



Astrodienst Ephemeris Tables for the year 2028

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 2028

geocentric

JANUARY 2028

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	6 40 45	10° 3' 37	25° 39	21° 37	15° 0	27° 55	27° 18	21° 5	6° 42	3° 56	5° 58	2° 25	3° 31	22° 33	0° 4	S 1
S 2	6 44 41	11° 5' 47	7° 25	23° 13	16° 14	28° 42	27° 20	21° 6	6° 40	3° 57	6° 0	2° 26	3° 28	22° 40	0° 3	S 2
M 3	6 48 38	12° 6' 57	19° 15	24° 50	17° 27	29° 29	27° 22	21° 7	6° 38	3° 57	6° 1	2° 28	3° 25	22° 47	0° 3	M 3
T 4	6 52 35	13° 8' 07	1° 12	26° 26	18° 40	0° 16	27° 24	21° 8	6° 36	3° 58	6° 3	2° 29	3° 21	22° 53	0° 2	T 4
W 5	6 56 31	14° 9' 16	13° 22	28° 1	19° 54	1° 3	27° 26	21° 9	6° 34	3° 59	6° 5	2° 30	3° 18	23° 0	0° 2	W 5
T 6	7 0 28	15° 10' 25	25° 49	29° 36	21° 7	1° 50	27° 27	21° 10	6° 32	3° 59	6° 7	2° 29	3° 15	23° 6	0° 2	T 6
F 7	7 4 24	16° 11' 34	8° 37	1° 11	22° 20	2° 37	27° 28	21° 12	6° 30	4° 0	6° 9	2° 28	3° 12	23° 13	0° 1	F 7
S 8	7 8 21	17° 12' 42	21° 50	2° 44	23° 33	3° 24	27° 29	21° 14	6° 29	4° 1	6° 10	2° 26	3° 9	23° 20	0° 1	S 8
S 9	7 12 17	18° 13' 50	5° 30	4° 17	24° 46	4° 11	27° 30	21° 15	6° 27	4° 2	6° 12	2° 24	3° 6	23° 26	0° 1	S 9
M10	7 16 14	19° 14' 58	19° 36	5° 48	25° 59	4° 58	27° 30	21° 17	6° 25	4° 2	6° 14	2° 23	3° 2	23° 33	0° 1	M10
T 11	7 20 11	20° 16' 06	4° 7	7° 17	27° 12	5° 45	27° 31	21° 19	6° 24	4° 3	6° 16	2° 21	2° 59	23° 40	0° 1	T 11
W12	7 24 7	21° 17' 13	18° 56	8° 44	28° 25	6° 33	27° 31	21° 21	6° 22	4° 4	6° 18	2° 20	2° 56	23° 46	0° 1	W12
T 13	7 28 4	22° 18' 19	3° 56	10° 8	29° 38	7° 20	27° 31	21° 23	6° 20	4° 5	6° 19	2° 20	2° 53	23° 53	0° 1	T 13
F 14	7 32 0	23° 19' 26	18° 59	11° 30	0° 50	8° 7	27° 30	21° 25	6° 19	4° 6	6° 21	2° 20	2° 50	24° 0	0° 2	F 14
S 15	7 35 57	24° 20' 32	3° 56	12° 47	2° 3	8° 54	27° 30	21° 28	6° 17	4° 7	6° 23	2° 21	2° 47	24° 6	0° 2	S 15
S 16	7 39 53	25° 21' 38	18° 39	14° 1	3° 16	9° 42	27° 29	21° 30	6° 16	4° 8	6° 25	2° 22	2° 43	24° 13	0° 2	S 16
M17	7 43 50	26° 22' 43	3° 4	15° 9	4° 28	10° 29	27° 29	21° 33	6° 15	4° 9	6° 27	2° 22	2° 40	24° 20	0° 2	M17
T 18	7 47 46	27° 23' 49	17° 7	16° 12	5° 41	11° 16	27° 28	21° 35	6° 13	4° 11	6° 29	2° 23	2° 37	24° 26	0° 3	T 18
W19	7 51 43	28° 24' 54	0° 48	17° 8	6° 53	12° 3	27° 26	21° 38	6° 12	4° 12	6° 31	2° 23	2° 34	24° 33	0° 3	W19
T 20	7 55 40	29° 25' 59	14° 7	17° 57	8° 5	12° 51	27° 25	21° 41	6° 11	4° 13	6° 33	2° 22	2° 31	24° 40	0° 4	T 20
F 21	7 59 36	0° 27' 04	27° 7	18° 37	9° 17	13° 38	27° 24	21° 44	6° 10	4° 14	6° 34	2° 22	2° 27	24° 46	0° 4	F 21
S 22	8 3 33	1° 28' 08	9° 50	19° 9	10° 30	14° 26	27° 22	21° 47	6° 8	4° 15	6° 36	2° 22	2° 24	24° 53	0° 5	S 22
S 23	8 7 29	2° 29' 12	22° 18	19° 30	11° 42	15° 13	27° 20	21° 50	6° 7	4° 17	6° 38	2° 22	2° 21	25° 0	0° 6	S 23
M24	8 11 26	3° 30' 16	4° 34	19° 41	12° 54	16° 0	27° 18	21° 53	6° 6	4° 18	6° 40	2° 22	2° 18	25° 6	0° 7	M24
T 25	8 15 22	4° 31' 19	16° 40	19° 40	14° 5	16° 48	27° 15	21° 57	6° 5	4° 19	6° 42	2° 22	2° 15	25° 13	0° 7	T 25
W26	8 19 19	5° 32' 21	28° 39	19° 28	15° 17	17° 35	27° 13	22° 0	6° 4	4° 21	6° 44	2° 22	2° 12	25° 20	0° 8	W26
T 27	8 23 15	6° 33' 23	10° 32	19° 5	16° 29	18° 23	27° 10	22° 4	6° 3	4° 22	6° 46	2° 22	2° 8	25° 26	0° 9	T 27
F 28	8 27 12	7° 34' 23	22° 21	18° 30	17° 41	19° 10	27° 7	22° 7	6° 3	4° 23	6° 48	2° 22	2° 5	25° 33	0° 10	F 28
S 29	8 31 9	8° 35' 23	4° 9	17° 45	18° 52	19° 58	27° 4	22° 11	6° 2	4° 25	6° 50	2° 21	2° 2	25° 40	0° 11	S 29
S 30	8 35 5	9° 36' 21	15° 57	16° 51	20° 3	20° 45	27° 1	22° 15	6° 1	4° 26	6° 51	2° 20	1° 59	25° 46	0° 12	S 30
M31	8 39 2	10° 37' 18	27° 50	15° 49	21° 15	21° 33	26° 57	22° 19	6° 0	4° 28	6° 53	2° 19	1° 56	25° 53	0° 13	M31

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	23s 3	11s 1	2n 5	23s50	2s10	18s 6	1s51	21s40	1s 6	2n14	1n16	5n52	2s33	21n21	0s 5	0n16	1s25	23s22	4s44	19s37	19s22	12s24	11n 6	0s25	
S 2	22 58	5 58	3 2	23 34	2 9	17 43	1 50	21 30	1 6	2 13	1 16	5 52	2 33	21 20	0 5	0 16	1 25	23 21	4 44	19 37	19 23	12 21	11 6	0 25	
M 3	22 53	0 43	3 51	23 15	2 8	17 20	1 49	21 21	1 7	2 13	1 16	5 53	2 32	21 20	0 5	0 16	1 25	23 21	4 44	19 36	19 23	12 18	11 6	0 25	
T 4	22 47	4n37	4 31	22 56	2 6	16 57	1 49	21 11	1 7	2 12	1 17	5 54	2 32	21 20	0 5	0 16	1 25	23 20	4 44	19 36	19 24	12 15	11 6	0 25	
W 5	22 41	9 52	4 59	22 34	2 3	16 33	1 48	21 0	1 7	2 12	1 17	5 54	2 32	21 19	0 5	0 17	1 25	23 20	4 44	19 36	19 25	12 12	11 6	0 25	
T 6	22 34	14 51	5 14	22 11	2 0	16 9	1 47	20 50	1 7	2 12	1 17	5 55	2 31	21 19	0 5	0 17	1 25	23 20	4 44	19 36	19 26	12 9	11 6	0 25	
F 7	22 27	19 20	5 15	21 47	1 57	15 44	1 46	20 39	1 7	2 12	1 18	5 56	2 31	21 19	0 5	0 17	1 25	23 19	4 44	19 36	19 26	12 7	11 5	0 25	
S 8	22 20	23 2	4 59	21 22	1 52	15 19	1 44	20 28	1 7	2 11	1 18	5 57	2 31	21 19	0 5	0 18	1 25	23 19	4 44	19 37	19 27	12 4	11 5	0 25	
S 9	22 12	25 34	4 26	20 55	1 47	14 53	1 43	20 17	1 7	2 11	1 18	5 58	2 31	21 18	0 5	0 18	1 25	23 18	4 44	19 37	19 28	12 1	11 5	0 25	
M10	22 3	26 37	3 35	20 27	1 41	14 27	1 42	20 6	1 7	2 11	1 18	5 59	2 30	21 18	0 5	0 18	1 25	23 18	4 44	19 38	19 29	11 58	11 5	0 25	
T 11	21 54	25 53	2 30	19 58	1 34	14 1	1 40	19 54	1 7	2 12	1 19	6 0	2 30	21 18	0 5	0 19	1 25	23 17	4 44	19 38	19 29	11 55	11 5	0 25	
W12	21 45	23 19	1 14	19 28	1 27	13 34	1 39	19 43	1 7	2 12	1 19	6 1	2 30	21 17	0 5	0 19	1 25	23 17	4 44	19 38	19 30	11 52	11 5	0 25	
T 13	21 35	19 7	0s 9	18 57	1 18	13 7	1 37	19 31	1 7	2 12	1 19	6 2	2 29	21 17	0 5	0 20	1 25	23 17	4 44	19 38	19 31	11 49	11 5	0 25	
F 14	21 25	13 41	1 31	18 26	1 9	12 40	1 36	19 18	1 6	2 12	1 19	6 3	2 29	21 17	0 5	0 20	1 25	23 16	4 44	19 38	19 31	11 46	11 5	0 25	
S 15	21 15	7 29	2 47	17 54	0 59	12 12	1 34	19 6	1 6	2 13	1 20	6 4	2 29	21 17	0 5	0 21	1 25	23 16	4 45	19 38	19 32	11 43	11 5	0 25	
S 16	21 4	0 58	3 50	17 23	0 47	11 44	1 32	18 53	1 6	2 13	1 20	6 5	2 29	21 16	0 5	0 21	1 25	23 15	4 45	19 38	19 33	11 40	11 5	0 25	
M17	20 52	5s27	4 37	16 51	0 35	11 16	1 30	18 40	1 6	2 14	1 20	6 6	2 28	21 16	0 5	0 21	1 25	23 15	4 45	19 38	19 34	11 37	11 5	0 25	
T 18	20 41	11 26	5 7	16 20	0 22	10 48	1 28	18 27	1 6	2 15	1 21	6 7	2 28	21 16	0 5	0 22	1 25	23 14	4 45	19 38	19 34	11 34	11 5	0 26	
W19	20 29	16 42	5 18	15 49	0 8	10 19	1 26	18 14	1 6	2 15	1 21	6 9	2 28	21 16	0 5	0 22	1 25	23 14	4 45	19 38	19 35	11 31	11 5	0 26	
T 20	20 16	21 1	5 11	15 20	0n 7	9 50	1 24	18 1	1 6	2 16	1 21	6 10	2 28	21 16	0 5	0 23	1 24	23 14	4 45	19 38	19 36	11 28	11 6	0 26	
F 21	20 3	24 12	4 49	14 53	0 23	9 20	1 21	17 47	1 6	2 17	1 21	6 11	2 27	21 15	0 5	0 23	1 24	23 13	4 45	19 38	19 37	11 25	11 6	0 26	
S 22	19 50	26 5	4 13	14 27	0 40	8 51	1 19	17 33	1 6	2 18	1 22	6 13	2 27	21 15	0 5	0 24	1 24	23 13	4 45	19 38	19 37	11 22	11 6	0 26	
S 23	19 36	26 37	3 25	14 4	0 57	8 21	1 16	17 19	1 6	2 19	1 22	6 14	2 27	21 15	0 5	0 25	1 24	23 12	4 45	19 38	19 38	11 19	11 6	0 26	
M24	19 22	25 50	2 29	13 44	1 15	7 51	1 14	17 5	1 6	2 20	1 22	6 16	2 27	21 15	0 5	0 25	1 24	23 12	4 45	19 38	19 39	11 16	11 6	0 26	
T 25	19 8	23 49	1 26	13 27	1 33	7 21	1 11	16 51	1 6	2 21	1 22	6 17	2 26	21 15	0 5	0 26	1 24	23 12	4 45	19 38	19 39	11 13	11 7	0 26	
W26	18 53	20 46	0 21	13 13	1 51	6 51	1 8	16 36	1 5	2 22	1 23	6 19	2 26	21 15	0 5	0 26	1 24	23 11	4 45	19 38	19 40	11 10	11 7	0 26	
T 27	18 38	16 52	0n45	13 4	2 8	6 20	1 6	16 21	1 5	2 24	1 23	6 20	2 26	21 14	0 5	0 27	1 24	23 11	4 45	19 38	19 41	11 7	11 7	0 26	
F 28	18 23	12 21	1 49	12 58	2 25	5 50	1 3	16 6	1 5	2 25	1 23	6 22	2 25	21 14	0 5	0 27	1 24	23 10	4 45	19 38	19 42	11 4	11 7	0 26	
S 29	18 7	7 23	2 48	12 57	2 41	5 19	1 0	15 51	1 5	2 27	1 24	6 23	2 25	21 14	0 5	0 28	1 24	23 10	4 45	19 38	19 42	11 1	11 8	0 26	
S 30	17 51	2 10	3 39	12 59	2 56	4 48	0 57	15 36	1 5	2 28	1 24	6 25	2 25	21 14	0 5	0 29	1 24	23 9	4 46	19 38	19 43	10 58	11 8	0 26	
M31	17s34	3n 8	4n22	13s 5	3n 9	4s17	0s53	15s21	1s 5	2n30	1n24	6n27	2s25	21n14	0s 5	0n29	1s24	23s 9	4s46	19s38	19s44	10s55	11n 8	0s26	

ASTRODIENST EPHEMERIS for the year 2028
geocentric

FEBRUARY 2028

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	8 42 58	11°38'15	9°49	14°R41	22°26	22°20	26°R54	22°23	6°R 0	4°29	6°55	2°R18	1°53	26°0	0°15	T 1
W 2	8 46 55	12°39'10	21°58	13°28	23°37	23° 7	26°50	22°27	5°59	4°31	6°57	2°17	1°49	26° 6	0°16	W 2
T 3	8 50 51	13°40'03	4°22	12°14	24°48	23°55	26°46	22°31	5°58	4°32	6°59	2°16	1°46	26°13	0°17	T 3
F 4	8 54 48	14°40'56	17° 4	11° 1	25°59	24°42	26°42	22°35	5°58	4°34	7° 1	2°D16	1°43	26°19	0°19	F 4
S 5	8 58 44	15°41'47	0°II 8	9°49	27°10	25°30	26°38	22°40	5°58	4°36	7° 3	2°17	1°40	26°26	0°20	S 5
S 6	9 2 41	16°42'37	13°37	8°42	28°20	26°17	26°33	22°44	5°57	4°37	7° 5	2°17	1°37	26°33	0°22	S 6
M 7	9 6 38	17°43'25	27°34	7°40	29°31	27° 5	26°29	22°49	5°57	4°39	7° 7	2°19	1°33	26°39	0°23	M 7
T 8	9 10 34	18°44'12	11°58	6°45	0°41	27°52	26°24	22°53	5°57	4°41	7° 8	2°20	1°30	26°46	0°25	T 8
W 9	9 14 31	19°44'57	26°45	5°58	1°51	28°40	26°19	22°58	5°56	4°42	7°10	2°R21	1°27	26°53	0°26	W 9
T 10	9 18 27	20°45'41	11°50	5°18	3° 1	29°27	26°14	23° 3	5°56	4°44	7°12	2°20	1°24	26°59	0°28	T 10
F 11	9 22 24	21°46'24	27° 5	4°46	4°11	0°15	26° 9	23° 8	5°56	4°46	7°14	2°19	1°21	27° 6	0°30	F 11
S 12	9 26 20	22°47'05	12°19	4°23	5°21	1° 2	26° 3	23°13	5°56	4°48	7°16	2°17	1°18	27°13	0°32	S 12
S 13	9 30 17	23°47'45	27°23	4° 8	6°30	1°50	25°58	23°18	5°D56	4°49	7°18	2°14	1°14	27°19	0°33	S 13
M14	9 34 13	24°48'23	12° 8	4° 0	7°40	2°37	25°52	23°23	5°56	4°51	7°19	2°11	1°11	27°26	0°35	M14
T 15	9 38 10	25°49'01	26°28	4°D 0	8°49	3°25	25°46	23°28	5°56	4°53	7°21	2° 8	1° 8	27°33	0°37	T 15
W16	9 42 7	26°49'38	10°20	4° 7	9°58	4°12	25°40	23°33	5°56	4°55	7°23	2° 6	1° 5	27°39	0°39	W16
T 17	9 46 3	27°50'13	23°44	4°20	11° 7	4°59	25°34	23°38	5°56	4°57	7°25	2°D 5	1° 2	27°46	0°41	T 17
F 18	9 50 0	28°50'47	6°24	4°39	12°16	5°47	25°28	23°44	5°57	4°59	7°27	2° 6	0°59	27°53	0°43	F 18
S 19	9 53 56	29°51'20	19°20	5° 4	13°25	6°34	25°21	23°49	5°57	5° 1	7°28	2° 7	0°55	27°59	0°45	S 19
S 20	9 57 53	0°51'52	1°39	5°35	14°33	7°22	25°15	23°55	5°57	5° 3	7°30	2° 8	0°52	28° 6	0°48	S 20
M21	10 1 49	1°52'23	13°45	6°10	15°42	8° 9	25° 8	24° 1	5°58	5° 5	7°32	2°10	0°49	28°13	0°50	M21
T 22	10 5 46	2°52'52	25°41	6°49	16°50	8°56	25° 2	24° 6	5°58	5° 7	7°34	2°11	0°46	28°19	0°52	T 22
W23	10 9 42	3°53'19	7°32	7°33	17°58	9°44	24°55	24°12	5°59	5° 9	7°36	2°R11	0°43	28°26	0°54	W23
T 24	10 13 39	4°53'45	19°19	8°20	19° 5	10°31	24°48	24°18	5°59	5°11	7°37	2°10	0°39	28°33	0°57	T 24
F 25	10 17 36	5°54'10	1°7	9°11	20°13	11°19	24°41	24°24	6° 0	5°13	7°39	2° 7	0°36	28°39	0°59	F 25
S 26	10 21 32	6°54'32	12°57	10° 5	21°20	12° 6	24°34	24°30	6° 0	5°15	7°41	2° 2	0°33	28°46	1° 2	S 26
S 27	10 25 29	7°54'53	24°50	11° 2	22°27	12°53	24°27	24°36	6° 1	5°17	7°42	1°55	0°30	28°53	1° 4	S 27
M28	10 29 25	8°55'13	6°49	12° 2	23°34	13°41	24°19	24°42	6° 2	5°19	7°44	1°48	0°27	28°59	1° 7	M28
T 29	10 33 22	9°55'30	18°55	13° 4	24°41	14°28	24°12	24°48	6°II 3	5°21	7°46	1°41	0°24	29° 6	1° 9	T 29

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	17s18	8n23	4n53	13s15	3n20	3s46	0s50	15s 5	1s 5	2n31	1n24	6n28	2s24	21n14	0s 5	0n30
W 2	17 1 13	22 5 12	13 27	3 28	3 15	0 47	14 49	1 4	2 33	1 25	6 30	2 24	21 14	0 5	0 30	1 24
T 3	16 43	17 56	5 17	13 42	3 34	2 44	0 43	14 33	1 4	2 35	1 25	6 32	2 24	21 14	0 5	0 31
F 4	16 26	21 49	5 7	13 58	3 38	2 13	0 40	14 17	1 4	2 37	1 25	6 34	2 24	21 14	0 5	0 32
S 5	16 8	24 45	4 41	14 16	3 39	1 41	0 36	14 1	1 4	2 39	1 25	6 36	2 23	21 14	0 4	0 32
S 6	15 50	26 23	3 58	14 35	3 38	1 10	0 33	13 45	1 4	2 41	1 26	6 38	2 23	21 13	0 4	0 33
M 7	15 31	26 26	3 1	14 53	3 35	0 38	0 29	13 29	1 3	2 43	1 26	6 39	2 23	21 13	0 4	0 34
T 8	15 12	24 44	1 51	15 12	3 29	0 7	0 25	13 12	1 3	2 45	1 26	6 41	2 23	21 13	0 4	0 35
W 9	14 54	21 19	0 31	15 31	3 22	0n24	0 22	12 55	1 3	2 47	1 26	6 43	2 23	21 13	0 4	0 35
T 10	14 34	16 24	0s52	15 48	3 14	0 56	0 18	12 39	1 3	2 49	1 26	6 45	2 22	21 13	0 4	0 36
F 11	14 15	10 24	2 13	16 5	3 4	1 27	0 14	12 22	1 3	2 52	1 27	6 47	2 22	21 13	0 4	0 37
S 12	13 55	3 48	3 23	16 21	2 54	1 59	0 10	12 5	1 2	2 54	1 27	6 49	2 22	21 13	0 4	0 37
S 13	13 35	2s55	4 19	16 35	2 43	2 30	0 6	11 47	1 2	2 56	1 27	6 51	2 22	21 13	0 4	0 38
M14	13 15	9 20	4 56	16 48	2 31	3 1	0 1	11 30	1 2	2 59	1 27	6 53	2 21	21 13	0 4	0 39
T 15	12 55	15 4	5 14	17 0	2 19	3 32	0n 3	11 13	1 2	3 1	1 27	6 55	2 21	21 13	0 4	0 40
W16	12 34	19 51	5 12	17 11	2 7	4 4	0 7	10 55	1 1	3 4	1 28	6 58	2 21	21 13	0 4	0 40
T 17	12 13	23 26	4 53	17 20	1 54	4 35	0 11	10 38	1 1	3 6	1 28	7 0	2 21	21 13	0 4	0 41
F 18	11 52	25 41	4 20	17 27	1 42	5 6	0 16	10 20	1 1	3 9	1 28	7 2	2 21	21 14	0 4	0 42
S 19	11 31	26 34	3 34	17 33	1 29	5 36	0 20	10 2	1 0	3 12	1 28	7 4	2 20	21 14	0 4	0 43
S 20	11 10	26 6	2 40	17 38	1 17	6 7	0 25	9 44	1 0	3 14	1 28	7 6	2 20	21 14	0 4	0 44
M21	10 48	24 23	1 40	17 41	1 5	6 38	0 29	9 26	1 0	3 17	1 29	7 9	2 20	21 14	0 4	0 44
T 22	10 27	21 35	0 36	17 43	0 53	7 8	0 34	9 8	1 0	3 20	1 29	7 11	2 20	21 14	0 4	0 45
W23	10 5	17 55	0n29	17 43	0 42	7 38	0 39	8 50	0 59	3 23	1 29	7 13	2 20	21 14	0 4	0 46
T 24	9 43	13 34	1 32	17 42	0 30	8 8	0 43	8 32	0 59	3 26	1 29	7 15	2 19	21 14	0 4	0 47
F 25	9 21	8 43	2 32	17 39	0 19	8 38	0 48	8 14	0 59	3 29	1 29	7 18	2 19	21 14	0 4	0 48
S 26	8 58	3 33	3 24	17 35	0 8	9 8	0 53	7 55	0 58	3 32	1 29	7 20	2 19	21 14	0 4	0 48
S 27	8 36	1n45	4 8	17 29	0s 2	9 38	0 57	7 37	0 58	3 35	1 30	7 22	2 19	21 14	0 4	0 49
M28	8 13	7 1	4 41	17 23	0 12	10 7	1 2	7 18	0 58	3 38	1 30	7 25	2 19	21 15	0 4	0 50
T 29	7s51	12n 4	5n 3	17s14	0s22	10n36	1n 7	7s 0	0s57	3n41	1n30	7n27	2s18	21n15	0s 4	0n51

Julian Day Number = 2461802.5, Delta T = 68.82 sec
Ecliptic obliquity = 23°26'13, Nutation = 0°00'16, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 25°07'57, Lahiri = 24°14'58

ASTRODIENST EPHEMERIS for the year 2028

geocentric

MARCH 2028

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	10 37 18	10 ^h 55'45"	1 ^h 11'	14 ^h 8'	25 ^h 47'	15 ^h 15'	24 ^h 5'	24 ^h 54'	6 ^h 4'	5 ^h 23'	7 ^h 47'	1 ^h 35'	0 ^h 20'	29 ^h 13'	1 ^h 12'	W 1
T 2	10 41 15	11 ^h 55'59"	13 ^h 39'	15 ^h 16'	26 ^h 54'	16 ^h 2'	23 ^h 57'	25 ^h 0'	6 ^h 5'	5 ^h 25'	7 ^h 49'	1 ^h 30'	0 ^h 17'	29 ^h 19'	1 ^h 14'	T 2
F 3	10 45 11	12 ^h 56'11"	26 ^h 21'	16 ^h 25'	28 ^h 0'	16 ^h 50'	23 ^h 50'	25 ^h 6'	6 ^h 5'	5 ^h 27'	7 ^h 51'	1 ^h 26'	0 ^h 14'	29 ^h 26'	1 ^h 17'	F 3
S 4	10 49 8	13 ^h 56'20"	9 ^h 22'	17 ^h 37'	29 ^h 5'	17 ^h 37'	23 ^h 42'	25 ^h 13'	6 ^h 7'	5 ^h 29'	7 ^h 52'	1 ^h 25'	0 ^h 11'	29 ^h 33'	1 ^h 20'	S 4
S 5	10 53 5	14 ^h 56'28"	22 ^h 40'	18 ^h 50'	0 ^h 11'	18 ^h 24'	23 ^h 35'	25 ^h 19'	6 ^h 8'	5 ^h 31'	7 ^h 54'	1 ^h 25'	0 ^h 8'	29 ^h 39'	1 ^h 23'	S 5
M 6	10 57 1	15 ^h 56'33"	6 ^h 24'	20 ^h 5'	1 ^h 16'	19 ^h 11'	23 ^h 27'	25 ^h 26'	6 ^h 9'	5 ^h 34'	7 ^h 55'	1 ^h 26'	0 ^h 5'	29 ^h 46'	1 ^h 25'	M 6
T 7	11 0 58	16 ^h 56'36"	20 ^h 32'	21 ^h 22'	2 ^h 21'	19 ^h 58'	23 ^h 19'	25 ^h 32'	6 ^h 10'	5 ^h 36'	7 ^h 57'	1 ^h 27'	0 ^h 1'	29 ^h 53'	1 ^h 28'	T 7
W 8	11 4 54	17 ^h 56'37"	5 ^h 4'	22 ^h 40'	3 ^h 26'	20 ^h 45'	23 ^h 11'	25 ^h 39'	6 ^h 11'	5 ^h 38'	7 ^h 58'	1 ^h 28'	29 ^h 58'	29 ^h 59'	1 ^h 31'	W 8
T 9	11 8 51	18 ^h 56'36"	19 ^h 57'	24 ^h 0'	4 ^h 30'	21 ^h 32'	23 ^h 4'	25 ^h 45'	6 ^h 12'	5 ^h 40'	8 ^h 0'	1 ^h 26'	29 ^h 55'	0 ^h 1'	1 ^h 34'	T 9
F 10	11 12 47	19 ^h 56'33"	5 ^h 4'	25 ^h 21'	5 ^h 34'	22 ^h 19'	22 ^h 56'	25 ^h 52'	6 ^h 14'	5 ^h 42'	8 ^h 1'	1 ^h 23'	29 ^h 52'	0 ^h 13'	1 ^h 37'	F 10
S 11	11 16 44	20 ^h 56'27"	20 ^h 17'	26 ^h 44'	6 ^h 38'	23 ^h 7'	22 ^h 48'	25 ^h 59'	6 ^h 15'	5 ^h 45'	8 ^h 3'	1 ^h 17'	29 ^h 49'	0 ^h 19'	1 ^h 40'	S 11
S 12	11 20 40	21 ^h 56'20"	5 ^h 26'	28 ^h 9'	7 ^h 41'	23 ^h 54'	22 ^h 40'	26 ^h 5'	6 ^h 17'	5 ^h 47'	8 ^h 4'	1 ^h 9'	29 ^h 45'	0 ^h 26'	1 ^h 43'	S 12
M13	11 24 37	22 ^h 56'11"	20 ^h 20'	29 ^h 34'	8 ^h 44'	24 ^h 40'	22 ^h 33'	26 ^h 12'	6 ^h 18'	5 ^h 49'	8 ^h 6'	1 ^h 1'	29 ^h 42'	0 ^h 33'	1 ^h 46'	M13
T 14	11 28 33	23 ^h 56'00"	4 ^h 45'	1 ^h 1'	9 ^h 47'	25 ^h 27'	22 ^h 25'	26 ^h 19'	6 ^h 20'	5 ^h 51'	8 ^h 7'	0 ^h 53'	29 ^h 39'	0 ^h 39'	1 ^h 49'	T 14
W15	11 32 30	24 ^h 55'47"	18 ^h 55'	2 ^h 30'	10 ^h 49'	26 ^h 14'	22 ^h 17'	26 ^h 26'	6 ^h 21'	5 ^h 54'	8 ^h 9'	0 ^h 47'	29 ^h 36'	0 ^h 46'	1 ^h 52'	W15
T 16	11 36 27	25 ^h 55'33"	2 ^h 28'	4 ^h 0'	11 ^h 52'	27 ^h 1'	22 ^h 9'	26 ^h 33'	6 ^h 23'	5 ^h 56'	8 ^h 10'	0 ^h 42'	29 ^h 33'	0 ^h 53'	1 ^h 55'	T 16
F 17	11 40 23	26 ^h 55'17"	15 ^h 33'	5 ^h 31'	12 ^h 53'	27 ^h 48'	22 ^h 1'	26 ^h 40'	6 ^h 24'	5 ^h 58'	8 ^h 11'	0 ^h 39'	29 ^h 30'	0 ^h 59'	1 ^h 58'	F 17
S 18	11 44 20	27 ^h 55'00"	28 ^h 13'	7 ^h 3'	13 ^h 55'	28 ^h 35'	21 ^h 54'	26 ^h 47'	6 ^h 26'	6 ^h 0'	8 ^h 13'	0 ^h 38'	29 ^h 26'	1 ^h 6'	2 ^h 2'	S 18
S 19	11 48 16	28 ^h 54'40"	10 ^h 33'	8 ^h 37'	14 ^h 56'	29 ^h 22'	21 ^h 46'	26 ^h 54'	6 ^h 28'	6 ^h 3'	8 ^h 14'	0 ^h 39'	29 ^h 23'	1 ^h 13'	2 ^h 5'	S 19
M20	11 52 13	29 ^h 54'19"	22 ^h 35'	10 ^h 12'	15 ^h 56'	0 ^h 9'	21 ^h 38'	27 ^h 1'	6 ^h 30'	6 ^h 5'	8 ^h 15'	0 ^h 40'	29 ^h 20'	1 ^h 19'	2 ^h 8'	M20
T 21	11 56 9	0 ^h 53'56"	4 ^h 28'	11 ^h 48'	16 ^h 56'	0 ^h 55'	21 ^h 31'	27 ^h 8'	6 ^h 32'	6 ^h 7'	8 ^h 17'	0 ^h 40'	29 ^h 17'	1 ^h 26'	2 ^h 11'	T 21
W22	12 0 6	1 ^h 53'32"	16 ^h 15'	13 ^h 26'	17 ^h 56'	1 ^h 42'	21 ^h 23'	27 ^h 15'	6 ^h 33'	6 ^h 9'	8 ^h 18'	0 ^h 39'	29 ^h 14'	1 ^h 33'	2 ^h 15'	W22
T 23	12 4 5	2 ^h 53'05"	28 ^h 2'	15 ^h 5'	18 ^h 55'	2 ^h 29'	21 ^h 15'	27 ^h 22'	6 ^h 35'	6 ^h 12'	8 ^h 19'	0 ^h 35'	29 ^h 10'	1 ^h 39'	2 ^h 18'	T 23
F 24	12 7 59	3 ^h 52'37"	9 ^h 15'	16 ^h 45'	19 ^h 54'	3 ^h 15'	21 ^h 8'	27 ^h 30'	6 ^h 37'	6 ^h 14'	8 ^h 20'	0 ^h 28'	29 ^h 7'	1 ^h 46'	2 ^h 21'	F 24
S 25	12 11 56	4 ^h 52'06"	21 ^h 45'	18 ^h 26'	20 ^h 53'	4 ^h 2'	21 ^h 0'	27 ^h 37'	6 ^h 39'	6 ^h 16'	8 ^h 22'	0 ^h 19'	29 ^h 4'	1 ^h 53'	2 ^h 25'	S 25
S 26	12 15 52	5 ^h 51'34"	3 ^h 46'	20 ^h 9'	21 ^h 51'	4 ^h 49'	20 ^h 53'	27 ^h 44'	6 ^h 41'	6 ^h 18'	8 ^h 23'	0 ^h 8'	29 ^h 1'	1 ^h 59'	2 ^h 28'	S 26
M27	12 19 49	6 ^h 50'59"	15 ^h 56'	21 ^h 53'	22 ^h 48'	5 ^h 35'	20 ^h 46'	27 ^h 51'	6 ^h 44'	6 ^h 21'	8 ^h 24'	29 ^h 56'	28 ^h 58'	2 ^h 6'	2 ^h 31'	M27
T 28	12 23 45	7 ^h 50'23"	28 ^h 15'	23 ^h 38'	23 ^h 45'	6 ^h 22'	20 ^h 39'	27 ^h 59'	6 ^h 46'	6 ^h 23'	8 ^h 25'	29 ^h 43'	28 ^h 55'	2 ^h 13'	2 ^h 35'	T 28
W29	12 27 42	8 ^h 49'44"	10 ^h 34'	25 ^h 25'	24 ^h 41'	7 ^h 8'	20 ^h 31'	28 ^h 6'	6 ^h 48'	6 ^h 25'	8 ^h 26'	29 ^h 31'	28 ^h 51'	2 ^h 19'	2 ^h 38'	W29
T 30	12 31 38	9 ^h 49'03"	23 ^h 23'	27 ^h 13'	25 ^h 37'	7 ^h 55'	20 ^h 24'	28 ^h 14'	6 ^h 50'	6 ^h 27'	8 ^h 27'	29 ^h 22'	28 ^h 48'	2 ^h 26'	2 ^h 42'	T 30
F 31	12 35 35	10 ^h 48'20"	6 ^h 15'	29 ^h 13'	26 ^h 33'	8 ^h 41'	20 ^h 17'	28 ^h 21'	6 ^h 52'	6 ^h 30'	8 ^h 28'	29 ^h 14'	28 ^h 45'	2 ^h 33'	2 ^h 45'	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
W 1	7s28	16n43	5n10	17s 5	0s31	11n 5	1n12	6s41	0s57	3n44	1n30	7n30	2s18	21n15	0s 4	0n52	1s23	22s58	4s49	19s48	20s 5	9s25	11n27	0s28	
T 2	7 5	20 45	5 3	16 54	0 40	11 34	1 17	6 23	0 57	3 47	1 30	7 32	2 18	21 15	0 4	0 53	1 23	22 58	4 49	19 50	20 5	9 22	11 28	0 28	
F 3	6 42	23 53	4 42	16 41	0 49	12 2	1 22	6 4	0 56	3 50	1 30	7 34	2 18	21 15	0 4	0 53	1 23	22 58	4 49	19 50	20 6	9 19	11 29	0 28	
S 4	6 19	25 53	4 5	16 27	0 57	12 30	1 27	5 45	0 56	3 53	1 30	7 37	2 18	21 15	0 4	0 54	1 23	22 57	4 50	19 51	20 7	9 16	11 30	0 28	
S 5	5 56	26 28	3 15	16 12	1 5	12 58	1 32	5 26	0 55	3 56	1 30	7 39	2 18	21 16	0 4	0 55	1 23	22 57	4 50	19 51	20 7	9 13	11 31	0 28	
M 6	5 33	28 28	2 12	15 56	1 12	13 26	1 37	5 7	0 55	3 59	1 30	7 42	2 17	21 16	0 4	0 56	1 23	22 57	4 50	19 50	20 8	9 10	11 32	0 28	
T 7	5 9	22 50	0 59	15 38	1 19	13 53	1 42	4 49	0 55	4 2	1 31	7 44	2 17	21 16	0 4	0 57	1 23	22 57	4 50	19 50	20 9	9 7	11 33	0 28	
W 8	4 46	18 41	0s19	15 19	1 26	14 20	1 47	4 30	0 54	4 5	1 31	7 47	2 17	21 16	0 4	0 58	1 23	22 56	4 50	19 50	20 9	9 4	11 34	0 28	
T 9	4 22	13 17	1 38	14 59	1 32	14 47	1 52	4 11	0 54	4 9	1 31	7 49	2 17	21 17	0 4	0 59	1 23	22 56	4 50	19 50	20 10	9 0	11 35	0 28	
F 10	3 59	7 0	2 51	14 37	1 38	15 13	1 57	3 52	0 53	4 12	1 31	7 52	2 17	21 17	0 4	1 0	1 23	22 56	4 51	19 51	20 11	8 57	11 36	0 28	
S 11	3 35	0 17	3 52	14 14	1 44	15 39	2 2	3 33	0 53	4 15	1 31	7 55	2 17	21 17	0 4	1 0	1 23	22 56	4 51	19 52	20 11	8 54	11 37	0 28	
S 12	3 12	6s24	4 37	13 49	1 49	16 4	2 7	3 14	0 53	4 18	1 31	7 57	2 17	21 17	0 4	1 1	1 23	22 56	4 51	19 54	20 12	8 51	11 38	0 28	
M13	2 48	12 36	5 1	13 24	1 54	16 30	2 12	2 55	0 52	4 21	1 31	8 0	2 16	21 18	0 4	1 2	1 23	22 55	4 51	19 56	20 13	8 48	11 39	0 28	
T 14	2 25	17 56	5 6	12 57	1 58	16 55	2 17	2 36	0 52	4 24	1 31	8 2	2 16	21 18	0 4	1 3	1 23	22 55	4 51	19 57	20 13	8 45	11 40	0 28	
W15	2 1	22 7	4 52	12 29	2 2	17 19	2 22	2 17	0 51	4 27	1 31	8 5	2 16	21 18	0 4	1 4	1 23	22 55	4 51	19 59	20 14	8 42	11 41	0 29	
T 16	1 37	24 55	4 21	12 0	2 6	17 43	2 27	1 58	0 51	4 30	1 31	8 7	2 16	21 18	0 4	1 5	1 23	22 55	4 52	20 0	20 15	8 39	11 42	0 29	
F 17	1 13	26 16	3 38	11 29	2 9	18 7	2 32	1 39	0 51	4 33	1 31	8 10	2 16	21 19	0 4	1 6	1 23	22 54	4 52	20 1	20 15	8 36	11 43	0 29	
S 18	0 50	26 11	2 45	10 57	2 11	18 31	2 37	1 20	0 50	4 37	1 31	8 13	2 16	21 19	0 4	1 7	1 23	22 54	4 52	20 1	20 16	8 33	11 44	0 29	
S 19	0 26	24 47	1 46	10 24	2 14	18 54	2 42	1 1	0 50	4 40	1 31	8 15	2 16	21 19	0 4	1 7	1 23	22 54	4 52	20 1	20 17	8 30	11 45	0 29	
M20	0 2	22 15	0 43	9 50	2 16	19 16	2 47	0 42	0 49	4 43	1 31	8 18	2 16	21 20	0 4	1 8	1 23	22 54	4 52	20 0	20 17	8 27	11 46	0 29	
T 21	0n21	18 49	0n20	9 15	2 17	19 38	2 52	0 23	0 49	4 46	1 31	8 21	2 15	21 20	0 4	1 9	1 23	22 54	4 52	20 0	20 18	8 24	11 47	0 29	
W22	0 45	14 39	1 22	8 38	2 18	20 0	2 57	0 4	0 48	4 49	1 31	8 23	2 15	21 20	0 4	1 10	1 23	22 54	4 53	20 1	20 19	8 21	11 48	0 29	
T 23	1 9	9 57	2 21	8 0	2 18	20 22	3 2	0n15	0 48	4 52	1 31	8 26	2 15	21 21	0 4	1 11	1 23	22 53	4 53	20 1	20 19	8 18	11 49	0 29	
F 24	1 32	4 54	3 13	7 21	2 18	20 42	3 7	0 34	0 47	4 55	1 31	8 29	2 15	21 21	0 4	1 12	1 23	22 53	4 53	20 3	20 20	8 15	11 50	0 29	
S 25	1 56	0n22	3 57	6 41	2 18	21 3	3 11	0 53	0 47	4 57	1 31	8 31	2 15	21 21	0 4	1 13	1 23	22 53	4 53	20 5	20 21	8 12	11 51	0 29	
S 26	2 20	5 39	4 31	6 0	2 17	21 23	3 16	1 12	0 46	5 0	1 31	8 34	2 15	21 22	0 4	1 14	1 23	22 53	4 53	20 7	20 21	8 9	11 52	0 29	
M27	2 43	10 46	4 53	5 18	2 16	21 42	3 21	1 31	0 46	5 3	1 31	8 37	2 15	21 22	0 4	1 15	1 23	22 53	4 54	20 10	20 22	8 6	11 53	0 29	
T 28	3 7	15 33	5 2	4 34	2 14	22 1	3 25	1 50	0 45	5 6	1 31	8 39	2 15	21 22	0 4	1 16	1 23	22 53	4 54	20 12	20 23	8 3	11 55	0 29	
W29	3 30	19 44	4 56	3 50	2 11	22 20	3 30	2 9	0 45	5 9	1 31	8 42	2 15	21 23	0 4	1 16	1 23	22 53	4 54	20 15	20 23	7 59	11 56	0 29	
T 30	3 53	23 4	4 36	3 4	2 8	22 38	3 34	2 28	0 44	5 11	1 31	8 45	2 15	21 23	0 4	1 17	1 23	22 53	4 54	20 17	20 24	7 56	11 57	0 29	
F 31	4n17	25n19	4n 2	2s18	2s 5	22n56	3n39	2n46	0s44	5n14	1n31	8n47	2s15	21n24	0s 4	1n18	1s23	22s52	4s54	20s18	20s24	7s53	11n58	0s29	

ASTRODIENST EPHEMERIS for the year 2028
geocentric

APRIL 2028

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	12 39 31	11°47'35	19°11'20	0°45'53	27°48'27	9°47'27	20°R11	28°47'28	6°11'55	6°47'32	8°29'29	29°R10	28°34'42	2°43'39	2°48'49	S 1
S 2	12 43 28	12°46'48	2°46'40	2°46	28°21	10°14	20°11'4	28°36	6°57	6°34	8°30	29°38	28°39	2°46	2°52	S 2
M 3	12 47 25	13°45'58	16°17	4°39	29°15	11°0	19°57	28°43	6°59	6°37	8°31	29°D 8	28°36	2°53	2°56	M 3
T 4	12 51 21	14°45'06	0°42'13	6°34	0°11'8	11°46	19°51	28°51	7°2	6°39	8°32	29°R 8	28°32	2°59	2°59	T 4
W 5	12 55 18	15°44'11	14°28	8°30	1°0	12°32	19°44	28°58	7°4	6°41	8°33	29°7	28°29	3°6	3°3	W 5
T 6	12 59 14	16°43'14	29°1	10°28	1°51	13°19	19°38	29°6	7°7	6°43	8°34	29°4	28°26	3°13	3°7	T 6
F 7	13 3 11	17°42'15	13°48	12°27	2°42	14°5	19°32	29°13	7°9	6°46	8°35	28°59	28°23	3°19	3°10	F 7
S 8	13 7 7	18°41'13	28°43	14°27	3°32	14°51	19°26	29°21	7°12	6°48	8°36	28°51	28°20	3°26	3°14	S 8
S 9	13 11 4	19°40'10	13°39	16°29	4°21	15°37	19°20	29°28	7°15	6°50	8°37	28°41	28°16	3°33	3°17	S 9
M10	13 15 0	20°39'04	28°25	18°31	5°9	16°23	19°14	29°36	7°17	6°52	8°38	28°29	28°13	3°39	3°21	M10
T 11	13 18 57	21°37'56	12°53	20°35	5°57	17°9	19°8	29°44	7°20	6°54	8°38	28°18	28°10	3°46	3°25	T 11
W12	13 22 54	22°36'47	26°57	22°40	6°43	17°55	19°3	29°51	7°23	6°57	8°39	28°8	28°7	3°53	3°28	W12
T 13	13 26 50	23°35'36	10°34	24°45	7°29	18°41	18°57	29°59	7°25	6°59	8°40	28°0	28°4	3°59	3°32	T 13
F 14	13 30 47	24°34'23	23°43	26°51	8°14	19°26	18°52	0°8'6	7°28	7°1	8°41	27°55	28°1	4°6	3°36	F 14
S 15	13 34 43	25°33'08	6°327	28°58	8°58	20°12	18°47	0°14	7°31	7°3	8°41	27°52	27°57	4°13	3°39	S 15
S 16	13 38 40	26°31'52	18°49	18°4	9°41	20°58	18°42	0°22	7°34	7°5	8°42	27°52	27°54	4°19	3°43	S 16
M17	13 42 36	27°30'33	0°54	3°11	10°22	21°44	18°37	0°29	7°37	7°8	8°43	27°51	27°51	4°26	3°47	M17
T 18	13 46 33	28°29'13	12°49	5°17	11°3	22°29	18°33	0°37	7°39	7°10	8°43	27°51	27°48	4°33	3°50	T 18
W19	13 50 29	29°27'52	24°37	7°23	11°42	23°15	18°28	0°45	7°42	7°12	8°44	27°49	27°45	4°39	3°54	W19
T 20	13 54 26	0°26'28	6°28	9°28	12°21	24°0	18°24	0°52	7°45	7°14	8°44	27°45	27°42	4°46	3°58	T 20
F 21	13 58 23	1°25'03	18°17	11°32	12°58	24°46	18°20	1°0	7°48	7°16	8°45	27°39	27°38	4°53	4°2	F 21
S 22	14 2 19	2°23'36	0°17	13°34	13°34	25°31	18°16	1°8	7°51	7°18	8°45	27°29	27°35	4°59	4°5	S 22
S 23	14 6 16	3°22'08	12°26	15°34	14°8	26°17	18°12	1°15	7°54	7°20	8°46	27°17	27°32	5°6	4°9	S 23
M24	14 10 12	4°20'37	24°48	17°32	14°42	27°2	18°8	1°23	7°57	7°22	8°46	27°4	27°29	5°13	4°13	M24
T 25	14 14 9	5°19'05	7°22	19°27	15°13	27°47	18°5	1°31	8°0	7°24	8°47	26°51	27°26	5°19	4°16	T 25
W26	14 18 5	6°17'31	20°9	21°20	15°44	28°33	18°1	1°38	8°3	7°27	8°47	26°38	27°22	5°26	4°20	W26
T 27	14 22 2	7°15'55	3°11'8	23°9	16°12	29°18	17°58	1°46	8°7	7°29	8°47	26°27	27°19	5°33	4°24	T 27
F 28	14 25 58	8°14'18	16°18	24°56	16°40	0°8'3	17°55	1°53	8°10	7°31	8°48	26°19	27°16	5°39	4°28	F 28
S 29	14 29 55	9°12'38	29°39	26°39	17°5	0°48	17°52	2°1	8°13	7°33	8°48	26°15	27°13	5°46	4°31	S 29
S 30	14 33 52	10°10'56	13°11	28°18	17°11'29	1°33	17°50	2°8'9	8°11'16	7°35	8°48	26°12	27°10	5°43	4°35	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	decl	lat	
S 1	4n40	26n14	3n14	1s30	2s 1	23n13	3n43	3n 5	0s43	5n17	1n31	8n50	2s14	21n24	0s 4	1n19	1s23	22s52	4s55	20s19	20s25	7s50	11n59	0s30										
S 2	5 3	25 40	2 15	0 41	1 57	23 29	3 48	3 24	0 43	5 19	1 30	8 53	2 14	21 24	0 4	1 20	1 23	22 52	4 55	20 20	20 26	7 47	12 0	0 30										
M 3	5 26	23 34	1 8	0n 8	1 52	23 45	3 52	3 42	0 42	5 22	1 30	8 56	2 14	21 25	0 4	1 21	1 23	22 52	4 55	20 20	20 26	7 44	12 1	0 30										
T 4	5 49	20 1	0s 6	0 59	1 47	24 1	3 56	4 1	0 42	5 24	1 30	8 58	2 14	21 25	0 4	1 22	1 23	22 52	4 55	20 20	20 27	7 41	12 3	0 30										
W 5	6 12	15 12	1 20	1 50	1 41	24 16	4 0	4 19	0 41	5 27	1 30	9 1	2 14	21 26	0 4	1 23	1 23	22 52	4 55	20 20	20 28	7 38	12 4	0 30										
T 6	6 34	9 27	2 31	2 42	1 34	24 31	4 4	4 38	0 41	5 29	1 30	9 4	2 14	21 26	0 4	1 24	1 23	22 52	4 56	20 21	20 28	7 35	12 5	0 30										
F 7	6 57	3 6	3 33	3 35	1 27	24 45	4 8	4 56	0 40	5 31	1 30	9 6	2 14	21 26	0 4	1 24	1 23	22 52	4 56	20 22	20 29	7 32	12 6	0 30										
S 8	7 19	3s29	4 21	4 28	1 20	24 58	4 12	5 14	0 40	5 34	1 30	9 9	2 14	21 27	0 4	1 25	1 23	22 52	4 56	20 23	20 30	7 29	12 7	0 30										
S 9	7 42	9 51	4 51	5 22	1 12	25 12	4 15	5 33	0 39	5 36	1 30	9 12	2 14	21 27	0 4	1 26	1 23	22 52	4 56	20 25	20 30	7 26	12 8	0 30										
M10	8 4	15 35	5 1	6 17	1 4	25 24	4 19	5 51	0 39	5 38	1 30	9 14	2 14	21 28	0 4	1 27	1 23	22 52	4 56	20 28	20 31	7 23	12 10	0 30										
T 11	8 26	20 19	4 51	7 11	0 55	25 36	4 22	6 9	0 38	5 40	1 30	9 17	2 14	21 28	0 4	1 28	1 23	22 52	4 57	20 30	20 32	7 20	12 11	0 30										
W12	8 48	23 45	4 24	8 6	0 46	25 48	4 26	6 27	0 37	5 42	1 29	9 20	2 14	21 29	0 4	1 29	1 23	22 52	4 57	20 32	20 32	7 17	12 12	0 30										
T 13	9 10	25 42	3 42	9 2	0 36	25 59	4 29	6 45	0 37	5 44	1 29	9 23	2 14	21 29	0 4	1 30	1 23	22 52	4 57	20 34	20 33	7 14	12 13	0 30										
F 14	9 31	26 7	2 50	9 57	0 26	26 9	4 32	7 3	0 36	5 46	1 29	9 25	2 14	21 30	0 4	1 30	1 24	22 52	4 57	20 35	20 33	7 10	12 14	0 30										
S 15	9 53	25 7	1 51	10 51	0 16	26 19	4 35	7 21	0 36	5 48	1 29	9 28	2 14	21 30	0 4	1 31	1 24	22 52	4 57	20 35	20 34	7 7	12 15	0 30										
S 16	10 14	22 54	0 48	11 46	0 5	26 28	4 38	7 38	0 35	5 50	1 29	9 31	2 14	21 31	0 4	1 32	1 24	22 52	4 58	20 35	20 35	7 4	12 17	0 30										
M17	10 35	19 42	0n16	12 39	0n 5	26 37	4 40	7 56	0 35	5 52	1 29	9 33	2 14	21 31	0 4	1 33	1 24	22 52	4 58	20 35	20 35	7 1	12 18	0 31										
T 18	10 56	15 43	1 18	13 32	0 16	26 46	4 43	8 13	0 34	5 53	1 29	9 36	2 14	21 32	0 4	1 34	1 24	22 52	4 58	20 35	20 36	6 58	12 19	0 31										
W19	11 17	11 10	2 17	14 24	0 27	26 53	4 45	8 31	0 33	5 55	1 28	9 39	2 14	21 32	0 4	1 35	1 24	22 52	4 58	20 36	20 37	6 55	12 20	0 31										
T 20	11 38	6 14	3 9	15 15	0 38	27 1	4 47	8 48	0 33	5 56	1 28	9 41	2 14	21 33	0 4	1 35	1 24	22 52	4 59	20 37	20 37	6 52	12 21	0 31										
F 21	11 58	1 3	3 53	16 4	0 49	27 7	4 49	9 5	0 32	5 58	1 28	9 44	2 14	21 33	0 4	1 36	1 24	22 52	4 59	20 38	20 38	6 49	12 23	0 31										
S 22	12 18	4n12	4 28	16 51	1 0	27 14	4 50	9 22	0 32	5 59	1 28	9 47	2 14	21 34	0 4	1 37	1 24	22 52	4 59	20 40	20 39	6 46	12 24	0 31										
S 23	12 38	9 22	4 50	17 37	1 10	27 19	4 52	9 39	0 31	6 1	1 28	9 49	2 14	21 34	0 4	1 38	1 24	22 52	4 59	20 42	20 39	6 43	12 25	0 31										
M24	12 58	14 15	5 0	18 21	1 20	27 25	4 53	9 56	0 31	6 2	1 27	9 52	2 14	21 35	0 4	1 39	1 24	22 53	4 59	20 45	20 40	6 40	12 26	0 31										
T 25	13 18	18 37	4 55	19 2	1 30	27 29	4 54	10 13	0 30	6 3	1 27	9 55	2 14	21 35	0 4	1 39	1 24	22 53	5 0	20 47	20 40	6 37	12 27	0 31										
W26	13 37	22 12	4 36	19 41	1 39	27 33	4 55	10 30	0 29	6 4	1 27	9 57	2 14	21 36	0 3	1 40	1 24	22 53	5 0	20 50	20 41	6 34	12 28	0 31										
T 27	13 56	24 44	4 2	20 18	1 48	27 37	4 55	10 46	0 29	6 5	1 27	10 0	2 14	21 36	0 3	1 41	1 24	22 53	5 0	20 52	20 42	6 31	12 30	0 31										
F 28	14 15	25 57	3 14	20 52	1 56	27 40	4 55	11 3	0 28	6 6	1 27	10 2	2 14	21 37	0 3	1 42	1 24	22 53	5 0	20 53	20 42	6 27	12 31	0 31										
S 29	14 34	25 42	2 16	21 24	2 3	27 43	4 55	11 19	0 28	6 7	1 27	10 5	2 14	21 37	0 3	1 43	1 24	22 53	5 1	20 54	20 43	6 24	12 32	0 31										
S 30	14n52	23n55	1n 8	21n54	2n10	27n44	4n55	11n36	0s27	6n 8	1n26	10n 8	2s14	21n38	0s 3	1n43	1s24	22s53	5s 1	20s54	20s43	6s21	12n33	0s31										

ASTRODIENST EPHEMERIS for the year 2028

geocentric

MAY 2028

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	14 37 48	11° 8' 12"	26° 54'	29° 53'	17° 11'	28° 18'	17° 47'	28° 16'	8° 11'	7° 37'	8° 49'	26° D12	27° 7'	5° 59'	48° 39'	M 1
T 2	14 41 45	12° 7' 26"	10° 48'	1° 11'	18° 11'	3° 3'	17° 45'	2° 24'	8° 23'	7° 39'	8° 49'	26° R12	27° 3'	6° 6'	4° 42'	T 2
W 3	14 45 41	13° 5' 38"	24° 54'	2° 53'	18° 30'	3° 48'	17° 43'	2° 31'	8° 26'	7° 41'	8° 49'	26° 311	27° 0'	6° 13'	4° 46'	W 3
T 4	14 49 38	14° 3' 48"	9° 11'	4° 16'	18° 46'	4° 33'	17° 41'	2° 39'	8° 29'	7° 42'	8° 49'	26° 9	26° 57'	6° 20'	4° 50'	T 4
F 5	14 53 34	15° 1' 56"	23° 37'	5° 35'	19° 1'	5° 18'	17° 40'	2° 47'	8° 32'	7° 44'	8° 49'	26° 5	26° 54'	6° 26'	4° 53'	F 5
S 6	14 57 31	16° 0' 02"	8° 8'	6° 50'	19° 13'	6° 3'	17° 38'	2° 54'	8° 36'	7° 46'	8° 49'	25° 58'	26° 51'	6° 33'	4° 57'	S 6
S 7	15 1 27	16° 58' 06"	22° 38'	8° 1'	19° 23'	6° 47'	17° 37'	3° 2'	8° 39'	7° 48'	8° 49'	25° 48'	26° 48'	6° 40'	5° 1'	S 7
M 8	15 5 24	17° 56' 08"	7° 11'	9° 7'	19° 31'	7° 32'	17° 36'	3° 9'	8° 42'	7° 50'	8° 49'	25° 38'	26° 44'	6° 46'	5° 4'	M 8
T 9	15 9 21	18° 54' 08"	21° 11'	10° 9'	19° 37'	8° 17'	17° 35'	3° 17'	8° 46'	7° 52'	8° R50	25° 28'	26° 41'	6° 53'	5° 8'	T 9
W10	15 13 17	19° 52' 08"	5° 2'	11° 6'	19° 40'	9° 1'	17° 34'	3° 24'	8° 49'	7° 54'	8° 50'	25° 19'	26° 38'	7° 0'	5° 12'	W10
T 11	15 17 14	20° 50' 05"	18° 31'	11° 58'	19° R41	9° 46'	17° 33'	3° 31'	8° 52'	7° 55'	8° 49'	25° 11'	26° 35'	7° 6'	5° 15'	T 11
F 12	15 21 10	21° 48' 01"	1° 37'	12° 46'	19° 40'	10° 30'	17° 33'	3° 39'	8° 56'	7° 57'	8° 49'	25° 6'	26° 32'	7° 13'	5° 19'	F 12
S 13	15 25 7	22° 45' 56"	14° 20'	13° 29'	19° 36'	11° 15'	17° 32'	3° 46'	8° 59'	7° 59'	8° 49'	25° 4'	26° 28'	7° 20'	5° 23'	S 13
S 14	15 29 3	23° 43' 49"	26° 43'	14° 7'	19° 30'	11° 59'	17° D32	3° 54'	9° 3'	8° 1'	8° 49'	25° D 4	26° 25'	7° 26'	5° 26'	S 14
M15	15 33 0	24° 41' 42"	8° 51'	14° 41'	19° 22'	12° 43'	17° 33'	4° 1'	9° 6'	8° 2'	8° 49'	25° 4'	26° 22'	7° 33'	5° 30'	M15
T 16	15 36 56	25° 39' 32"	20° 48'	15° 9'	19° 11'	13° 27'	17° 33'	4° 8'	9° 10'	8° 4'	8° 49'	25° R 5	26° 19'	7° 40'	5° 33'	T 16
W17	15 40 53	26° 37' 22"	2° 38'	15° 33'	18° 57'	14° 12'	17° 33'	4° 16'	9° 13'	8° 6'	8° 49'	25° 5'	26° 16'	7° 46'	5° 37'	W17
T 18	15 44 50	27° 35' 10"	14° 29'	15° 52'	18° 42'	14° 56'	17° 34'	4° 23'	9° 17'	8° 7'	8° 49'	25° 3'	26° 13'	7° 53'	5° 40'	T 18
F 19	15 48 46	28° 32' 58"	26° 24'	16° 6'	18° 23'	15° 40'	17° 35'	4° 30'	9° 20'	8° 9'	8° 48'	24° 59'	26° 9'	8° 0'	5° 44'	F 19
S 20	15 52 43	29° 30' 44"	8° 28'	16° 14'	18° 3'	16° 24'	17° 36'	4° 37'	9° 23'	8° 11'	8° 48'	24° 53'	26° 6'	8° 6'	5° 47'	S 20
S 21	15 56 39	0° 11' 28' 29"	20° 44'	16° R19	17° 40'	17° 8'	17° 37'	4° 44'	9° 27'	8° 12'	8° 48'	24° 46'	26° 3'	8° 13'	5° 51'	S 21
M22	16 0 36	1° 26' 13"	3° 15'	16° 18'	17° 16'	17° 52'	17° 38'	4° 52'	9° 30'	8° 14'	8° 47'	24° 37'	26° 0'	8° 20'	5° 54'	M22
T 23	16 4 32	2° 23' 55"	16° 3'	16° 13'	16° 49'	18° 36'	17° 40'	4° 59'	9° 34'	8° 15'	8° 47'	24° 27'	25° 57'	8° 26'	5° 58'	T 23
W24	16 8 29	3° 21' 37"	29° 8'	16° 3'	16° 20'	19° 19'	17° 42'	5° 6'	9° 37'	8° 17'	8° 47'	24° 19'	25° 53'	8° 33'	6° 1'	W24
T 25	16 12 25	4° 19' 17"	12° 27'	15° 49'	15° 50'	20° 3'	17° 44'	5° 13'	9° 41'	8° 18'	8° 46'	24° 11'	25° 50'	8° 40'	6° 4'	T 25
F 26	16 16 22	5° 16' 56"	26° 1'	15° 31'	15° 18'	20° 47'	17° 46'	5° 20'	9° 44'	8° 20'	8° 46'	24° 6'	25° 47'	8° 46'	6° 8'	F 26
S 27	16 20 19	6° 14' 34"	9° 45'	15° 10'	14° 44'	21° 31'	17° 48'	5° 27'	9° 48'	8° 21'	8° 45'	24° 3'	25° 44'	8° 53'	6° 11'	S 27
S 28	16 24 15	7° 12' 10"	23° 39'	14° 45'	14° 9'	22° 14'	17° 50'	5° 34'	9° 52'	8° 22'	8° 45'	24° D 2	25° 41'	9° 0'	6° 15'	S 28
M29	16 28 12	8° 9' 45"	7° 12'	14° 18'	13° 34'	22° 58'	17° 53'	5° 41'	9° 55'	8° 24'	8° 44'	24° 3'	25° 38'	9° 6'	6° 18'	M29
T 30	16 32 8	9° 7' 19"	21° 44'	13° 48'	12° 57'	23° 41'	17° 56'	5° 47'	9° 59'	8° 25'	8° 44'	24° 4'	25° 34'	9° 13'	6° 21'	T 30
W31	16 36 5	10° 11' 45"	5° 53'	13° 11'	12° 11'	24° 25'	17° 59'	5° 54'	10° 11'	8° 26'	8° 43'	24° R 5	25° 31'	9° 20'	6° 24'	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	decl lat	
M 1	15n10	20n43	0s 4	22n20	2n16	27n46	4n54	11n52	0s26	6n 9	1n26	10n10	2s14	21n38	0s 3	1n44	M 1
T 2	15 28	16 18	1 17	22 45	2 21	27 47	4 53	12 8	0 26	6 10	1 26	10 13	2 14	21 39	0 3	1 45	T 2
W 3	15 46	10 55	2 26	23 7	2 26	27 47	4 52	12 23	0 25	6 10	1 26	10 15	2 14	21 39	0 3	1 46	W 3
T 4	16 3	4 55	3 27	23 26	2 29	27 47	4 50	12 39	0 25	6 11	1 26	10 18	2 14	21 40	0 3	1 46	T 4
F 5	16 21	1s23	4 16	23 43	2 32	27 46	4 48	12 55	0 24	6 11	1 25	10 20	2 14	21 40	0 3	1 47	F 5
S 6	16 38	7 38	4 48	23 58	2 33	27 45	4 46	13 10	0 23	6 12	1 25	10 23	2 14	21 41	0 3	1 48	S 6
S 7	16 54	13 28	5 2	24 11	2 34	27 43	4 43	13 25	0 23	6 12	1 25	10 25	2 14	21 41	0 3	1 48	S 7
M 8	17 10	18 31	4 56	24 21	2 34	27 40	4 40	13 41	0 22	6 12	1 25	10 28	2 14	21 42	0 3	1 49	M 8
T 9	17 26	22 26	4 33	24 29	2 32	27 37	4 36	13 56	0 21	6 12	1 25	10 30	2 14	21 42	0 3	1 50	T 9
W10	17 42	24 58	3 53	24 35	2 30	27 33	4 32	14 10	0 21	6 13	1 24	10 33	2 14	21 43	0 3	1 50	W10
T 11	17 58	25 58	3 2	24 39	2 27	27 28	4 27	14 25	0 20	6 13	1 24	10 35	2 14	21 43	0 3	1 51	T 11
F 12	18 13	25 27	2 2	24 41	2 23	27 23	4 22	14 40	0 20	6 13	1 24	10 38	2 14	21 44	0 3	1 52	F 12
S 13	18 28	23 37	0 57	24 41	2 17	27 17	4 16	14 54	0 19	6 12	1 24	10 40	2 14	21 44	0 3	1 52	S 13
S 14	18 42	20 40	0n 9	24 39	2 11	27 11	4 10	15 8	0 18	6 12	1 23	10 43	2 14	21 45	0 3	1 53	S 14
M15	18 56	16 52	1 13	24 36	2 3	27 3	4 4	15 22	0 18	6 12	1 23	10 45	2 14	21 45	0 3	1 54	M15
T 16	19 10	12 27	2 13	24 31	1 55	26 55	3 57	15 36	0 17	6 12	1 23	10 47	2 14	21 46	0 3	1 54	T 16
W17	19 24	7 37	3 7	24 24	1 45	26 47	3 49	15 50	0 16	6 11	1 23	10 50	2 14	21 47	0 3	1 55	W17
T 18	19 37	2 32	3 53	24 16	1 35	26 37	3 41	16 4	0 16	6 11	1 23	10 52	2 14	21 47	0 3	1 56	T 18
F 19	19 50	2n41	4 29	24 6	1 23	26 27	3 32	16 17	0 15	6 10	1 22	10 55	2 14	21 48	0 3	1 56	F 19
S 20	20 3	7 51	4 53	23 54	1 11	26 16	3 22	16 31	0 14	6 10	1 22	10 57	2 15	21 48	0 3	1 57	S 20
S 21	20 15	12 48	5 5	23 41	0 58	26 4	3 13	16 44	0 14	6 9	1 22	10 59	2 15	21 49	0 3	1 57	S 21
M22	20 27	17 20	5 2	23 27	0 43	25 51	3 2	16 57	0 13	6 8	1 22	11 1	2 15	21 49	0 3	1 58	M22
T 23	20 38	21 11	4 45	23 12	0 28	25 37	2 51	17 9	0 12	6 7	1 22	11 4	2 15	21 50	0 3	1 58	T 23
W24	20 49	24 3	4 12	22 55	0 13	25 23	2 40	17 22	0 12	6 7	1 21	11 6	2 15	21 50	0 3	1 59	W24
T 25	21 0	25 40	3 25	22 37	0s 4	25 8	2 28	17 34	0 11	6 6	1 21	11 8	2 15	21 51	0 3	2 0	T 25
F 26	21 11	25 48	2 25	22 19	0 21	24 52	2 16	17 47	0 11	6 5	1 21	11 10	2 15	21 51	0 3	2 0	F 26
S 27	21 21	24 21	1 16	21 59	0 38	24 36	2 3	17 59	0 10	6 4	1 21	11 13	2 15	21 52	0 3	2 1	S 27
S 28	21 31	21 24	0 2	21 39	0 55	24 19	1 50	18 11	0 9	6 2	1 20	11 15	2 15	21 52	0 3	2 1	S 28
M29	21 40	17 11	1s13	21 19	1 13	24 1	1 37	18 22	0 9	6 1	1 20	11 17	2 15	21 53	0 3	2 2	M29
T 30	21 49	11 59	2 24	20 58	1 30	23 43	1 23	18 34	0 8	6 0	1 20	11 19	2 15	21 53	0 3	2 2	T 30
W31	21n58	6n 9	3s27	20n37	1s47	23n25	1n 9	18n45	0s 7	5n59	1n20	11n21	2s16	21n54	0s 3	2n 3	W31

Julian Day Number = 2461892.5, Delta T = 68.88 sec

Ecliptic obliquity = 23°26'12", Nutation = 0°00'14", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 25°08'10", Lahiri = 24°15'10"

ASTRODIENST EPHEMERIS for the year 2028

geocentric

JUNE 2028

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	16 40 1	11 ^{II} 2'21	20 ^{III} 4	12°R44	11°R42	25 ^{III} 8	18 ^{III} 2	6 ^{III} 1	10 ^{II} 6	8 ^{III} 28	8°R43	24°R 5	25 ^{III} 28	9 ^{III} 27	6 ^{III} 28	T 1
F 2	16 43 58	11°59'51	4 ^{III} 16	12 ^{II} 10	11 ^{II} 4	25°51	18° 5	6° 8	10° 9	8°29	8 ^{III} 42	24 ^{III} 3	25°25	9°33	6°31	F 2
S 3	16 47 54	12°57'19	18°25	11°37	10°27	26°35	18° 9	6°14	10°13	8°30	8°41	23°59	25°22	9°40	6°34	S 3
S 4	16 51 51	13°54'45	2 ^{III} 29	11° 4	9°50	27°18	18°12	6°21	10°16	8°31	8°41	23°54	25°19	9°47	6°37	S 4
M 5	16 55 48	14°52'11	16°25	10°31	9°13	28° 1	18°16	6°28	10°20	8°32	8°40	23°48	25°15	9°53	6°40	M 5
T 6	16 59 44	15°49'36	0 ^{III} 9	10° 1	8°37	28°44	18°20	6°34	10°23	8°34	8°39	23°42	25°12	10° 0	6°43	T 6
W 7	17 3 41	16°46'59	13°37	9°33	8° 2	29°27	18°24	6°41	10°27	8°35	8°39	23°36	25° 9	10° 7	6°46	W 7
T 8	17 7 37	17°44'22	26°49	9° 7	7°29	0 ^{III} 10	18°28	6°47	10°30	8°36	8°38	23°32	25° 6	10°13	6°49	T 8
F 9	17 11 34	18°41'44	9 ^{III} 42	8°44	6°57	0°53	18°33	6°53	10°34	8°37	8°37	23°30	25° 3	10°20	6°52	F 9
S 10	17 15 30	19°39'06	22°17	8°24	6°27	1°36	18°38	7° 0	10°37	8°38	8°36	23°D29	25° 0	10°27	6°55	S 10
S 11	17 19 27	20°36'26	4 ^{III} 37	8° 8	5°58	2°19	18°42	7° 6	10°41	8°39	8°36	23°29	24°56	10°33	6°58	S 11
M12	17 23 23	21°33'46	16°43	7°57	5°32	3° 2	18°47	7°12	10°44	8°40	8°35	23°31	24°53	10°40	7° 1	M12
T 13	17 27 20	22°31'06	28°40	7°49	5° 8	3°44	18°52	7°18	10°48	8°41	8°34	23°33	24°50	10°47	7° 4	T 13
W14	17 31 17	23°28'25	10 ^{III} 32	7°D46	4°45	4°27	18°57	7°25	10°51	8°42	8°33	23°34	24°47	10°53	7° 7	W14
T 15	17 35 13	24°25'43	22°24	7°47	4°25	5°10	19° 3	7°31	10°55	8°43	8°32	23°R35	24°44	11° 0	7°10	T 15
F 16	17 39 10	25°23'01	4 ^{III} 20	7°52	4° 8	5°52	19° 8	7°37	10°58	8°43	8°31	23°34	24°40	11° 7	7°12	F 16
S 17	17 43 6	26°20'19	16°26	8° 3	3°52	6°35	19°14	7°43	11° 2	8°44	8°30	23°33	24°37	11°14	7°15	S 17
S 18	17 47 3	27°17'37	28°45	8°17	3°39	7°17	19°20	7°48	11° 5	8°45	8°29	23°30	24°34	11°20	7°18	S 18
M19	17 50 59	28°14'54	11 ^{III} 21	8°37	3°29	7°59	19°26	7°54	11° 8	8°46	8°28	23°27	24°31	11°27	7°20	M19
T 20	17 54 56	29°12'11	24°17	9° 1	3°21	8°42	19°32	8° 0	11°12	8°46	8°27	23°23	24°28	11°34	7°23	T 20
W21	17 58 52	0 ^{III} 9'28	7 ^{III} 33	9°29	3°15	9°24	19°38	8° 6	11°15	8°47	8°26	23°20	24°25	11°40	7°26	W21
T 22	18 2 49	1° 6'45	21°10	10° 3	3°12	10° 6	19°44	8°11	11°19	8°48	8°25	23°17	24°21	11°47	7°28	T 22
F 23	18 6 46	2° 4'01	5 ^{III} 5	10°40	3°D11	10°48	19°51	8°17	11°22	8°48	8°24	23°15	24°18	11°54	7°31	F 23
S 24	18 10 42	3° 1'16	19°14	11°22	3°12	11°31	19°57	8°22	11°25	8°49	8°23	23°D14	24°15	12° 0	7°33	S 24
S 25	18 14 39	3°58'32	3 ^{III} 34	12° 8	3°16	12°13	20° 4	8°28	11°29	8°50	8°22	23°14	24°12	12° 7	7°35	S 25
M26	18 18 35	4°55'47	17°59	12°58	3°21	12°55	20°11	8°33	11°32	8°50	8°21	23°15	24° 9	12°14	7°38	M26
T 27	18 22 32	5°53'01	2 ^{III} 26	13°53	3°29	13°37	20°18	8°39	11°35	8°51	8°20	23°16	24° 6	12°20	7°40	T 27
W28	18 26 28	6°50'14	16°49	14°52	3°40	14°18	20°25	8°44	11°39	8°51	8°19	23°17	24° 2	12°27	7°42	W28
T 29	18 30 25	7°47'27	1 ^{III} 5	15°54	3°52	15° 0	20°32	8°49	11°42	8°51	8°18	23°18	23°59	12°34	7°45	T 29
F 30	18 34 22	8°44'40	15 ^{III} 13	17 ^{III} 1	4 ^{III} 6	15 ^{III} 42	20 ^{III} 40	8°54	11 ^{III} 45	8°52	8°16	23°R18	23°56	12°40	7°47	F 30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
T 1	22n 6	0s 1	4s17	20n16	2s 4	23n 6	0n55	18n56	0s 7	5n57	1n20	11n23	2s16	21n55	0s 3	2n 3
F 2	22 14	6 9	4 51	19 55	2 21	22 46	0 41	19 7	0 6	5 56	1 19	11 26	2 16	21 55	0 3	2 3
S 3	22 21	11 58	5 8	19 36	2 36	22 27	0 27	19 18	0 5	5 54	1 19	11 28	2 16	21 56	0 3	2 4
S 4	22 28	17 7	5 6	19 16	2 51	22 8	0 12	19 29	0 5	5 52	1 19	11 30	2 16	21 56	0 3	2 4
M 5	22 35	21 18	4 46	18 58	3 5	21 48	0s 2	19 39	0 4	5 51	1 19	11 32	2 16	21 57	0 3	2 5
T 6	22 41	24 15	4 10	18 41	3 18	21 29	0 16	19 49	0 3	5 49	1 19	11 34	2 16	21 57	0 3	2 5
W 7	22 47	25 44	3 20	18 25	3 30	21 9	0 30	19 59	0 3	5 47	1 18	11 36	2 16	21 58	0 3	2 5
T 8	22 52	25 44	2 20	18 11	3 40	20 51	0 43	20 9	0 2	5 45	1 18	11 38	2 16	21 58	0 3	2 6
F 9	22 57	24 19	1 15	17 59	3 49	20 32	0 57	20 19	0 1	5 43	1 18	11 40	2 17	21 59	0 3	2 6
S 10	23 2	21 42	0 7	17 48	3 57	20 14	1 10	20 28	0 1	5 41	1 18	11 42	2 17	21 59	0 3	2 7
S 11	23 6	18 8	1n 1	17 39	4 4	19 57	1 23	20 37	0n 0	5 39	1 18	11 43	2 17	22 0	0 3	2 7
M12	23 10	13 51	2 4	17 32	4 9	19 40	1 35	20 46	0 1	5 37	1 17	11 45	2 17	22 0	0 3	2 7
T 13	23 14	9 7	3 1	17 26	4 13	19 24	1 47	20 55	0 1	5 35	1 17	11 47	2 17	22 1	0 3	2 8
W14	23 17	4 4	3 50	17 23	4 16	19 9	1 59	21 4	0 2	5 33	1 17	11 49	2 17	22 1	0 3	2 8
T 15	23 19	1n 6	4 29	17 22	4 18	18 54	2 10	21 12	0 3	5 31	1 17	11 51	2 17	22 2	0 3	2 8
F 16	23 21	6 15	4 56	17 23	4 18	18 40	2 20	21 20	0 3	5 28	1 17	11 53	2 18	22 2	0 3	2 8
S 17	23 23	11 15	5 11	17 25	4 17	18 27	2 30	21 28	0 4	5 26	1 16	11 54	2 18	22 3	0 3	2 9
S 18	23 25	15 53	5 12	17 29	4 15	18 16	2 40	21 36	0 5	5 23	1 16	11 56	2 18	22 3	0 3	2 9
M19	23 26	19 58	4 59	17 35	4 12	18 5	2 49	21 44	0 5	5 21	1 16	11 58	2 18	22 4	0 3	2 9
T 20	23 26	23 11	4 30	17 43	4 8	17 54	2 58	21 51	0 6	5 18	1 16	12 0	2 18	22 4	0 3	2 9
W21	23 26	25 16	3 45	17 52	4 3	17 45	3 6	21 58	0 7	5 16	1 16	12 1	2 18	22 5	0 3	2 10
T 22	23 26	25 56	2 47	18 2	3 57	17 37	3 14	22 5	0 7	5 13	1 15	12 3	2 19	22 5	0 3	2 10
F 23	23 25	24 59	1 38	18 14	3 51	17 30	3 21	22 12	0 8	5 10	1 15	12 4	2 19	22 6	0 3	2 10
S 24	23 24	22 25	0 22	18 27	3 43	17 23	3 28	22 18	0 9	5 8	1 15	12 6	2 19	22 6	0 3	2 10
S 25	23 23	18 26	0s57	18 41	3 35	17 18	3 35	22 25	0 9	5 5	1 15	12 8	2 19	22 6	0 3	2 10
M26	23 21	13 20	2 12	18 56	3 26	17 13	3 41	22 31	0 10	5 2	1 15	12 9	2 19	22 7	0 3	2 11
T 27	23 18	7 30	3 20	19 12	3 17	17 9	3 46	22 36	0 11	4 59	1 14	12 11	2 19	22 7	0 3	2 11
W28	23 16	1 18	4 14	19 29	3 7	17 6	3 51	22 42	0 11	4 56	1 14	12 12	2 20	22 8	0 3	2 11
T 29	23 12	4s54	4 53	19 46	2 57	17 3	3 56	22 48	0 12	4 53	1 14	12 14	2 20	22 8	0 3	2 11
F 30	23n 9	10s48	5s13	20n 3	2s46	17n 2	4s 0	22n53	0n13	4n50	1n14	12n15	2s20	22n 9	0s 3	2n11

Julian Day Number = 2461923.5, Delta T = 68.90 sec

Ecliptic obliquity = 23°26'12, Nutation = 0°00'15, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 25°08'14, Lahiri = 24°15'15

ASTRODIENST EPHEMERIS for the year 2028
geocentric

JULY 2028

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	18 38 18	9♂41'52	29♂ 9	18♂12	4♂22	16♂24	20♂47	8♂59	11♂48	8♂52	8°R15	23°R17	23♂53	12♂47	7♂49	S 1
S 2	18 42 15	10°39'04	12♂54	19°26	4°40	17° 5	20°55	9° 4	11°51	8°53	8♂14	23♂16	23°50	12°54	7°51	S 2
M 3	18 46 11	11°36'16	26°26	20°45	5° 0	17°47	21° 3	9° 9	11°55	8°53	8°13	23°15	23°46	13° 1	7°53	M 3
T 4	18 50 8	12°33'27	9♂44	22° 7	5°21	18°29	21°11	9°14	11°58	8°53	8°12	23°13	23°43	13° 7	7°55	T 4
W 5	18 54 4	13°30'38	22°48	23°33	5°45	19°10	21°19	9°18	12° 1	8°53	8°10	23°12	23°40	13°14	7°57	W 5
T 6	18 58 1	14°27'49	5♂37	25° 3	6°10	19°51	21°27	9°23	12° 4	8°54	8° 9	23°11	23°37	13°21	7°59	T 6
F 7	19 1 57	15°25'00	18°13	26°36	6°36	20°33	21°35	9°27	12° 7	8°54	8° 8	23°D11	23°34	13°27	8° 1	F 7
S 8	19 5 54	16°22'11	0♂36	28°13	7° 4	21°14	21°43	9°32	12°10	8°54	8° 7	23°11	23°31	13°34	8° 3	S 8
S 9	19 9 51	17°19'23	12°48	29°53	7°34	21°55	21°52	9°36	12°13	8°54	8° 5	23°11	23°27	13°41	8° 5	S 9
M10	19 13 47	18°16'34	24°50	19♂37	8° 5	22°37	22° 1	9°41	12°16	8°54	8° 4	23°12	23°24	13°47	8° 7	M10
T 11	19 17 44	19°13'46	6♂45	3°24	8°37	23°18	22° 9	9°45	12°19	8°54	8° 3	23°12	23°21	13°54	8° 8	T 11
W12	19 21 40	20°10'58	18°36	5°14	9°11	23°59	22°18	9°49	12°22	8°R54	8° 2	23°13	23°18	14° 1	8°10	W12
T 13	19 25 37	21° 8'11	0♂28	7° 7	9°46	24°40	22°27	9°53	12°25	8°54	8° 0	23°13	23°15	14° 7	8°11	T 13
F 14	19 29 33	22° 5'24	12°24	9° 3	10°22	25°21	22°36	9°57	12°28	8°54	7°59	23°13	23°11	14°14	8°13	F 14
S 15	19 33 30	23° 2'37	24°28	11° 1	11° 0	26° 2	22°45	10° 1	12°31	8°54	7°58	23°13	23° 8	14°21	8°15	S 15
S 16	19 37 26	23°59'52	6♂46	13° 1	11°38	26°43	22°54	10° 5	12°34	8°54	7°56	23°13	23° 5	14°28	8°16	S 16
M17	19 41 23	24°57'06	19°22	15° 4	12°18	27°24	23° 4	10° 9	12°37	8°54	7°55	23°13	23° 2	14°34	8°17	M17
T 18	19 45 20	25°54'22	2♂19	17° 8	12°59	28° 4	23°13	10°12	12°39	8°53	7°54	23°14	22°59	14°41	8°19	T 18
W19	19 49 16	26°51'38	15°39	19°13	13°41	28°45	23°22	10°16	12°42	8°53	7°52	23°14	22°56	14°48	8°20	W19
T 20	19 53 13	27°48'56	29°24	21°20	14°23	29°26	23°32	10°19	12°45	8°53	7°51	23°14	22°52	14°54	8°21	T 20
F 21	19 57 9	28°46'13	13♂32	23°27	15° 7	0♂6	23°42	10°23	12°48	8°53	7°50	23°14	22°49	15° 1	8°23	F 21
S 22	20 1 6	29°43'31	28° 0	25°35	15°52	0°47	23°52	10°26	12°50	8°52	7°48	23°R15	22°46	15° 8	8°24	S 22
S 23	20 5 2	0♂40'50	12♂43	27°43	16°37	1°28	24° 1	10°29	12°53	8°52	7°47	23°14	22°43	15°14	8°25	S 23
M24	20 8 59	1°38'09	27°34	29°50	17°23	2° 8	24°11	10°32	12°56	8°52	7°45	23°14	22°40	15°21	8°26	M24
T 25	20 12 55	2°35'29	12♂25	1♂57	18°11	2°48	24°21	10°35	12°58	8°51	7°44	23°13	22°37	15°28	8°27	T 25
W26	20 16 52	3°32'49	27° 9	4° 4	18°58	3°29	24°32	10°38	13° 1	8°51	7°43	23°12	22°33	15°34	8°28	W26
T 27	20 20 49	4°30'09	11♂40	6°10	19°47	4° 9	24°42	10°41	13° 3	8°50	7°41	23°11	22°30	15°41	8°29	T 27
F 28	20 24 45	5°27'30	25°53	8°15	20°36	4°49	24°52	10°44	13° 6	8°50	7°40	23°10	22°27	15°48	8°29	F 28
S 29	20 28 42	6°24'52	9♂48	10°19	21°26	5°29	25° 3	10°46	13° 8	8°49	7°38	23°D10	22°24	15°55	8°30	S 29
S 30	20 32 38	7°22'14	23°23	12°21	22°17	6°10	25°13	10°49	13°10	8°49	7°37	23°10	22°21	16° 1	8°31	S 30
M31	20 36 35	8♂19'36	6♂39	14♂22	23♂ 8	6♂50	25♂24	10♂51	13♂13	8♂48	7♂36	23♂11	22♂17	16♂ 8	8♂32	M31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
S 1	23n 5	16s 4	5s14	20n21	2s34	17n 1	4s 4	22n58	0n13	4n47	1n14	12n16	2s20	22n 9	0s 3	2n11
S 2	23 1	20 26	4 58	20 39	2 23	17 1	4 8	23 3	0 14	4 44	1 14	12 18	2 20	22 10	0 3	2 11
M 3	22 56	23 38	4 25	20 56	2 11	17 1	4 11	23 7	0 15	4 40	1 13	12 19	2 21	22 10	0 3	2 11
T 4	22 51	25 30	3 38	21 14	1 58	17 2	4 14	23 12	0 15	4 37	1 13	12 21	2 21	22 10	0 3	2 11
W 5	22 45	25 55	2 41	21 31	1 46	17 3	4 16	23 16	0 16	4 34	1 13	12 22	2 21	22 11	0 3	2 11
T 6	22 39	24 55	1 36	21 47	1 33	17 6	4 18	23 20	0 17	4 30	1 13	12 23	2 21	22 11	0 3	2 11
F 7	22 33	22 39	0 27	22 3	1 21	17 8	4 20	23 23	0 17	4 27	1 13	12 24	2 21	22 12	0 3	2 11
S 8	22 26	19 21	0n41	22 18	1 8	17 11	4 22	23 27	0 18	4 24	1 13	12 26	2 22	22 12	0 3	2 11
S 9	22 19	15 16	1 47	22 31	0 55	17 15	4 23	23 30	0 19	4 20	1 12	12 27	2 22	22 13	0 3	2 11
M10	22 11	10 38	2 47	22 43	0 42	17 19	4 24	23 33	0 19	4 17	1 12	12 28	2 22	22 13	0 3	2 11
T 11	22 3	5 39	3 39	22 54	0 30	17 23	4 25	23 36	0 20	4 13	1 12	12 29	2 22	22 13	0 3	2 11
W12	21 55	0 30	4 21	23 2	0 18	17 27	4 25	23 39	0 21	4 9	1 12	12 30	2 22	22 14	0 3	2 11
T 13	21 47	4n39	4 53	23 9	0 6	17 32	4 25	23 41	0 21	4 6	1 12	12 31	2 23	22 14	0 3	2 11
F 14	21 38	9 40	5 12	23 14	0n 6	17 37	4 25	23 43	0 22	4 2	1 12	12 32	2 23	22 14	0 3	2 11
S 15	21 28	14 24	5 17	23 16	0 17	17 43	4 25	23 45	0 23	3 58	1 11	12 33	2 23	22 15	0 3	2 11
S 16	21 18	18 37	5 8	23 16	0 28	17 48	4 25	23 47	0 23	3 54	1 11	12 34	2 23	22 15	0 3	2 11
M17	21 8	22 8	4 45	23 13	0 38	17 54	4 24	23 49	0 24	3 51	1 11	12 35	2 24	22 16	0 3	2 11
T 18	20 58	24 39	4 6	23 8	0 48	18 0	4 23	23 50	0 25	3 47	1 11	12 36	2 24	22 16	0 3	2 11
W19	20 47	25 52	3 14	23 0	0 57	18 6	4 22	23 51	0 25	3 43	1 11	12 37	2 24	22 16	0 3	2 11
T 20	20 36	25 35	2 8	22 49	1 5	18 12	4 21	23 52	0 26	3 39	1 11	12 38	2 24	22 17	0 3	2 10
F 21	20 24	23 38	0 54	22 36	1 13	18 18	4 20	23 53	0 27	3 35	1 11	12 39	2 24	22 17	0 3	2 10
S 22	20 12	20 8	0s26	22 20	1 20	18 24	4 18	23 53	0 27	3 31	1 10	12 39	2 25	22 17	0 3	2 10
S 23	20 0	15 18	1 46	22 1	1 26	18 31	4 16	23 54	0 28	3 27	1 10	12 40	2 25	22 18	0 3	2 10
M24	19 48	9 31	2 59	21 40	1 31	18 37	4 15	23 54	0 29	3 23	1 10	12 41	2 25	22 18	0 3	2 10
T 25	19 35	3 12	4 0	21 17	1 36	18 43	4 13	23 54	0 29	3 19	1 10	12 42	2 25	22 18	0 3	2 10
W26	19 22	3s13	4 45	20 51	1 39	18 49	4 10	23 53	0 30	3 15	1 10	12 42	2 26	22 19	0 3	2 9
T 27	19 8	9 22	5 10	20 23	1 42	18 55	4 8	23 53	0 31	3 10	1 10	12 43	2 26	22 19	0 3	2 9
F 28	18 54	14 54	5 16	19 53	1 45	19 1	4 6	23 52	0 31	3 6	1 10	12 44	2 26	22 19	0 3	2 9
S 29	18 40	19 32	5 3	19 21	1 46	19 7	4 3	23 51	0 32	3 2	1 10	12 44	2 26	22 20	0 3	2 9
S 30	18 26	23 2	4 34	18 48	1 47	19 13	4 0	23 50	0 33	2 58	1 9	12 45	2 27	22 20	0 3	2 8
M31	18n11	25s12	3s50	18n13	1n47	19n18	3s58	23n49	0n33	2n53	1n 9	12n45	2s27	22n20	0s 3	2n 8

Julian Day Number = 2461953.5, Delta T = 68.92 sec
Ecliptic obliquity = 23°26'11, Nutation = 0°00'16, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 25°08'18, Lahiri = 24°15'19

ASTRODIENST EPHEMERIS for the year 2028

geocentric

AUGUST 2028

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	20 40 31	9♏16'59	19♊37	16♏22	24♏0	7♏30	25♏34	10♏53	13♏15	8♏47	7♏34	23♏12	22♏14	16♏15	8♏32	T 1
W 2	20 44 28	10°14'23	2♏21	18°20	24°53	8°10	25°45	10°56	13°17	8♏47	7♏33	23°14	22°11	16°21	8°33	W 2
T 3	20 48 24	11°11'47	14°51	20°17	25°46	8°49	25°56	10°58	13°20	8°46	7°32	23°14	22°8	16°28	8°33	T 3
F 4	20 52 21	12°9'12	27°10	22°12	26°40	9°29	26°7	11°0	13°22	8°45	7°30	23°R15	22°5	16°35	8°34	F 4
S 5	20 56 18	13°6'38	9♏20	24°5	27°34	10°9	26°18	11°2	13°24	8°45	7°29	23°14	22°2	16°41	8°34	S 5
S 6	21 0 14	14°4'05	21°22	25°57	28°29	10°49	26°29	11°4	13°26	8°44	7°27	23°12	21°58	16°48	8°34	S 6
M 7	21 4 11	15°1'33	3♏18	27°48	29°24	11°28	26°40	11°5	13°28	8°43	7°26	23°9	21°55	16°55	8°35	M 7
T 8	21 8 7	15°59'02	15°11	29°37	0♏20	12°8	26°51	11°7	13°30	8°42	7°25	23°6	21°52	17°2	8°35	T 8
W 9	21 12 4	16°56'32	27°1	1♏24	1°16	12°48	27°2	11°8	13°32	8°41	7°23	23°2	21°49	17°8	8°35	W 9
T 10	21 16 0	17°54'03	8♏53	3°10	2°13	13°27	27°13	11°10	13°34	8°40	7°22	22°58	21°46	17°15	8°35	T 10
F 11	21 19 57	18°51'36	20°49	4°54	3°10	14°7	27°25	11°11	13°36	8°39	7°20	22°55	21°43	17°22	8°35	F 11
S 12	21 23 53	19°49'10	2♏53	6°37	4°8	14°46	27°36	11°12	13°38	8°39	7°19	22°52	21°39	17°28	8°R35	S 12
S 13	21 27 50	20°46'46	15°9	8°18	5°6	15°25	27°47	11°14	13°40	8°38	7°18	22°51	21°36	17°35	8°35	S 13
M14	21 31 47	21°44'23	27°41	9°58	6°5	16°5	27°59	11°15	13°42	8°37	7°16	22°D51	21°33	17°42	8°35	M14
T 15	21 35 43	22°42'02	10♏33	11°36	7°4	16°44	28°11	11°15	13°43	8°36	7°15	22°52	21°30	17°48	8°35	T 15
W16	21 39 40	23°39'42	23°49	13°12	8°3	17°23	28°22	11°16	13°45	8°35	7°14	22°54	21°27	17°55	8°35	W16
T 17	21 43 36	24°37'23	7♏32	14°48	9°3	18°2	28°34	11°17	13°47	8°33	7°12	22°55	21°23	18°2	8°35	T 17
F 18	21 47 33	25°35'07	21°41	16°21	10°3	18°41	28°46	11°18	13°48	8°32	7°11	22°R56	21°20	18°9	8°34	F 18
S 19	21 51 29	26°32'51	6♏16	17°54	11°3	19°20	28°58	11°18	13°50	8°31	7°10	22°55	21°17	18°15	8°34	S 19
S 20	21 55 26	27°30'38	21°11	19°24	12°4	19°59	29°9	11°18	13°52	8°30	7°9	22°53	21°14	18°22	8°33	S 20
M21	21 59 22	28°28'25	6♏20	20°54	13°5	20°38	29°21	11°19	13°53	8°29	7°7	22°49	21°11	18°29	8°33	M21
T 22	22 3 19	29°26'14	21°31	22°21	14°7	21°17	29°33	11°19	13°54	8°28	7°6	22°44	21°8	18°35	8°32	T 22
W23	22 7 16	0♏24'04	6♏36	23°48	15°8	21°56	29°45	11°R19	13°56	8°27	7°5	22°39	21°4	18°42	8°32	W23
T 24	22 11 12	1°21'55	21°24	25°12	16°10	22°35	29°57	11°19	13°57	8°25	7°4	22°34	21°1	18°49	8°31	T 24
F 25	22 15 9	2°19'48	5♏51	26°36	17°13	23°13	0♏10	11°19	13°58	8°24	7°2	22°30	20°58	18°55	8°30	F 25
S 26	22 19 5	3°17'42	19°52	27°57	18°15	23°52	0°22	11°18	14°0	8°23	7°1	22°27	20°55	19°2	8°30	S 26
S 27	22 23 2	4°15'37	3♏26	29°17	19°18	24°30	0°34	11°18	14°1	8°21	7°0	22°D26	20°52	19°9	8°29	S 27
M28	22 26 58	5°13'33	16°36	0♏35	20°22	25°9	0°46	11°17	14°2	8°20	6°59	22°27	20°49	19°16	8°28	M28
T 29	22 30 55	6°11'31	29°25	1°52	21°25	25°47	0°58	11°17	14°3	8°19	6°57	22°28	20°45	19°22	8°27	T 29
W30	22 34 51	7°9'30	11♏56	3°6	22°29	26°26	1°11	11°16	14°4	8°17	6°56	22°29	20°42	19°29	8°26	W30
T 31	22 38 48	8♏7'30	24♏13	4♏19	23♏33	27♏4	1♏23	11♏15	14♏5	8♏16	6♏55	22°R30	20♏39	19♏36	8♏25	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
T 1	17n56	25s57	2s55	17n37	1n46	19n24	3s55	23n47	0n34	2n49	1n9	12n46	2s27	22n21	0s3	T 1
W 2	17 40	25 18	1 53	17 0	1 45	19 29	3 52	23 46	0 35	2 45	1 9	12 46	2 27	22 21	0 3	W 2
T 3	17 25	23 22	0 46	16 21	1 43	19 34	3 48	23 44	0 35	2 40	1 9	12 47	2 28	22 21	0 3	T 3
F 4	17 9	20 22	0n22	15 42	1 41	19 39	3 45	23 42	0 36	2 36	1 9	12 47	2 28	22 21	0 3	F 4
S 5	16 53	16 31	1 28	15 1	1 38	19 43	3 42	23 39	0 37	2 32	1 9	12 47	2 28	22 22	0 3	S 5
S 6	16 36	12 2	2 29	14 20	1 34	19 47	3 38	23 37	0 37	2 27	1 9	12 48	2 28	22 22	0 3	S 6
M 7	16 20	7 8	3 23	13 39	1 30	19 51	3 35	23 34	0 38	2 23	1 9	12 48	2 29	22 22	0 3	M 7
T 8	16 3	2 2	4 8	12 57	1 26	19 55	3 31	23 31	0 39	2 18	1 8	12 48	2 29	22 22	0 3	T 8
W 9	15 45	3n 8	4 42	12 14	1 21	19 58	3 28	23 28	0 39	2 14	1 8	12 48	2 29	22 23	0 3	W 9
T 10	15 28	8 11	5 4	11 31	1 16	20 1	3 24	23 25	0 40	2 9	1 8	12 49	2 29	22 23	0 3	T 10
F 11	15 10	12 58	5 13	10 48	1 10	20 4	3 20	23 22	0 41	2 4	1 8	12 49	2 29	22 23	0 3	F 11
S 12	14 52	17 18	5 9	10 5	1 4	20 6	3 16	23 18	0 41	2 0	1 8	12 49	2 30	22 23	0 3	S 12
S 13	14 34	21 0	4 50	9 21	0 58	20 8	3 12	23 14	0 42	1 55	1 8	12 49	2 30	22 24	0 3	S 13
M14	14 15	23 49	4 18	8 37	0 51	20 10	3 8	23 10	0 43	1 50	1 8	12 49	2 30	22 24	0 3	M14
T 15	13 57	25 31	3 31	7 54	0 44	20 11	3 4	23 6	0 43	1 46	1 8	12 49	2 30	22 24	0 3	T 15
W16	13 38	25 50	2 33	7 10	0 37	20 12	3 0	23 2	0 44	1 41	1 8	12 49	2 31	22 24	0 3	W16
T 17	13 19	24 36	1 23	6 27	0 30	20 12	2 56	22 57	0 45	1 36	1 8	12 49	2 31	22 25	0 3	T 17
F 18	12 59	21 48	0 7	5 43	0 22	20 12	2 51	22 53	0 45	1 32	1 8	12 49	2 31	22 25	0 3	F 18
S 19	12 40	17 32	1s12	5 0	0 14	20 12	2 47	22 48	0 46	1 27	1 7	12 49	2 31	22 25	0 3	S 19
S 20	12 20	12 6	2 28	4 17	0 6	20 11	2 43	22 43	0 47	1 22	1 7	12 49	2 32	22 25	0 3	S 20
M21	12 0	5 52	3 34	3 35	0s 2	20 10	2 39	22 38	0 47	1 17	1 7	12 49	2 32	22 25	0 3	M21
T 22	11 40	0s43	4 26	2 52	0 10	20 8	2 34	22 32	0 48	1 12	1 7	12 49	2 32	22 26	0 3	T 22
W23	11 20	7 11	4 58	2 10	0 19	20 6	2 30	22 27	0 49	1 7	1 7	12 48	2 32	22 26	0 3	W23
T 24	10 59	13 8	5 10	1 29	0 28	20 3	2 25	22 21	0 49	1 3	1 7	12 48	2 33	22 26	0 3	T 24
F 25	10 39	18 13	5 2	0 48	0 36	20 0	2 21	22 15	0 50	0 58	1 7	12 48	2 33	22 26	0 2	F 25
S 26	10 18	22 7	4 36	0 7	0 45	19 56	2 16	22 9	0 51	0 53	1 7	12 47	2 33	22 26	0 2	S 26
S 27	9 57	24 41	3 55	0s33	0 54	19 52	2 12	22 3	0 51	0 48	1 7	12 47	2 33	22 26	0 2	S 27
M28	9 36	25 47	3 2	1 12	1 3	19 48	2 7	21 57	0 52	0 43	1 7	12 47	2 34	22 26	0 2	M28
T 29	9 14	25 28	2 2	1 51	1 12	19 43	2 3	21 51	0 52	0 38	1 7	12 46	2 34	22 27	0 2	T 29
W30	8 53	23 51	0 57	2 29	1 22	19 37	1 58	21 44	0 53	0 33	1 7	12 46	2 34	22 27	0 2	W30
T 31	8n31	21s 7	0n 9	3s 6	1s31	19n31	1s54	21n37	0n54	0n28	1n 7	12n45	2s34	22n27	0s 2	T 31

Julian Day Number = 2461984.5, Delta T = 68.94 sec

Ecliptic obliquity = 23°26'11", Nutation = 0°00'17", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 25°08'22", Lahiri = 24°15'23"

ASTRODIENST EPHEMERIS for the year 2028

geocentric

SEPTEMBER 2028

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	22 42 45	9 ^h 5'32	6 ^h 19	5 ^h 30	24 ^h 37	27 ^h 42	1 ^h 36	11°R14	14 ^h 6	8°R15	6°R54	22°R29	20 ^h 36	19 ^h 42	8°R24	F 1
S 2	22 46 41	10° 3'35	18°19	6°39	25°41	28°21	1°48	11 ^h 13	14° 7	8°Y13	6 ^h 53	22 ^h 26	20°33	19°49	8 ^h 23	S 2
S 3	22 50 38	11° 1'40	0 ^h 13	7°46	26°46	28°59	2° 0	11°12	14° 8	8°12	6°52	22°20	20°29	19°56	8°22	S 3
M 4	22 54 34	11°59'46	12° 5	8°51	27°51	29°37	2°13	11°11	14° 9	8°10	6°51	22°13	20°26	20° 2	8°20	M 4
T 5	22 58 31	12°57'54	23°57	9°53	28°56	0 ^h 15	2°26	11°10	14° 9	8° 9	6°50	22° 4	20°23	20° 9	8°19	T 5
W 6	23 2 27	13°56'04	5 ^h 49	10°53	0 ^h 2	0°53	2°38	11° 8	14°10	8° 7	6°49	21°54	20°20	20°16	8°18	W 6
T 7	23 6 24	14°54'15	17°43	11°50	1° 8	1°31	2°51	11° 7	14°11	8° 6	6°48	21°44	20°17	20°23	8°16	T 7
F 8	23 10 20	15°52'29	29°43	12°45	2°14	2° 9	3° 3	11° 5	14°11	8° 4	6°47	21°35	20°14	20°29	8°15	F 8
S 9	23 14 17	16°50'44	11 ^h 49	13°36	3°20	2°46	3°16	11° 4	14°12	8° 3	6°46	21°28	20°10	20°36	8°13	S 9
S 10	23 18 14	17°49'02	24° 5	14°25	4°26	3°24	3°29	11° 2	14°12	8° 1	6°45	21°23	20° 7	20°43	8°12	S 10
M 11	23 22 10	18°47'21	6 ^h 35	15°10	5°33	4° 2	3°41	11° 0	14°13	8° 0	6°44	21°20	20° 4	20°49	8°10	M 11
T 12	23 26 7	19°45'43	19°23	15°51	6°39	4°39	3°54	10°58	14°13	7°58	6°43	21°D19	20° 1	20°56	8° 9	T 12
W 13	23 30 3	20°44'07	2 ^h 32	16°28	7°46	5°17	4° 7	10°56	14°14	7°57	6°42	21°20	19°58	21° 3	8° 7	W 13
T 14	23 34 0	21°42'33	16° 6	17° 2	8°53	5°55	4°20	10°53	14°14	7°55	6°41	21°R20	19°55	21°10	8° 5	T 14
F 15	23 37 56	22°41'01	0 ^h 7	17°31	10° 1	6°32	4°33	10°51	14°14	7°54	6°40	21°20	19°51	21°16	8° 4	F 15
S 16	23 41 53	23°39'32	14°35	17°55	11° 8	7° 9	4°45	10°49	14°14	7°52	6°39	21°18	19°48	21°23	8° 2	S 16
S 17	23 45 49	24°38'04	29°28	18°13	12°16	7°47	4°58	10°46	14°14	7°50	6°38	21°14	19°45	21°30	8° 0	S 17
M 18	23 49 46	25°36'38	14 ^h 38	18°27	13°24	8°24	5°11	10°44	14°14	7°49	6°37	21° 7	19°42	21°36	7°58	M 18
T 19	23 53 43	26°35'14	29°56	18°34	14°32	9° 1	5°24	10°41	14°R14	7°47	6°37	20°58	19°39	21°43	7°56	T 19
W 20	23 57 39	27°33'52	15 ^h 12	18°R35	15°40	9°38	5°37	10°38	14°14	7°46	6°36	20°48	19°35	21°50	7°54	W 20
T 21	0 1 36	28°32'32	0 ^h 13	18°30	16°48	10°15	5°50	10°35	14°14	7°44	6°35	20°38	19°32	21°56	7°52	T 21
F 22	0 5 32	29°31'14	14°52	18°18	17°57	10°52	6° 3	10°32	14°14	7°42	6°34	20°30	19°29	22° 3	7°50	F 22
S 23	0 9 29	0 ^h 29'58	29° 3	17°58	19° 6	11°29	6°16	10°29	14°14	7°41	6°34	20°24	19°26	22°10	7°48	S 23
S 24	0 13 25	1°28'43	12 ^h 44	17°32	20°14	12° 6	6°29	10°26	14°14	7°39	6°33	20°20	19°23	22°17	7°46	S 24
M 25	0 17 22	2°27'30	25°56	16°58	21°23	12°43	6°42	10°23	14°14	7°37	6°32	20°19	19°20	22°23	7°43	M 25
T 26	0 21 18	3°26'19	8 ^h 33	16°17	22°33	13°20	6°55	10°20	14°13	7°36	6°32	20°D19	19°16	22°30	7°41	T 26
W 27	0 25 15	4°25'10	21°10	15°29	23°42	13°56	7° 8	10°16	14°13	7°34	6°31	20°R19	19°13	22°37	7°39	W 27
T 28	0 29 12	5°24'02	3 ^h 21	14°35	24°51	14°33	7°21	10°13	14°12	7°32	6°31	20°18	19°10	22°43	7°37	T 28
F 29	0 33 8	6°22'56	15°22	13°36	26° 1	15° 9	7°33	10° 9	14°12	7°31	6°30	20°16	19° 7	22°50	7°34	F 29
S 30	0 37 5	7 ^h 21'51	27 ^h 15	12 ^h 32	27 ^h 11	15 ^h 46	7 ^h 46	10 ^h 8	14 ^h 11	7 ^h 29	6 ^h 29	20 ^h 11	19 ^h 4	22 ^h 57	7 ^h 32	S 30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
F 1	8n10	17s30	1n14	3s43	1s40	19n25	1s49	21n30	0n54	0n23	1n 7	12n45	2s35	22n27	0s 2	F 1
S 2	7 48	13 12	2 15	4 19	1 49	19 17	1 44	21 23	0 55	0 18	1 7	12 44	2 35	22 27	0 2	S 2
S 3	7 26	8 27	3 9	4 53	1 58	19 10	1 40	21 16	0 56	0 13	1 7	12 44	2 35	22 27	0 2	S 3
M 4	7 4	3 25	3 55	5 27	2 7	19 2	1 35	21 9	0 56	0 8	1 6	12 43	2 35	22 27	0 2	M 4
T 5	6 41	1n44	4 30	6 0	2 16	18 53	1 31	21 1	0 57	0 3	1 6	12 43	2 36	22 27	0 2	T 5
W 6	6 19	6 48	4 54	6 32	2 25	18 44	1 26	20 54	0 58	0s 2	1 6	12 42	2 36	22 27	0 2	W 6
T 7	5 57	11 39	5 5	7 2	2 33	18 35	1 22	20 46	0 58	0 7	1 6	12 41	2 36	22 28	0 2	T 7
F 8	5 34	16 5	5 2	7 31	2 42	18 25	1 17	20 38	0 59	0 12	1 6	12 41	2 36	22 28	0 2	F 8
S 9	5 12	19 55	4 47	7 59	2 50	18 14	1 13	20 30	1 0	0 17	1 6	12 40	2 36	22 28	0 2	S 9
S 10	4 49	22 57	4 17	8 25	2 58	18 3	1 8	20 22	1 0	0 22	1 6	12 39	2 37	22 28	0 2	S 10
M 11	4 26	24 57	3 36	8 50	3 6	17 51	1 4	20 14	1 1	0 27	1 6	12 38	2 37	22 28	0 2	M 11
T 12	4 3	25 42	2 42	9 13	3 14	17 39	0 59	20 6	1 2	0 32	1 6	12 37	2 37	22 28	0 2	T 12
W 13	3 40	25 4	1 39	9 34	3 21	17 27	0 55	19 57	1 2	0 37	1 6	12 37	2 37	22 28	0 2	W 13
T 14	3 17	22 56	0 28	9 53	3 27	17 13	0 50	19 49	1 3	0 43	1 6	12 36	2 38	22 28	0 2	T 14
F 15	2 54	19 22	0s47	10 10	3 34	17 0	0 46	19 40	1 4	0 48	1 6	12 35	2 38	22 28	0 2	F 15
S 16	2 31	14 32	2 1	10 24	3 39	16 46	0 42	19 31	1 4	0 53	1 6	12 34	2 38	22 28	0 2	S 16
S 17	2 8	8 43	3 8	10 36	3 44	16 31	0 37	19 22	1 5	0 58	1 6	12 33	2 38	22 28	0 2	S 17
M 18	1 45	2 18	4 4	10 45	3 48	16 16	0 33	19 13	1 6	1 3	1 6	12 32	2 38	22 28	0 2	M 18
T 19	1 21	4s18	4 43	10 51	3 52	16 1	0 29	19 4	1 6	1 8	1 6	12 31	2 39	22 28	0 2	T 19
W 20	0 58	10 37	5 1	10 54	3 54	15 45	0 24	18 55	1 7	1 13	1 6	12 30	2 39	22 28	0 2	W 20
T 21	0 35	16 12	4 58	10 53	3 56	15 28	0 20	18 45	1 8	1 18	1 6	12 29	2 39	22 28	0 2	T 21
F 22	0 11	20 41	4 36	10 48	3 56	15 12	0 16	18 36	1 8	1 23	1 6	12 28	2 39	22 28	0 2	F 22
S 23	0s12	23 48	3 57	10 40	3 54	14 54	0 12	18 26	1 9	1 29	1 6	12 27	2 39	22 28	0 2	S 23
S 24	0 35	25 23	3 6	10 27	3 52	14 37	0 8	18 17	1 10	1 34	1 6	12 25	2 39	22 28	0 2	S 24
M 25	0 59	25 28	2 6	10 10	3 48	14 18	0 4	18 7	1 10	1 39	1 6	12 24	2 40	22 28	0 2	M 25
T 26	1 22	24 10	1 1	9 49	3 41	14 0	0 0	17 57	1 11	1 44	1 6	12 23	2 40	22 28	0 2	T 26
W 27	1 45	21 42	0n 5	9 23	3 34	13 41	0n 4	17 47	1 12	1 49	1 6	12 22	2 40	22 28	0 2	W 27
T 28	2 9	18 18	1 9	8 53	3 24	13 21	0 8	17 37	1 12	1 54	1 6	12 21	2 40	22 28	0 2	T 28
F 29	2 32	14 11	2 9	8 19	3 12	13 1	0 11	17 27	1 13	1 59	1 6	12 20	2 40	22 28	0 2	F 29
S 30	2s55	9s34	3n 2	7s42	2s59	12n41	0n15	17n17	1n14	2s 4	1n 6	12n18	2s40	22n28	0s 2	S 30

Julian Day Number = 2462015.5, Delta T = 68.96 sec
 Ecliptic obliquity = 23°26'12, Nutation = 0°00'17, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 25°08'27, Lahiri = 24°15'27

ASTRODIENST EPHEMERIS for the year 2028

geocentric

OCTOBER 2028

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	0 41 1	8♂20'49	9♂ 6	11°R25	28♂20	16♂22	7♂59	10°R 2	14°R11	7°R27	6°R29	20°R 3	19♂ 0	23♂ 4	7°R30	S 1
M 2	0 44 58	9°19'48	20°57	10♂16	29°30	16°59	8°12	9♂58	14♂10	7°Y26	6♂28	19♂52	18°57	23°10	7♂27	M 2
T 3	0 48 54	10°18'49	2°Y50	9° 8	0♂41	17°35	8°25	9°55	14° 9	7°24	6°28	19°39	18°54	23°17	7°25	T 3
W 4	0 52 51	11°17'53	14°46	8° 2	1°51	18°11	8°38	9°51	14° 9	7°22	6°28	19°25	18°51	23°24	7°22	W 4
T 5	0 56 47	12°16'58	26°47	6°59	3° 1	18°47	8°51	9°47	14° 8	7°21	6°27	19°11	18°48	23°30	7°20	T 5
F 6	1 0 44	13°16'06	8♂55	6° 3	4°12	19°23	9° 4	9°43	14° 7	7°19	6°27	18°58	18°45	23°37	7°17	F 6
S 7	1 4 40	14°15'15	21° 9	5°13	5°22	19°59	9°17	9°39	14° 6	7°17	6°26	18°47	18°41	23°44	7°15	S 7
S 8	1 8 37	15°14'27	3♂33	4°32	6°33	20°35	9°30	9°34	14° 5	7°16	6°26	18°39	18°38	23°50	7°12	S 8
M 9	1 12 34	16°13'41	16° 8	4° 1	7°44	21°11	9°43	9°30	14° 4	7°14	6°26	18°34	18°35	23°57	7° 9	M 9
T 10	1 16 30	17°12'58	28°57	3°40	8°55	21°46	9°56	9°26	14° 3	7°12	6°26	18°31	18°32	24° 4	7° 7	T 10
W11	1 20 27	18°12'17	12♂ 3	3°D30	10° 6	22°22	10° 9	9°22	14° 2	7°11	6°25	18°31	18°29	24°11	7° 4	W11
T 12	1 24 23	19°11'38	25°30	3°31	11°17	22°58	10°22	9°17	14° 1	7° 9	6°25	18°31	18°26	24°17	7° 1	T 12
F 13	1 28 20	20°11'01	9♂20	3°42	12°29	23°33	10°35	9°13	14° 0	7° 7	6°25	18°30	18°22	24°24	6°59	F 13
S 14	1 32 16	21°10'27	23°34	4° 4	13°40	24° 9	10°48	9° 9	13°59	7° 6	6°25	18°27	18°19	24°31	6°56	S 14
S 15	1 36 13	22° 9'55	8♂11	4°35	14°52	24°44	11° 1	9° 4	13°57	7° 4	6°25	18°22	18°16	24°37	6°53	S 15
M16	1 40 9	23° 9'25	23° 8	5°16	16° 3	25°19	11°14	9° 0	13°56	7° 3	6°25	18°14	18°13	24°44	6°50	M16
T 17	1 44 6	24° 8'58	8♂15	6° 6	17°15	25°54	11°26	8°55	13°55	7° 1	6°24	18° 4	18°10	24°51	6°48	T 17
W18	1 48 3	25° 8'32	23°25	7° 3	18°27	26°30	11°39	8°50	13°53	7° 0	6°24	17°53	18° 6	24°58	6°45	W18
T 19	1 51 59	26° 8'09	8♂25	8° 6	19°39	27° 5	11°52	8°46	13°52	6°58	6°D24	17°41	18° 3	25° 4	6°42	T 19
F 20	1 55 56	27° 7'48	23° 7	9°16	20°51	27°39	12° 5	8°41	13°51	6°56	6°24	17°31	18° 0	25°11	6°39	F 20
S 21	1 59 52	28° 7'28	7♂23	10°31	22° 3	28°14	12°18	8°36	13°49	6°55	6°24	17°24	17°57	25°18	6°36	S 21
S 22	2 3 49	29° 7'11	21°10	11°51	23°15	28°49	12°30	8°32	13°47	6°53	6°25	17°19	17°54	25°24	6°33	S 22
M23	2 7 45	0♂6'55	4♂28	13°14	24°28	29°24	12°43	8°27	13°46	6°52	6°25	17°17	17°51	25°31	6°31	M23
T 24	2 11 42	1° 6'41	17°19	14°41	25°40	29°58	12°56	8°22	13°44	6°50	6°25	17°D16	17°47	25°38	6°28	T 24
W25	2 15 38	2° 6'28	29°48	16°10	26°53	0♂33	13° 8	8°17	13°43	6°49	6°25	17°R16	17°44	25°45	6°25	W25
T 26	2 19 35	3° 6'17	12♂ 0	17°42	28° 5	1° 7	13°21	8°13	13°41	6°47	6°25	17°16	17°41	25°51	6°22	T 26
F 27	2 23 32	4° 6'08	24° 0	19°15	29°18	1°41	13°34	8° 8	13°39	6°46	6°25	17°14	17°38	25°58	6°19	F 27
S 28	2 27 28	5° 6'00	5♂52	20°50	0♂31	2°16	13°46	8° 3	13°37	6°45	6°26	17°10	17°35	26° 5	6°16	S 28
S 29	2 31 25	6° 5'54	17°43	22°27	1°44	2°50	13°59	7°58	13°35	6°43	6°26	17° 3	17°32	26°11	6°13	S 29
M30	2 35 21	7° 5'50	29°34	24° 4	2°56	3°24	14°11	7°53	13°34	6°42	6°26	16°54	17°28	26°18	6°10	M30
T 31	2 39 18	8♂5'48	11°Y30	25♂41	4♂ 9	3♂58	14♂24	7♂48	13♂32	6°Y40	6♂26	16♂42	17♂25	26♂25	6♂ 8	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	3s19	4s38	3n48	7s 1	2s43	12n21	0n19	17n 7	1n14	2s10	1n 6	12n17	2s41	22n28	0s 2	1n34	S 1
M 2	3 42	0n27	4 23	6 19	2 27	12 0	0 22	16 56	1 15	2 15	1 6	12 16	2 41	22 28	0 2	1 34	M 2
T 3	4 5	5 31	4 47	5 35	2 8	11 38	0 26	16 46	1 16	2 20	1 6	12 14	2 41	22 28	0 2	1 33	T 3
W 4	4 28	10 24	4 59	4 51	1 49	11 17	0 29	16 35	1 16	2 25	1 6	12 13	2 41	22 28	0 2	1 33	W 4
T 5	4 51	14 56	4 57	4 8	1 29	10 54	0 33	16 25	1 17	2 30	1 6	12 12	2 41	22 27	0 2	1 32	T 5
F 6	5 14	18 55	4 42	3 27	1 8	10 32	0 36	16 14	1 18	2 35	1 6	12 10	2 41	22 27	0 2	1 31	F 6
S 7	5 37	22 7	4 14	2 48	0 48	10 9	0 40	16 3	1 18	2 40	1 6	12 9	2 41	22 27	0 2	1 31	S 7
S 8	6 0	24 21	3 33	2 14	0 28	9 46	0 43	15 53	1 19	2 45	1 6	12 8	2 41	22 27	0 2	1 30	S 8
M 9	6 23	25 24	2 42	1 43	0 8	9 23	0 46	15 42	1 20	2 50	1 6	12 6	2 41	22 27	0 2	1 29	M 9
T 10	6 46	25 7	1 41	1 18	0n10	8 59	0 49	15 31	1 20	2 55	1 6	12 5	2 42	22 27	0 2	1 29	T 10
W11	7 8	23 27	0 34	0 58	0 28	8 35	0 52	15 20	1 21	3 0	1 6	12 3	2 42	22 27	0 2	1 28	W11
T 12	7 31	20 26	0s37	0 44	0 44	8 11	0 55	15 9	1 22	3 5	1 6	12 2	2 42	22 27	0 2	1 27	T 12
F 13	7 53	16 11	1 48	0 35	0 58	7 46	0 58	14 58	1 23	3 10	1 6	12 0	2 42	22 27	0 2	1 27	F 13
S 14	8 16	10 56	2 54	0 31	1 11	7 21	1 1	14 47	1 23	3 15	1 6	11 59	2 42	22 26	0 2	1 26	S 14
S 15	8 38	4 56	3 50	0 33	1 23	6 56	1 3	14 36	1 24	3 20	1 6	11 57	2 42	22 26	0 2	1 25	S 15
M16	9 0	1s26	4 52	0 41	1 33	6 31	1 6	14 24	1 25	3 25	1 6	11 56	2 42	22 26	0 2	1 25	M16
T 17	9 22	7 48	4 36	0 52	1 41	6 5	1 8	14 13	1 25	3 30	1 6	11 54	2 42	22 26	0 2	1 24	T 17
W18	9 44	13 43	4 59	1 8	1 48	5 39	1 11	14 2	1 26	3 35	1 6	11 53	2 42	22 26	0 2	1 24	W18
T 19	10 5	18 44	4 41	1 28	1 54	5 13	1 13	13 50	1 27	3 40	1 6	11 51	2 42	22 26	0 2	1 23	T 19
F 20	10 27	22 30	4 5	1 52	1 58	4 47	1 16	13 39	1 27	3 45	1 6	11 50	2 42	22 25	0 2	1 22	F 20
S 21	10 48	24 44	3 14	2 18	2 1	4 21	1 18	13 28	1 28	3 50	1 7	11 48	2 42	22 25	0 2	1 22	S 21
S 22	11 10	25 22	2 13	2 48	2 3	3 54	1 20	13 16	1 29	3 55	1 7	11 47	2 42	22 25	0 2	1 21	S 22
M23	11 31	24 29	1 7	3 19	2 4	3 27	1 22	13 5	1 29	4 0	1 7	11 45	2 42	22 25	0 2	1 21	M23
T 24	11 52	22 19	0n 0	3 53	2 4	3 0	1 24	12 53	1 30	4 5	1 7	11 44	2 42	22 25	0 2	1 20	T 24
W25	12 12	19 7	1 6	4 28	2 3	2 33	1 26	12 42	1 31	4 10	1 7	11 42	2 42	22 25	0 2	1 19	W25
T 26	12 33	15 9	2 7	5 4	2 2	2 6	1 28	12 30	1 32	4 15	1 7	11 41	2 42	22 24	0 2	1 19	T 26
F 27	12 53	10 40	3 2	5 42	1 59	1 39	1 29	12 19	1 32	4 19	1 7	11 39	2 42	22 24	0 2	1 18	F 27
S 28	13 13	5 50	3 48	6 20	1 56	1 11	1 31	12 7	1 33	4 24	1 7	11 38	2 42	22 24	0 2	1 18	S 28
S 29	13 33	0 49	4 24	6 59	1 53	0 44	1 33	11 55	1 34	4 29	1 7	11 36	2 42	22 24	0 2	1 17	S 29
M30	13 53	4n14	4 48	7 39	1 49	0 16	1 34	11 44	1 34	4 34	1 7	11 35	2 42	22 24	0 2	1 17	M30
T 31	14s12	9n 9	5n 0	8s18	1n45	0s11	1n36	11n32	1n35	4s39	1n 7	11n33	2s42	22n23	0s 2	1n16	T 31

Julian Day Number = 2462045.5, Delta T = 68.98 sec
 Ecliptic obliquity = 23°26'12, Nutation = 0°00'16, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 25°08'31, Lahiri = 24°15'31

ASTRODIENST EPHEMERIS for the year 2028

geocentric

NOVEMBER 2028

00:00 UT

Day	Sid.t	☉	☽	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	2 43 14	9♈ 5'47	23♈33	27♈20	5♈22	4♈31	14♈36	7°R44	13°R30	6°R39	6♈27	16°R29	17♈22	26♈32	6°R 5	W 1	
T 2	2 47 11	10° 5'48	5♈44	28°58	6°36	5° 5	14°48	7♈39	13♈28	6°Y38	6°27	16♈17	17°19	26°38	6♈ 2	T 2	
F 3	2 51 7	11° 5'51	18° 3	0♈37	7°49	5°39	15° 1	7°34	13°26	6°36	6°28	16° 5	17°16	26°45	5°59	F 3	
S 4	2 55 4	12° 5'56	0♈32	2°15	9° 2	6°12	15°13	7°29	13°24	6°35	6°28	15°55	17°12	26°52	5°56	S 4	
S 5	2 59 1	13° 6'03	13°11	3°54	10°15	6°46	15°25	7°24	13°22	6°34	6°28	15°48	17° 9	26°58	5°53	S 5	
M 6	3 2 57	14° 6'12	26° 1	5°33	11°29	7°19	15°37	7°19	13°19	6°33	6°29	15°43	17° 6	27° 5	5°50	M 6	
T 7	3 6 54	15° 6'23	9♈ 1	7°11	12°42	7°52	15°49	7°15	13°17	6°31	6°29	15°41	17° 3	27°12	5°48	T 7	
W 8	3 10 50	16° 6'36	22°16	8°50	13°56	8°25	16° 2	7°10	13°15	6°30	6°30	15°D41	17° 0	27°19	5°45	W 8	
T 9	3 14 47	17° 6'51	5♈44	10°28	15° 9	8°58	16°14	7° 5	13°13	6°29	6°31	15°42	16°57	27°25	5°42	T 9	
F 10	3 18 43	18° 7'08	19°30	12° 6	16°23	9°31	16°26	7° 1	13°11	6°28	6°31	15°R43	16°53	27°32	5°39	F 10	
S 11	3 22 40	19° 7'27	3♈33	13°43	17°37	10° 4	16°38	6°56	13° 9	6°27	6°32	15°42	16°50	27°39	5°36	S 11	
S 12	3 26 36	20° 7'48	17°52	15°21	18°51	10°36	16°49	6°51	13° 6	6°26	6°32	15°38	16°47	27°45	5°33	S 12	
M13	3 30 33	21° 8'10	2♈27	16°58	20° 4	11° 9	17° 1	6°47	13° 4	6°24	6°33	15°33	16°44	27°52	5°31	M13	
T 14	3 34 30	22° 8'35	17°11	18°34	21°18	11°41	17°13	6°42	13° 2	6°23	6°34	15°26	16°41	27°59	5°28	T 14	
W15	3 38 26	23° 9'02	1♈58	20°11	22°32	12°14	17°25	6°37	12°59	6°22	6°35	15°17	16°37	28° 6	5°25	W15	
T 16	3 42 23	24° 9'30	16°40	21°47	23°46	12°46	17°36	6°33	12°57	6°21	6°35	15° 9	16°34	28°12	5°23	T 16	
F 17	3 46 19	25°10'00	1♈ 8	23°23	25° 0	13°18	17°48	6°28	12°55	6°20	6°36	15° 1	16°31	28°19	5°20	F 17	
S 18	3 50 16	26°10'32	15°17	24°59	26°14	13°50	18° 0	6°24	12°52	6°19	6°37	14°56	16°28	28°26	5°17	S 18	
S 19	3 54 12	27°11'05	29° 2	26°34	27°29	14°21	18°11	6°20	12°50	6°19	6°38	14°52	16°25	28°32	5°15	S 19	
M20	3 58 9	28°11'39	12♈22	28° 9	28°43	14°53	18°22	6°15	12°47	6°18	6°39	14°D51	16°22	28°39	5°12	M20	
T 21	4 2 5	29°12'15	25°17	29°44	29°57	15°24	18°34	6°11	12°45	6°17	6°40	14°51	16°18	28°46	5° 9	T 21	
W22	4 6 2	0♈12'52	7♈50	1♈19	1♈11	15°56	18°45	6° 7	12°43	6°16	6°41	14°53	16°15	28°53	5° 7	W22	
T 23	4 9 59	1°13'30	20° 5	2°53	2°26	16°27	18°56	6° 3	12°40	6°15	6°41	14°54	16°12	28°59	5° 4	T 23	
F 24	4 13 55	2°14'09	2♈ 7	4°28	3°40	16°58	19° 7	5°59	12°38	6°14	6°42	14°R55	16° 9	29° 6	5° 2	F 24	
S 25	4 17 52	3°14'49	14° 2	6° 2	4°54	17°29	19°18	5°55	12°35	6°14	6°43	14°54	16° 6	29°13	4°59	S 25	
S 26	4 21 48	4°15'31	25°53	7°36	6° 9	18° 0	19°29	5°51	12°33	6°13	6°44	14°51	16° 3	29°19	4°57	S 26	
M27	4 25 45	5°16'13	7°Y46	9°10	7°23	18°30	19°40	5°47	12°30	6°12	6°45	14°47	15°59	29°26	4°54	M27	
T 28	4 29 41	6°16'57	19°45	10°44	8°38	19° 1	19°51	5°43	12°28	6°12	6°47	14°41	15°56	29°33	4°52	T 28	
W29	4 33 38	7°17'41	18°53	12°18	9°52	19°31	20° 2	5°39	12°25	6°11	6°48	14°35	15°53	29°40	4°50	W29	
T 30	4 37 34	8°18'27	14♈12	13♈51	11♈ 7	20♈ 1	20♈12	5♈36	12♈23	6°Y10	6♈49	14♈28	15♈50	29♈46	4♈47	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
W 1	14s32	13n47	4n59	8s58	1n40	0s39	1n37	11n20	1n36	4s43	1n 7	11n32	2s42	22n23	0s 2	1n16	1s30	23s44	5s15	22s25	22s19	3n 2	12n45	0s50			
T 2	14 51	17 54	4 45	9 38	1 35	1 7	1 38	11 9	1 37	4 48	1 7	11 30	2 42	22 23	0 2	1 15	1 30	23 44	5 15	22 27	22 19	3 5	12 44	0 50			
F 3	15 9	21 19	4 17	10 18	1 29	1 35	1 39	10 57	1 37	4 53	1 7	11 29	2 42	22 23	0 2	1 15	1 30	23 44	5 14	22 28	22 19	3 8	12 43	0 51			
S 4	15 28	23 47	3 36	10 57	1 23	2 3	1 40	10 45	1 38	4 57	1 7	11 27	2 42	22 22	0 2	1 14	1 30	23 43	5 14	22 29	22 20	3 11	12 42	0 51			
S 5	15 46	25 5	2 44	11 36	1 17	2 31	1 41	10 34	1 39	5 2	1 8	11 26	2 42	22 22	0 2	1 14	1 30	23 43	5 14	22 30	22 20	3 14	12 41	0 51			
M 6	16 4	25 6	1 43	12 15	1 11	2 58	1 42	10 22	1 40	5 7	1 8	11 24	2 42	22 22	0 2	1 13	1 30	23 43	5 14	22 31	22 21	3 17	12 40	0 51			
T 7	16 22	23 43	0 36	12 53	1 5	3 26	1 43	10 10	1 40	5 11	1 8	11 23	2 42	22 22	0 2	1 13	1 30	23 43	5 14	22 31	22 21	3 20	12 39	0 51			
W 8	16 39	21 1	0s35	13 31	0 59	3 54	1 44	9 58	1 41	5 16	1 8	11 21	2 42	22 21	0 2	1 12	1 30	23 43	5 14	22 31	22 21	3 23	12 38	0 51			
T 9	16 57	17 8	1 45	14 8	0 52	4 22	1 44	9 47	1 42	5 20	1 8	11 20	2 42	22 21	0 2	1 12	1 30	23 42	5 14	22 31	22 22	3 26	12 37	0 51			
F 10	17 13	12 16	2 51	14 45	0 45	4 50	1 45	9 35	1 43	5 25	1 8	11 18	2 42	22 21	0 2	1 11	1 30	23 42	5 14	22 31	22 22	3 28	12 36	0 51			
S 11	17 30	6 40	3 47	15 20	0 39	5 18	1 45	9 23	1 43	5 29	1 8	11 17	2 42	22 21	0 2	1 11	1 30	23 42	5 14	22 31	22 23	3 31	12 35	0 51			
S 12	17 46	0 38	4 31	15 55	0 32	5 45	1 45	9 12	1 44	5 34	1 8	11 15	2 41	22 20	0 2	1 11	1 30	23 42	5 14	22 31	22 23	3 34	12 34	0 51			
M13	18 2	5s32	4 58	16 30	0 25	6 13	1 46	9 0	1 45	5 38	1 8	11 14	2 41	22 20	0 2	1 10	1 30	23 41	5 14	22 32	22 23	3 37	12 33	0 51			
T 14	18 18	11 27	5 6	17 3	0 18	6 40	1 46	8 48	1 46	5 42	1 8	11 13	2 41	22 20	0 2	1 10	1 30	23 41	5 14	22 33	22 24	3 40	12 32	0 51			
W15	18 33	16 44	4 53	17 36	0 12	7 8	1 46	8 37	1 46	5 47	1 8	11 11	2 41	22 19	0 2	1 9	1 30	23 41	5 14	22 34	22 24	3 43	12 31	0 51			
T 16	18 49	20 59	4 21	18 8	0 5	7 35	1 46	8 25	1 47	5 51	1 9	11 10	2 41	22 19	0 2	1 9	1 30	23 41	5 14	22 35	22 25	3 46	12 30	0 51			
F 17	19 3	23 51	3 33	18 39	0s 2	8 2	1 46	8 14	1 48	5 56	1 9	11 9	2 41	22 19	0 2	1 9	1 30	23 40	5 14	22 35	22 25	3 49	12 29	0 51			
S 18	19 18	25 9	2 32	19 9	0 9	8 29	1 46	8 2	1 49	6 0	1 9	11 7	2 41	22 19	0 2	1 8	1 30	23 40	5 13	22 36	22 25	3 52	12 28	0 52			
S 19	19 32	24 50	1 24	19 38	0 15	8 56	1 46	7 50	1 50	6 4	1 9	11 6	2 41	22 18	0 2	1 8	1 29	23 40	5 13	22 36	22 26	3 55	12 27	0 52			
M20	19 45	23 5	0 13	20 6	0 22	9 22	1 45	7 39	1 50	6 8	1 9	11 5	2 40	22 18	0 2	1 8	1 29	23 40	5 13	22 37	22 26	3 58	12 26	0 52			
T 21	19 59	20 9	0n56	20 33	0 28	9 49	1 45	7 27	1 51	6 12	1 9	11 3	2 40	22 18	0 2	1 7	1 29	23 39	5 13	22 37	22 26	4 1	12 26	0 52			
W22	20 12	16 21	2 1	20 59	0 35	10 15	1 45	7 16	1 52	6 17	1 9	11 2	2 40	22 17	0 2	1 7	1 29	23 39	5 13	22 36	22 27	4 4	12 25	0 52			
T 23	20 24	11 57	2 59	21 25	0 41	10 41	1 44	7 5	1 53	6 21	1 9	11 1	2 40	22 17	0 2	1 7	1 29	23 39	5 13	22 36	22 27	4 6	12 24	0 52			
F 24	20 36	7 10	3 48	21 49	0 47	11 7	1 43	6 53	1 54	6 25	1 9	11 0	2 40	22 17	0 2	1 7	1 29	23 38	5 13	22 36	22 28	4 9	12 23	0 52			
S 25	20 48	2 11	4 26	22 12	0 54	11 32	1 43	6 42	1 54	6 29	1 10	10 59	2 40	22 16	0 2	1 6	1 29	23 38	5 13	22 36	22 28	4 12	12 22	0 52			
S 26	21 0	2n51	4 53	22 33	1 0	11 58	1 42	6 31	1 55	6 33	1 10	10 58	2 39	22 16	0 2	1 6	1 29	23 38	5 13	22 36	22 28	4 15	12 21	0 52			
M27	21 11	7 47	5 8	22 54	1 6	12 23	1 41	6 20	1 56	6 37	1 10	10 56	2 39	22 16	0 2	1 6	1 29	23 37	5 13	22 37	22 29	4 18	12 20	0 52			
T 28	21 21	12 29	5 9	23 14	1 11	12 47	1 40	6 8	1 57	6 41	1 10	10 55	2 39	22 15	0 2	1 6	1 29	23 37	5 13	22 38	22 29	4 21	12 19	0 52			
W29	21 31	16 45	4 56	23 32	1 17	13 12	1 39	5 57	1 58	6 45	1 10	10 54	2 39	22 15	0 2	1 5	1 29	23 37	5 13	22 38	22 29	4 24	12 19	0 52			
T 30	21s41	20n23	4n30	23s49	1s22	13s36	1n38	5n46	1n58	6s49	1n10	10n53	2s39	22n15	0s 2	1n 5	1s29	23s36	5s13	22s39	22s30	4n27	12n18	0s52			

ASTRODIENST EPHEMERIS for the year 2028
geocentric

DECEMBER 2028

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	4 41 31	9♌19'14	26♋45	15♊25	12♏21	20♏31	20♏23	5°R32	12°R20	6°R10	6♋50	14°R21	15♌47	29♋53	4°R45	F 1
S 2	4 45 28	10°20'02	9♏30	16°58	13°36	21° 1	20°33	5♋28	12♏17	6♏9	6°51	14♌16	15°43	29°59	4♋43	S 2
S 3	4 49 24	11°20'51	22°30	18°32	14°51	21°30	20°43	5°25	12°15	6° 9	6°52	14°12	15°40	0♏6	4°41	S 3
M 4	4 53 21	12°21'42	5♋41	20° 5	16° 5	22° 0	20°54	5°22	12°12	6° 8	6°53	14°10	15°37	0°13	4°39	M 4
T 5	4 57 17	13°22'33	19° 5	21°38	17°20	22°29	21° 4	5°18	12°10	6° 8	6°55	14°D10	15°34	0°20	4°36	T 5
W 6	5 1 14	14°23'26	2♏39	23°12	18°35	22°58	21°14	5°15	12° 7	6° 8	6°56	14°11	15°31	0°27	4°34	W 6
T 7	5 5 10	15°24'20	16°24	24°45	19°49	23°27	21°24	5°12	12° 5	6° 7	6°57	14°13	15°28	0°33	4°32	T 7
F 8	5 9 7	16°25'15	0♏18	26°18	21° 4	23°56	21°34	5° 9	12° 2	6° 7	6°59	14°14	15°24	0°40	4°30	F 8
S 9	5 13 3	17°26'12	14°21	27°51	22°19	24°24	21°44	5° 6	12° 0	6° 7	7° 0	14°R15	15°21	0°47	4°28	S 9
S 10	5 17 0	18°27'09	28°31	29°24	23°34	24°53	21°53	5° 3	11°57	6° 6	7° 1	14°15	15°18	0°54	4°27	S 10
M 11	5 20 57	19°28'08	12♋47	0♋57	24°49	25°21	22° 3	5° 0	11°55	6° 6	7° 3	14°13	15°15	1° 0	4°25	M 11
T 12	5 24 53	20°29'08	27° 6	2°30	26° 4	25°49	22°12	4°58	11°52	6° 6	7° 4	14°11	15°12	1° 7	4°23	T 12
W 13	5 28 50	21°30'10	11♏24	4° 3	27°19	26°17	22°22	4°55	11°50	6° 6	7° 5	14° 7	15° 9	1°14	4°21	W 13
T 14	5 32 46	22°31'12	25°36	5°36	28°34	26°44	22°31	4°53	11°47	6° 6	7° 7	14° 4	15° 5	1°20	4°19	T 14
F 15	5 36 43	23°32'15	9♌39	7° 8	29°49	27°12	22°40	4°50	11°45	6° 6	7° 8	14° 1	15° 2	1°27	4°18	F 15
S 16	5 40 39	24°33'19	23°27	8°40	1♌4	27°39	22°49	4°48	11°42	6° 6	7°10	13°59	14°59	1°34	4°16	S 16
S 17	5 44 36	25°34'24	6♋57	10°12	2°19	28° 5	22°58	4°46	11°40	6°D 6	7°11	13°58	14°56	1°41	4°15	S 17
M 18	5 48 33	26°35'29	20° 9	11°43	3°34	28°32	23° 7	4°44	11°37	6° 6	7°13	13°D58	14°53	1°47	4°13	M 18
T 19	5 52 29	27°36'35	3♋0	13°14	4°49	28°59	23°16	4°42	11°35	6° 6	7°14	13°59	14°49	1°54	4°12	T 19
W 20	5 56 26	28°37'41	15°33	14°44	6° 4	29°25	23°24	4°40	11°33	6° 6	7°16	14° 0	14°46	2° 1	4°10	W 20
T 21	6 0 22	29°38'48	27°50	16°14	7°19	29°51	23°33	4°38	11°30	6° 6	7°17	14° 2	14°43	2° 7	4° 9	T 21
F 22	6 4 19	0♋39'54	9♋55	17°42	8°34	0♋16	23°41	4°37	11°28	6° 6	7°19	14° 3	14°40	2°14	4° 8	F 22
S 23	6 8 15	1°41'01	21°51	19° 9	9°49	0°42	23°49	4°35	11°25	6° 6	7°20	14° 4	14°37	2°21	4° 6	S 23
S 24	6 12 12	2°42'08	3♏43	20°35	11° 4	1° 7	23°58	4°34	11°23	6° 6	7°22	14°R 4	14°34	2°28	4° 5	S 24
M 25	6 16 8	3°43'15	15°37	21°59	12°19	1°32	24° 6	4°32	11°21	6° 7	7°24	14° 3	14°30	2°34	4° 4	M 25
T 26	6 20 5	4°44'23	27°36	23°20	13°34	1°56	24°13	4°31	11°19	6° 7	7°25	14° 3	14°27	2°41	4° 3	T 26
W 27	6 24 2	5°45'30	9♋45	24°40	14°49	2°21	24°21	4°30	11°16	6° 7	7°27	14° 2	14°24	2°48	4° 2	W 27
T 28	6 27 58	6°46'38	22° 8	25°56	16° 4	2°45	24°29	4°29	11°14	6° 8	7°29	14° 1	14°21	2°55	4° 1	T 28
F 29	6 31 55	7°47'45	4♏48	27° 9	17°20	3° 9	24°36	4°28	11°12	6° 8	7°30	14° 0	14°18	3° 1	4° 0	F 29
S 30	6 35 51	8°48'53	17°46	28°18	18°35	3°32	24°43	4°27	11°10	6° 9	7°32	13°59	14°15	3° 8	3°59	S 30
S 31	6 39 48	9♋50'00	1♋4	29♋23	19♌50	3♋55	24♋51	4♋27	11♏7	6♏9	7♋34	13♋59	14♋11	3♏15	3♋58	S 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
F 1	21s51	23n 9	3n50	24s 5	1s27	14s 0	1n37	5n35	1n59	6s52	1n10	10n52	2s38	22n15	0s 2	1n 5	1s29	23s36	5s13	22s40	22s30	4n30	12n17	0s52
S 2	22 0	24 48	2 58	24 20	1 32	14 23	1 36	5 24	2 0	6 56	1 11	10 51	2 38	22 14	0 2	1 5	1 29	23 36	5 13	22 40	22 31	4 33	12 16	0 52
S 3	22 8	25 9	1 56	24 33	1 37	14 47	1 35	5 13	2 1	7 0	1 11	10 50	2 38	22 14	0 2	1 5	1 29	23 35	5 13	22 41	22 31	4 35	12 15	0 52
M 4	22 16	24 5	0 46	24 46	1 42	15 9	1 34	5 2	2 2	7 4	1 11	10 50	2 38	22 14	0 2	1 5	1 29	23 35	5 13	22 41	22 31	4 38	12 15	0 52
T 5	22 24	21 38	0s27	24 56	1 46	15 32	1 32	4 52	2 3	7 7	1 11	10 49	2 38	22 13	0 2	1 4	1 29	23 35	5 13	22 41	22 32	4 41	12 14	0 52
W 6	22 31	17 57	1 40	25 6	1 50	15 54	1 31	4 41	2 4	7 11	1 11	10 48	2 37	22 13	0 2	1 4	1 29	23 34	5 13	22 41	22 32	4 44	12 13	0 53
T 7	22 38	13 15	2 47	25 14	1 54	16 16	1 29	4 30	2 4	7 15	1 11	10 47	2 37	22 13	0 2	1 4	1 29	23 34	5 12	22 41	22 32	4 47	12 12	0 53
F 8	22 45	7 50	3 46	25 21	1 58	16 37	1 28	4 20	2 5	7 18	1 11	10 46	2 37	22 12	0 2	1 4	1 29	23 34	5 12	22 41	22 33	4 50	12 12	0 53
S 9	22 51	1 58	4 32	25 26	2 1	16 58	1 26	4 9	2 6	7 22	1 12	10 45	2 37	22 12	0 2	1 4	1 29	23 33	5 12	22 40	22 33	4 53	12 11	0 53
S 10	22 56	4s 2	5 2	25 30	2 4	17 18	1 24	3 59	2 7	7 25	1 12	10 45	2 36	22 12	0 2	1 4	1 29	23 33	5 12	22 40	22 34	4 56	12 10	0 53
M11	23 1	9 52	5 14	25 33	2 7	17 38	1 23	3 48	2 8	7 28	1 12	10 44	2 36	22 11	0 2	1 4	1 29	23 32	5 12	22 41	22 34	4 58	12 10	0 53
T 12	23 6	15 11	5 6	25 34	2 9	17 57	1 21	3 38	2 9	7 32	1 12	10 43	2 36	22 11	0 2	1 4	1 29	23 32	5 12	22 41	22 34	5 1	12 9	0 53
W13	23 10	19 40	4 39	25 34	2 12	18 16	1 19	3 28	2 10	7 35	1 12	10 43	2 36	22 11	0 2	1 4	1 29	23 32	5 12	22 41	22 35	5 4	12 8	0 53
T 14	23 13	22 58	3 56	25 32	2 13	18 35	1 17	3 18	2 11	7 38	1 12	10 42	2 35	22 10	0 2	1 4	1 28	23 31	5 12	22 42	22 35	5 7	12 8	0 53
F 15	23 17	24 50	2 58	25 29	2 14	18 53	1 15	3 8	2 11	7 42	1 13	10 42	2 35	22 10	0 2	1 4	1 28	23 31	5 12	22 42	22 35	5 10	12 7	0 53
S 16	23 19	25 7	1 51	25 24	2 15	19 10	1 13	2 58	2 12	7 45	1 13	10 41	2 35	22 10	0 2	1 4	1 28	23 30	5 12	22 42	22 36	5 13	12 7	0 53
S 17	23 22	23 54	0 39	25 18	2 16	19 27	1 11	2 48	2 13	7 48	1 13	10 41	2 35	22 9	0 2	1 4	1 28	23 30	5 12	22 42	22 36	5 16	12 6	0 53
M18	23 24	21 22	0n34	25 10	2 15	19 44	1 9	2 38	2 14	7 51	1 13	10 40	2 34	22 9	0 2	1 4	1 28	23 30	5 12	22 42	22 36	5 19	12 6	0 53
T 19	23 25	17 48	1 43	25 1	2 15	19 59	1 7	2 28	2 15	7 54	1 13	10 40	2 34	22 9	0 2	1 4	1 28	23 29	5 12	22 42	22 37	5 21	12 5	0 53
W20	23 26	13 32	2 46	24 50	2 14	20 15	1 5	2 19	2 16	7 57	1 13	10 39	2 34	22 8	0 1	1 4	1 28	23 29	5 12	22 42	22 37	5 24	12 4	0 53
T 21	23 26	8 47	3 39	24 38	2 12	20 30	1 3	2 10	2 17	8 0	1 14	10 39	2 34	22 8	0 1	1 4	1 28	23 28	5 12	22 42	22 37	5 27	12 4	0 53
F 22	23 26	3 48	4 22	24 24	2 9	20 44	1 1	2 0	2 18	8 3	1 14	10 39	2 33	22 8	0 1	1 4	1 28	23 28	5 12	22 42	22 38	5 30	12 4	0 53
S 23	23 26	1n16	4 53	24 9	2 6	20 57	0 59	1 51	2 19	8 6	1 14	10 39	2 33	22 7	0 1	1 5	1 28	23 28	5 12	22 42	22 38	5 33	12 3	0 53
S 24	23 24	6 14	5 11	23 53	2 3	21 10	0 56	1 42	2 20	8 9	1 14	10 38	2 33	22 7	0 1	1 5	1 28	23 27	5 12	22 42	22 38	5 36	12 3	0 53
M25	23 23	11 0	5 16	23 35	1 58	21 23	0 54	1 33	2 21	8 11	1 14	10 38	2 32	22 7	0 1	1 5	1 28	23 27	5 12	22 42	22 39	5 38	12 2	0 53
T 26	23 21	15 24	5 8	23 16	1 53	21 34	0 52	1 24	2 22	8 14	1 15	10 38	2 32	22 7	0 1	1 5	1 28	23 26	5 12	22 42	22 39	5 41	12 2	0 53
W27	23 19	19 14	4 45	22 56	1 47	21 45	0 49	1 15	2 23	8 17	1 15	10 38	2 32	22 6	0 1	1 5	1 28	23 26	5 12	22 42	22 39	5 44	12 1	0 53
T 28	23 16	22 19	4 9	22 35	1 40	21 56	0 47	1 7	2 24	8 19	1 15	10 38	2 32	22 6	0 1	1 5	1 28	23 25	5 12	22 42	22 40	5 47	12 1	0 53
F 29	23 12	24 23	3 21	22 14	1 32	22 6	0 44	0 58	2 25	8 22	1 15	10 38	2 31	22 6	0 1	1 6	1 28	23 25	5 12	22 42	22 40	5 50	12 1	0 53
S 30	23 9	25 12	2 20	21 51	1 23	22 15	0 42	0 50	2 26	8 24	1 15	10 38	2 31	22 5	0 1	1 6	1 28	23 24	5 12	22 42	22 40	5 53	12 0	0 53
S 31	23s 4	24n37	1n11	21s28	1s13	22s23	0n40	0n41	2n27	8s27	1n16	10n38	2s31	22n 5	0s 1	1n 6	1s28	23s24	5s12	22s42	22s41	5n55	12n 0	0s53