



Astrodienst Ephemeris Tables for the year 1451

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 1451

geocentric

JANUARY 1451 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	7 15 17	19°20'38	24°23	29°D45	4°49	4°35	11°349	6°34	19°R19	0°R13	5°R 5	2°R 0	2°51	5°41	9°R43	F 1
S 2	7 19 13	20°21'46	6°23	29°46	5°57	5°15	12° 3	6°34	19°17	0°13	5° 3	1°58	2°47	5°48	9°I40	S 2
S 3	7 23 10	21°22'53	18°31	29°54	7° 4	5°55	12°17	6°35	19°14	0°13	5° 2	1°57	2°44	5°55	9°38	S 3
M 4	7 27 6	22°24'00	0°49	0°10	8°11	6°35	12°31	6°35	19°12	0°12	5° 1	1°D57	2°41	6° 2	9°35	M 4
T 5	7 31 3	23°25'06	13°18	0°33	9°17	7°15	12°45	6°35	19° 9	0°12	4°59	1°57	2°38	6° 8	9°33	T 5
W 6	7 34 59	24°26'11	25°58	1° 2	10°24	7°55	12°59	6°35	19° 6	0°12	4°58	1°57	2°35	6°15	9°30	W 6
T 7	7 38 56	25°27'15	8°51	1°36	11°30	8°35	13°13	6°R35	19° 4	0°11	4°57	1°58	2°32	6°22	9°28	T 7
F 8	7 42 52	26°28'17	21°59	2°16	12°36	9°15	13°27	6°35	19° 1	0°11	4°55	1°59	2°28	6°28	9°26	F 8
S 9	7 46 49	27°29'19	5°21	3° 0	13°42	9°55	13°40	6°35	18°59	0°10	4°54	1°59	2°25	6°35	9°24	S 9
S 10	7 50 46	28°30'20	18°59	3°48	14°47	10°35	13°54	6°35	18°56	0° 9	4°52	1°59	2°22	6°42	9°22	S 10
M 11	7 54 42	29°31'19	2°53	4°40	15°52	11°15	14° 8	6°35	18°53	0° 9	4°51	2°R 0	2°19	6°48	9°20	M 11
T 12	7 58 39	0°32'18	17° 2	5°35	16°57	11°55	14°22	6°34	18°51	0° 8	4°50	1°59	2°16	6°55	9°18	T 12
W 13	8 2 35	1°33'15	1°II26	6°34	18° 2	12°35	14°36	6°33	18°48	0° 8	4°48	1°D59	2°13	7° 2	9°16	W 13
T 14	8 6 32	2°34'11	16° 0	7°36	19° 6	13°15	14°49	6°33	18°46	0° 7	4°47	1°59	2° 9	7° 9	9°14	T 14
F 15	8 10 28	3°35'05	0°40	8°40	20°10	13°55	15° 3	6°32	18°43	0° 6	4°45	2° 0	2° 6	7°15	9°13	F 15
S 16	8 14 25	4°35'58	15°19	9°46	21°13	14°35	15°17	6°31	18°41	0° 5	4°44	2° 0	2° 3	7°22	9°11	S 16
S 17	8 18 21	5°36'50	29°52	10°55	22°17	15°15	15°30	6°30	18°38	0° 5	4°43	2°R 0	2° 0	7°29	9° 9	S 17
M 18	8 22 18	6°37'41	14°13	12° 5	23°19	15°55	15°44	6°29	18°36	0° 4	4°41	2° 0	1°57	7°35	9° 8	M 18
T 19	8 26 15	7°38'31	28°15	13°18	24°22	16°35	15°57	6°28	18°33	0° 3	4°40	1°59	1°53	7°42	9° 7	T 19
W 20	8 30 11	8°39'19	11°55	14°32	25°24	17°15	16°11	6°26	18°31	0° 2	4°38	1°59	1°50	7°49	9° 5	W 20
T 21	8 34 8	9°40'06	25°13	15°47	26°26	17°55	16°24	6°25	18°29	0° 1	4°37	1°58	1°47	7°55	9° 4	T 21
F 22	8 38 4	10°40'53	8° 7	17° 5	27°27	18°35	16°38	6°23	18°26	0° 0	4°36	1°57	1°44	8° 2	9° 3	F 22
S 23	8 42 1	11°41'38	20°41	18°23	28°28	19°15	16°51	6°22	18°24	29°59	4°34	1°56	1°41	8° 9	9° 2	S 23
S 24	8 45 57	12°42'22	2°57	19°43	29°29	19°55	17° 5	6°20	18°22	29°58	4°33	1°55	1°38	8°15	9° 1	S 24
M 25	8 49 54	13°43'05	15° 0	21° 5	0°Y29	20°35	17°18	6°18	18°19	29°57	4°31	1°D55	1°34	8°22	9° 0	M 25
T 26	8 53 50	14°43'47	26°55	22°27	1°28	21°15	17°31	6°16	18°17	29°56	4°30	1°55	1°31	8°29	9° 0	T 26
W 27	8 57 47	15°44'28	8°45	23°51	2°27	21°55	17°44	6°14	18°15	29°55	4°29	1°56	1°28	8°36	8°58	W 27
T 28	9 1 44	16°45'07	20°36	25°15	3°26	22°35	17°58	6°12	18°13	29°54	4°27	1°57	1°25	8°42	8°57	T 28
F 29	9 5 40	17°45'46	2°33	26°41	4°24	23°15	18°11	6°10	18°10	29°53	4°26	1°59	1°22	8°49	8°57	F 29
S 30	9 9 37	18°46'23	14°38	28° 8	5°22	23°55	18°24	6° 7	18° 8	29°52	4°25	2° 0	1°19	8°56	8°56	S 30
S 31	9 13 33	19°46'58	26°56	29°36	6°Y19	24°Y35	18°37	6° 5	18° 6	29°51	4°23	2°R 1	1°15	9° 2	8°56	S 31

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	22s 7	26s37	3s13	20s29	3n 2	10s42	1s 0	1n48	0s 2	23s 5	0s 6	0s21	2n27	22n37	0n30	1n15	1n28	25n33	6n42	19s47	19s35	25s35	16n39	5s23	
S 2	21 58	25 38	2 17	20 37	2 54	10 13	0 56	2 5	0 1	23 4	0 7	0 21	2 28	22 37	0 30	1 15	1 28	25 33	6 42	19 47	19 36	25 35	16 39	5 23	
S 3	21 48	23 27	1 14	20 45	2 45	9 45	0 52	2 22	0n 1	23 3	0 7	0 21	2 28	22 37	0 30	1 16	1 28	25 34	6 42	19 47	19 36	25 36	16 39	5 23	
M 4	21 39	20 8	0 6	20 54	2 36	9 16	0 47	2 39	0 2	23 2	0 7	0 21	2 28	22 38	0 30	1 16	1 28	25 34	6 42	19 47	19 37	25 37	16 39	5 22	
T 5	21 28	15 53	1n 3	21 4	2 27	8 47	0 43	2 56	0 3	23 1	0 7	0 21	2 29	22 38	0 30	1 16	1 28	25 35	6 43	19 47	19 38	25 37	16 38	5 22	
W 6	21 18	10 52	2 9	21 13	2 17	8 17	0 39	3 12	0 4	23 0	0 7	0 21	2 29	22 39	0 30	1 16	1 28	25 35	6 43	19 47	19 39	25 38	16 38	5 22	
T 7	21 7	5 19	3 11	21 23	2 7	7 48	0 34	3 29	0 5	22 58	0 7	0 21	2 29	22 39	0 30	1 16	1 28	25 36	6 43	19 47	19 39	25 39	16 38	5 22	
F 8	20 55	0n32	4 3	21 33	1 57	7 18	0 29	3 46	0 6	22 57	0 7	0 20	2 29	22 39	0 30	1 17	1 28	25 36	6 43	19 47	19 40	25 40	16 38	5 21	
S 9	20 44	6 28	4 44	21 42	1 47	6 48	0 24	4 3	0 7	22 56	0 7	0 20	2 30	22 40	0 30	1 17	1 28	25 36	6 43	19 47	19 41	25 40	16 38	5 21	
S 10	20 31	12 13	5 9	21 51	1 36	6 19	0 19	4 19	0 8	22 54	0 7	0 20	2 30	22 40	0 30	1 17	1 28	25 37	6 43	19 47	19 41	25 41	16 38	5 21	
M 11	20 19	17 28	5 17	22 0	1 26	5 49	0 14	4 36	0 9	22 53	0 7	0 19	2 30	22 40	0 30	1 18	1 28	25 37	6 43	19 47	19 42	25 42	16 38	5 21	
T 12	20 6	21 52	5 7	22 8	1 16	5 19	0 9	4 53	0 10	22 52	0 8	0 19	2 31	22 41	0 30	1 18	1 28	25 38	6 43	19 47	19 43	25 42	16 38	5 21	
W 13	19 52	25 1	4 37	22 15	1 6	4 49	0 4	5 9	0 11	22 50	0 8	0 18	2 31	22 41	0 30	1 18	1 29	25 38	6 43	19 47	19 44	25 43	16 38	5 20	
T 14	19 39	26 34	3 49	22 22	0 56	4 18	0n 1	5 26	0 12	22 49	0 8	0 18	2 31	22 41	0 30	1 18	1 29	25 39	6 43	19 47	19 44	25 44	16 38	5 20	
F 15	19 25	26 16	2 45	22 28	0 46	3 48	0 7	5 42	0 13	22 47	0 8	0 17	2 31	22 42	0 30	1 19	1 29	25 39	6 44	19 47	19 45	25 44	16 38	5 20	
S 16	19 10	24 8	1 31	22 33	0 36	3 18	0 12	5 59	0 14	22 46	0 8	0 16	2 32	22 42	0 30	1 19	1 29	25 39	6 44	19 47	19 46	25 45	16 38	5 20	
S 17	18 55	20 26	0 12	22 37	0 27	2 48	0 18	6 15	0 15	22 45	0 8	0 16	2 32	22 43	0 30	1 19	1 29	25 40	6 44	19 47	19 47	25 46	16 38	5 19	
M 18	18 40	15 32	1s 7	22 40	0 18	2 18	0 24	6 32	0 16	22 43	0 8	0 15	2 32	22 43	0 30	1 20	1 29	25 40	6 44	19 47	19 47	25 46	16 38	5 19	
T 19	18 25	9 55	2 21	22 42	0 9	1 48	0 30	6 48	0 17	22 42	0 8	0 14	2 32	22 43	0 30	1 20	1 29	25 41	6 44	19 47	19 48	25 47	16 38	5 19	
W 20	18 9	3 58	3 24	22 43	0s 0	1 17	0 36	7 4	0 18	22 40	0 8	0 14	2 33	22 44	0 30	1 21	1 29	25 41	6 44	19 47	19 49	25 47	16 38	5 18	
T 21	17 53	1s59	4 14	22 43	0 9	0 47	0 42	7 20	0 19	22 39	0 9	0 13	2 33	22 44	0 30	1 21	1 29	25 42	6 44	19 47	19 49	25 48	16 38	5 18	
F 22	17 37	7 40	4 50	22 42	0 17	0 17	0 48	7 36	0 19	22 37	0 9	0 12	2 33	22 44	0 30	1 21	1 29	25 42	6 44	19 47	19 50	25 49	16 38	5 18	
S 23	17 20	12 54	5 11	22 40	0 25	0n13	0 54	7 52	0 20	22 35	0 9	0 11	2 34	22 45	0 30	1 22	1 29	25 42	6 44	19 47	19 51	25 49	16 38	5 18	
S 24	17 3	17 29	5 17	22 36	0 33	0 43	1 0	8 8	0 21	22 34	0 9	0 10	2 34	22 45	0 30	1 22	1 29	25 43	6 44	19 48	19 51	25 50	16 38	5 17	
M 25	16 46	21 18	5 9	22 32	0 41	1 13	1 7	8 24	0 22	22 32	0 9	0 9	2 34	22 45	0 30	1 23	1 29	25 43	6 44	19 48	19 52	25 50	16 39	5 17	
T 26	16 28	24 11	4 47	22 26	0 48	1 42	1 13	8 40	0 23	22 31	0 9	0 8	2 34	22 45	0 30	1 23	1 29	25 44	6 44	19 48	19 53	25 51	16 39	5 17	
W 27	16 10	26 0	4 14	22 18	0 55	2 12	1 20	8 56	0 24	22 29	0 9	0 7	2 35	22 46	0 30	1 24	1 29	25 44	6 44	19 47	19 54	25 51	16 39	5 16	
T 28	15 52	26 40	3 30	22 10	1 2	2 42	1 27	9 12	0 25	22 27	0 9	0 6	2 35	22 46	0 30	1 24	1 29	25 44	6 44	19 47	19 54	25 52	16 39	5 16	
F 29	15 33	26 5	2 36	22 0	1 8	3 11	1 33	9 27	0 25	22 26	0 9	0 5	2 35	22 46	0 30	1 25	1 29	25 45	6 44	19 47	19 55	25 53	16 39	5 16	
S 30	15 15	24 16	1 35	21 49	1 15	3 40	1 40	9 43	0 26	22 24	0 10	0 4	2 35	22 47	0 30	1 25	1 29	25 45	6 44	19 46	19 56	25 53	16 39	5 16	
S 31	14s56	21s18	0s28	21s36	1s21	4n 9	1n47	9n58	0n27	22s22	0s10	0s 3	2n36	22n47	0n30	1n26	1n29	25n45	6n44	19s46	19s56	25s54	16n40	5s15	

ASTRODIENST EPHEMERIS for the year 1451

geocentric

FEBRUARY 1451 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	9 17 30	20 ⁴⁷ 33	9 ²⁸	1 ⁵	7 ¹⁶	25 ¹⁵	18 ⁵⁰	6 ^R 2	18 ^R 4	29 ^R 50	4 ^R 22	2 ^R 1	1 ¹²	9 ⁹	8 ^R 55	M 1
T 2	9 21 26	21 ⁴⁸ 05	22 ¹⁵	2 ³⁵	8 ¹²	25 ⁵⁵	19 ³	6 ⁰	18 ²	29 ⁴⁸	4 ²¹	2 ⁰	1 ⁹	9 ¹⁶	8 ^{II} 55	T 2
W 3	9 25 23	22 ⁴⁸ 36	5 ¹⁸	4 ⁶	9 ⁷	26 ³⁵	19 ¹⁶	5 ⁵⁷	18 ⁰	29 ⁴⁷	4 ¹⁹	1 ⁵⁷	1 ⁶	9 ²²	8 ⁵⁵	W 3
T 4	9 29 19	23 ⁴⁹ 05	18 ³⁶	5 ³⁸	10 ²	27 ¹⁵	19 ²⁸	5 ⁵⁴	17 ⁵⁸	29 ⁴⁶	4 ¹⁸	1 ⁵⁴	1 ³	9 ²⁹	8 ⁵⁵	T 4
F 5	9 33 16	24 ⁴⁹ 33	2 ¹⁸	7 ¹¹	10 ⁵⁶	27 ⁵⁵	19 ⁴¹	5 ⁵¹	17 ⁵⁶	29 ⁴⁵	4 ¹⁷	1 ⁵¹	0 ⁵⁹	9 ³⁶	8 ^D 55	F 5
S 6	9 37 13	25 ⁴⁹ 59	15 ⁵²	8 ⁴⁵	11 ⁵⁰	28 ³⁵	19 ⁵⁴	5 ⁴⁹	17 ⁵⁴	29 ⁴³	4 ¹⁵	1 ⁴⁷	0 ⁵⁶	9 ⁴³	8 ⁵⁵	S 6
S 7	9 41 9	26 ⁵⁰ 22	29 ⁴⁵	10 ¹⁹	12 ⁴³	29 ¹⁵	20 ⁶	5 ⁴⁵	17 ⁵²	29 ⁴²	4 ¹⁴	1 ⁴⁴	0 ⁵³	9 ⁴⁹	8 ⁵⁵	S 7
M 8	9 45 6	27 ⁵⁰ 44	13 ⁴⁶	11 ⁵⁵	13 ³⁵	29 ⁵⁵	20 ¹⁹	5 ⁴²	17 ⁵⁰	29 ⁴¹	4 ¹³	1 ⁴³	0 ⁵⁰	9 ⁵⁶	8 ⁵⁵	M 8
T 9	9 49 2	28 ⁵¹ 04	27 ⁵²	13 ³²	14 ²⁶	0 ³⁵	20 ³¹	5 ³⁹	17 ⁴⁹	29 ³⁹	4 ¹¹	1 ^D 42	0 ⁴⁷	10 ³	8 ⁵⁵	T 9
W10	9 52 59	29 ⁵¹ 22	12 ^{II} 3	15 ¹⁰	15 ¹⁷	1 ¹⁵	20 ⁴⁴	5 ³⁶	17 ⁴⁷	29 ³⁸	4 ¹⁰	1 ⁴²	0 ⁴⁴	10 ⁹	8 ⁵⁶	W10
T 11	9 56 55	0 ¹⁵ 37	26 ¹⁶	16 ⁴⁸	16 ⁷	1 ⁵⁵	20 ⁵⁶	5 ³³	17 ⁴⁵	29 ³⁷	4 ⁹	1 ⁴⁴	0 ⁴⁰	10 ¹⁶	8 ⁵⁶	T 11
F 12	10 0 52	1 ⁵¹ 51	10 ²⁹	18 ²⁸	16 ⁵⁶	2 ³⁴	21 ⁹	5 ²⁹	17 ⁴³	29 ³⁵	4 ⁸	1 ⁴⁵	0 ³⁷	10 ²³	8 ⁵⁷	F 12
S 13	10 4 48	2 ⁵² 03	24 ³⁹	20 ⁹	17 ⁴⁴	3 ¹⁴	21 ²¹	5 ²⁶	17 ⁴²	29 ³⁴	4 ⁷	1 ^R 46	0 ³⁴	10 ²⁹	8 ⁵⁷	S 13
S 14	10 8 45	3 ⁵² 12	8 ⁴⁴	21 ⁵¹	18 ³¹	3 ⁵⁴	21 ³³	5 ²²	17 ⁴⁰	29 ³²	4 ⁵	1 ⁴⁶	0 ³¹	10 ³⁶	8 ⁵⁸	S 14
M15	10 12 42	4 ⁵² 19	22 ³⁹	23 ³⁴	19 ¹⁷	4 ³⁴	21 ⁴⁵	5 ¹⁸	17 ³⁹	29 ³¹	4 ⁴	1 ⁴⁵	0 ²⁸	10 ⁴³	8 ⁵⁹	M15
T 16	10 16 38	5 ⁵² 25	6 ²³	25 ¹⁸	20 ²	5 ¹⁴	21 ⁵⁷	5 ¹⁵	17 ³⁷	29 ²⁹	4 ³	1 ⁴¹	0 ²⁴	10 ⁴⁹	9 ⁰	T 16
W17	10 20 35	6 ⁵² 28	19 ⁵¹	27 ³	20 ⁴⁷	5 ⁵⁴	22 ⁹	5 ¹¹	17 ³⁶	29 ²⁸	4 ²	1 ³⁶	0 ²¹	10 ⁵⁶	9 ⁰	W17
T 18	10 24 31	7 ⁵² 30	3 ¹	28 ⁴⁹	21 ³⁰	6 ³³	22 ²¹	5 ⁷	17 ³⁴	29 ²⁶	4 ¹	1 ³⁰	0 ¹⁸	11 ³	9 ¹	T 18
F 19	10 28 28	8 ⁵² 30	15 ⁵³	0 ³⁶	22 ¹²	7 ¹³	22 ³³	5 ³	17 ³³	29 ²⁵	4 ⁰	1 ²⁴	0 ¹⁵	11 ¹⁰	9 ³	F 19
S 20	10 32 24	9 ⁵² 28	28 ²⁷	2 ²⁴	22 ⁵³	7 ⁵³	22 ⁴⁴	4 ⁵⁹	17 ³²	29 ²³	3 ⁵⁸	1 ¹⁷	0 ¹²	11 ¹⁶	9 ⁴	S 20
S 21	10 36 21	10 ⁵² 24	10 ⁴⁵	4 ¹⁴	23 ³³	8 ³²	22 ⁵⁶	4 ⁵⁵	17 ³⁰	29 ²²	3 ⁵⁷	1 ¹²	0 ⁹	11 ²³	9 ⁵	S 21
M22	10 40 17	11 ⁵² 19	22 ⁴⁹	6 ⁴	24 ¹¹	9 ¹²	23 ⁷	4 ⁵¹	17 ²⁹	29 ²⁰	3 ⁵⁶	1 ⁸	0 ⁵	11 ³⁰	9 ⁶	M22
T 23	10 44 14	12 ⁵² 12	4 ²⁴	7 ⁵⁶	24 ⁴⁹	9 ⁵²	23 ¹⁹	4 ⁴⁷	17 ²⁸	29 ¹⁹	3 ⁵⁵	1 ⁶	0 ²	11 ³⁶	9 ⁸	T 23
W24	10 48 11	13 ⁵² 04	16 ³⁵	9 ⁴⁹	25 ²⁵	10 ³²	23 ³⁰	4 ⁴³	17 ²⁷	29 ¹⁷	3 ⁵⁴	1 ^D 6	29 ⁵⁹	11 ⁴³	9 ⁹	W24
T 25	10 52 7	14 ⁵¹ 53	28 ²⁷	11 ⁴³	26 ⁰	11 ¹¹	23 ⁴¹	4 ³⁹	17 ²⁶	29 ¹⁶	3 ⁵³	1 ⁷	29 ⁵⁶	11 ⁵⁰	9 ¹¹	T 25
F 26	10 56 4	15 ⁵¹ 41	10 ³²	13 ³⁸	26 ³³	11 ⁵¹	23 ⁵³	4 ³⁵	17 ²⁵	29 ¹⁴	3 ⁵²	1 ⁸	29 ⁵³	11 ⁵⁶	9 ¹²	F 26
S 27	11 0 0	16 ⁵¹ 27	22 ³¹	15 ³⁴	27 ⁵	12 ³⁰	24 ⁴	4 ³⁰	17 ²⁴	29 ¹²	3 ⁵¹	1 ⁹	29 ⁵⁰	12 ³	9 ¹⁴	S 27
S 28	11 3 57	17 ⁵¹ 12	4 ⁵⁴	17 ³¹	27 ³⁵	13 ¹⁰	24 ³⁵	4 ²⁶	17 ²³	29 ¹¹	3 ⁵⁰	1 ^R 10	29 ⁴⁶	12 ¹⁰	9 ^{II} 16	S 28

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	14s36	17s17	0n41	21s23	1s26	4n38	1n54	10n14	0n28	22s21	0s10	0s 1	2n36	22n47	0n30	1n26
T 2	14 17	12 25	1 49	21 8	1 31	5 7	2 1	10 29	0 28	22 19	0 10	0 0	2 36	22 47	0 30	1 27
W 3	13 57	6 54	2 53	20 51	1 36	5 36	2 8	10 44	0 29	22 17	0 10	0n 1	2 36	22 48	0 30	1 27
T 4	13 37	1 0	3 49	20 33	1 41	6 4	2 16	11 0	0 30	22 16	0 10	0 3	2 37	22 48	0 30	1 28
F 5	13 17	5n 1	4 33	20 14	1 45	6 32	2 23	11 15	0 31	22 14	0 10	0 4	2 37	22 48	0 30	1 28
S 6	12 57	10 54	5 2	19 53	1 49	7 0	2 30	11 30	0 31	22 12	0 10	0 5	2 37	22 48	0 30	1 29
S 7	12 36	16 18	5 14	19 31	1 53	7 27	2 38	11 45	0 32	22 10	0 10	0 7	2 37	22 49	0 30	1 29
M 8	12 15	20 54	5 7	19 8	1 56	7 55	2 45	11 59	0 33	22 9	0 11	0 8	2 37	22 49	0 30	1 30
T 9	11 55	24 19	4 42	18 43	1 59	8 22	2 53	12 14	0 34	22 7	0 11	0 10	2 38	22 49	0 30	1 30
W10	11 33	26 16	4 0	18 16	2 2	8 48	3 0	12 29	0 34	22 5	0 11	0 11	2 38	22 49	0 30	1 31
T 11	11 12	26 30	3 2	17 49	2 4	9 15	3 8	12 43	0 35	22 3	0 11	0 13	2 38	22 50	0 30	1 32
F 12	10 51	24 59	1 54	17 20	2 6	9 41	3 16	12 58	0 36	22 2	0 11	0 14	2 38	22 50	0 30	1 32
S 13	10 29	21 54	0 39	16 49	2 7	10 7	3 24	13 12	0 36	22 0	0 11	0 16	2 38	22 50	0 30	1 33
S 14	10 7	17 31	0s38	16 17	2 8	10 32	3 31	13 26	0 37	21 58	0 11	0 17	2 39	22 50	0 30	1 33
M15	9 45	12 15	1 52	15 44	2 8	10 57	3 39	13 40	0 38	21 56	0 11	0 19	2 39	22 50	0 30	1 34
T 16	9 23	6 27	2 58	15 9	2 9	11 21	3 47	13 54	0 38	21 54	0 12	0 20	2 39	22 51	0 30	1 35
W17	9 1	0 28	3 52	14 32	2 8	11 46	3 55	14 8	0 39	21 53	0 12	0 22	2 39	22 51	0 30	1 35
T 18	8 39	5s23	4 33	13 55	2 7	12 9	4 3	14 22	0 39	21 51	0 12	0 24	2 39	22 51	0 30	1 36
F 19	8 16	10 52	4 59	13 15	2 6	12 33	4 11	14 36	0 40	21 49	0 12	0 26	2 40	22 51	0 30	1 37
S 20	7 53	15 46	5 10	12 35	2 4	12 55	4 19	14 49	0 41	21 47	0 12	0 27	2 40	22 51	0 30	1 37
S 21	7 31	19 56	5 6	11 53	2 2	13 18	4 27	15 3	0 41	21 45	0 12	0 29	2 40	22 51	0 30	1 38
M22	7 8	23 11	4 49	11 10	1 59	13 40	4 35	15 16	0 42	21 44	0 12	0 31	2 40	22 52	0 30	1 38
T 23	6 45	25 23	4 19	10 25	1 56	14 1	4 43	15 29	0 42	21 42	0 12	0 32	2 40	22 52	0 30	1 39
W24	6 22	26 27	3 38	9 39	1 52	14 22	4 51	15 42	0 43	21 40	0 13	0 34	2 40	22 52	0 30	1 40
T 25	5 59	26 18	2 48	8 51	1 48	14 42	4 58	15 55	0 44	21 38	0 13	0 36	2 40	22 52	0 30	1 40
F 26	5 36	24 56	1 50	8 3	1 43	15 1	5 6	16 8	0 44	21 36	0 13	0 38	2 41	22 52	0 30	1 41
S 27	5 12	22 23	0 47	7 13	1 38	15 20	5 14	16 21	0 45	21 35	0 13	0 40	2 41	22 52	0 30	1 42
S 28	4s49	18s46	0n20	6s21	1s32	15n39	5n22	16n33	0n45	21s33	0s13	0n42	2n41	22n52	0n30	1n42

Julian Day Number = 2251066.5, Delta T = 06m27s

Ecliptic obliquity = 23°30'43", Nutation = 0°00'16", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 17°04'56", Lahiri = 16°11'57" Julian Calendar 1 Feb. 1451 == Greg. Calendar 10 Feb. 1451

ASTRODIENST EPHEMERIS for the year 1451

geocentric

MARCH 1451 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	11 7 53	18°50'54	17°36'36	19°32'29	28°4'4	13°8'50	24°32'26	4°R22	17°R22	29°R 9	3°R49	1°R 8	29°34'3	12°16'16	9°11'18	M 1
T 2	11 11 50	19°50'35	0°38'38	21°28'28	28°31'14	14°29'24	24°36'4	4°17'17	17°21'21	29°8'8	3°48'48	1°5'5	29°40'12	12°23'23	9°20'20	T 2
W 3	11 15 46	20°50'13	14°1'1	23°28'28	28°56'15	15°9'24	24°47'4	4°13'17	17°20'29	29°6'6	3°47'47	0°59'59	29°37'12	12°30'30	9°22'22	W 3
T 4	11 19 43	21°49'50	27°44'25	25°28'29	29°20'15	15°48'24	24°58'4	4°8'17	17°20'29	29°4'4	3°47'47	0°51'51	29°34'12	12°36'36	9°24'24	T 4
F 5	11 23 40	22°49'24	11°44'27	27°29'29	29°42'16	16°28'25	25°8'4	4°4'17	17°19'29	29°3'46	3°46'04	0°43'43	29°30'12	12°43'43	9°26'26	F 5
S 6	11 27 36	23°48'56	25°56'29	30'08'2	17°7'25	19°17'25	25°19'3	59'17	17°18'29	29°1'345	3°45'04	0°34'34	29°27'12	12°50'50	9°28'28	S 6
S 7	11 31 33	24°48'27	10°15'1	1°31'0	0°20'17	17°47'25	25°29'3	55'17	17°18'28	59'344	3°44'026	0°26'26	29°24'12	12°57'57	9°30'30	S 7
M 8	11 35 29	25°47'55	24°35'3	3°32'0	0°36'18	18°26'25	25°39'3	50'17	17°17'28	58'343	3°43'017	0°20'20	29°21'13	13°3'3	9°33'33	M 8
T 9	11 39 26	26°47'20	8°53'5	5°32'0	0°50'19	19°6'25	25°49'3	45'17	17°17'28	56'343	3°43'017	0°17'17	29°18'13	13°10'10	9°35'35	T 9
W10	11 43 22	27°46'43	23°4'7	7°32'1	2°19'19	19°45'25	25°59'3	41'17	17°16'28	54'342	3°42'0D15	29°15'13	13°17'17	9°38'38	W10	
T 11	11 47 19	28°46'04	7°9'9	9°31'1	1°11'20	20°25'26	26°9'3	36'17	17°16'28	53'341	3°41'015	29°11'13	13°23'23	9°40'40	T 11	
F 12	11 51 15	29°45'23	21°5'11	11°28'1	1°19'21	21°4'26	26°19'3	31'17	17°16'28	51'340	3°40'016	29°8'13	13°30'30	9°43'43	F 12	
S 13	11 55 12	0°44'39	4°53'13	23'13	1°24'21	21°44'26	26°28'3	27'17	17°16'28	49'340	3°40'0R16	29°5'13	13°37'37	9°46'46	S 13	
S 14	11 59 9	1°43'52	18°32'15	17'1	1°26'22	22°23'26	26°38'3	22'17	17°15'28	48'339	3°39'015	29°2'13	13°43'43	9°48'48	S 14	
M15	12 3 5	2°43'04	2°17'17	1°7'1	1°R27'23	2°2'26	26°47'3	18'17	17°15'28	46'338	3°38'011	28°59'13	13°50'50	9°51'51	M15	
T 16	12 7 2	3°42'13	15°20'18	55'1	1°25'23	23°42'26	26°57'3	13'17	17°15'28	44'338	3°38'04	28°56'13	13°57'57	9°54'54	T 16	
W17	12 10 58	4°41'20	28°27'20	39'1	1°20'24	24°21'27	6'3	8'17	17°D15'28	43'337	29°35'55	28°52'14	14°3'3	9°57'57	W17	
T 18	12 14 55	5°40'24	11°22'22	20'1	1°13'25	25°0'27	15'3	4'17	17°15'28	41'337	29°44'44	28°49'14	14°10'10	10°0'0	T 18	
F 19	12 18 51	6°39'27	24°2'23	56'1	1°3'25	25°40'27	27°24'2	59'17	17°15'28	40'336	29°32'32	28°46'14	14°17'17	10°3'3	F 19	
S 20	12 22 48	7°38'28	6°29'25	28'0	0°51'26	26°19'27	27°33'2	54'17	17°15'28	38'336	29°20'20	28°43'14	14°23'23	10°7'7	S 20	
S 21	12 26 44	8°37'27	18°42'26	55'0	0°36'26	26°58'27	27°41'2	50'17	17°15'28	36'335	29°10'10	28°40'14	14°30'30	10°10'10	S 21	
M22	12 30 41	9°36'24	0°44'28	17'0	0°19'27	27°37'27	27°50'2	45'17	17°16'28	35'335	29°1'1	28°36'14	14°37'37	10°13'13	M22	
T 23	12 34 37	10°35'19	12°38'29	34'0	0°0'28	16'27'58	27°58'2	40'17	17°16'28	33'334	28°55'55	28°33'14	14°43'43	10°16'16	T 23	
W24	12 38 34	11°34'13	24°28'0	46'29	0°34'29	13'28'56	28°6'2	36'17	17°16'28	31'334	28°52'52	28°30'14	14°50'50	10°20'20	W24	
T 25	12 42 31	12°33'04	6°19'1	51'29	1°13'29	23'35'28	28°15'2	31'17	17°17'28	30'334	28°50'50	28°27'14	14°57'57	10°23'23	T 25	
F 26	12 46 27	13°31'54	18°14'2	51'28	0°11'28	23'27'17	28°23'2	27'17	17°17'28	28'28'333	28°D50'50	28°24'24	15°4'4	10°27'27	F 26	
S 27	12 50 24	14°30'42	0°21'3	45'28	0°53'28	20'0'53	28°30'2	22'17	17°18'28	27'333	28°R50'50	28°21'21	15°10'10	10°31'31	S 27	
S 28	12 54 20	15°29'29	12°45'4	33'27	1°32'27	50'1	28°38'2	18'17	17°18'28	25'333	28°50'50	28°17'17	15°17'17	10°34'34	S 28	
M29	12 58 17	16°28'13	25°29'5	15'27	1°19'27	21'1	28°46'2	13'17	17°19'28	24'332	28°47'47	28°14'14	15°24'24	10°38'38	M29	
T 30	13 2 13	17°26'56	8°38'5	51'26	1°46'26	25'0	28°53'2	9'17	17°20'28	22'332	28°42'42	28°11'11	15°30'30	10°42'42	T 30	
W31	13 6 10	18°25'37	22°13'6	20'18	1°11'26	26°11'3	29°3'0	4'17	17°20'28	20'20'20	3°32'32	28°34'34	28°8'8	15°37'37	10°45'45	W31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
M 1	4s26	14s13	1n28	5s29	1s25	15n56	5n30	16n46	0n46	21s31	0s13	0n43	2n41	22n52	0n30	1n43
T 2	4 2	8 55	2 32	4 36	1 18	16 13	5 37	16 58	0 46	21 29	0 13	0 45	2 41	22 52	0 30	1 44
W 3	3 39	3 5	3 30	3 41	1 11	16 30	5 45	17 10	0 47	21 27	0 13	0 47	2 41	22 53	0 30	1 44
T 4	3 15	3n 1	4 17	2 46	1 3	16 45	5 52	17 22	0 47	21 26	0 14	0 49	2 41	22 53	0 30	1 45
F 5	2 51	9 5	4 49	1 50	0 54	17 0	6 0	17 34	0 48	21 24	0 14	0 51	2 41	22 53	0 30	1 46
S 6	2 28	14 46	5 5	0 53	0 45	17 14	6 7	17 46	0 48	21 22	0 14	0 53	2 41	22 53	0 30	1 46
S 7	2 4	19 42	5 1	0n 4	0 35	17 27	6 14	17 58	0 49	21 20	0 14	0 55	2 42	22 53	0 30	1 47
M 8	1 40	23 29	4 39	1 2	0 25	17 39	6 21	18 9	0 49	21 19	0 14	0 57	2 42	22 53	0 30	1 48
T 9	1 17	25 47	4 0	1 59	0 14	17 50	6 27	18 21	0 50	21 17	0 14	0 58	2 42	22 53	0 30	1 48
W10	0 53	26 25	3 5	2 57	0 3	18 0	6 34	18 32	0 50	21 15	0 14	1 0	2 42	22 53	0 30	1 49
T 11	0 29	25 19	2 0	3 54	0n 8	18 9	6 40	18 43	0 51	21 13	0 15	1 2	2 42	22 53	0 30	1 50
F 12	0 6	22 40	0 49	4 51	0 20	18 18	6 46	18 54	0 51	21 12	0 15	1 4	2 42	22 53	0 30	1 50
S 13	0n18	18 42	0s25	5 47	0 31	18 25	6 51	19 5	0 51	21 10	0 15	1 6	2 42	22 53	0 30	1 51
S 14	0 41	13 48	1 36	6 42	0 43	18 30	6 57	19 15	0 52	21 8	0 15	1 8	2 42	22 53	0 30	1 52
M15	1 5	8 17	2 41	7 36	0 55	18 35	7 2	19 26	0 52	21 7	0 15	1 10	2 42	22 53	0 30	1 52
T 16	1 29	2 29	3 36	8 28	1 7	18 39	7 10	19 36	0 53	21 5	0 15	1 12	2 42	22 53	0 30	1 53
W17	1 52	3s20	4 19	9 19	1 7	18 47	7 10	19 46	0 53	21 3	0 16	1 14	2 42	22 53	0 29	1 54
T 18	2 16	8 54	4 47	10 7	1 31	18 42	7 14	19 57	0 54	21 2	0 16	1 15	2 42	22 53	0 29	1 54
F 19	2 39	14 0	5 1	10 53	1 42	18 41	7 17	20 6	0 54	21 0	0 16	1 17	2 42	22 53	0 29	1 55
S 20	3 2	18 26	5 0	11 37	1 53	18 39	7 20	20 16	0 54	20 59	0 16	1 19	2 42	22 53	0 29	1 56
S 21	3 26	22 0	4 45	12 19	2 3	18 36	7 22	20 26	0 55	20 57	0 16	1 21	2 42	22 53	0 29	1 56
M22	3 49	24 34	4 18	12 58	2 13	18 31	7 23	20 35	0 55	20 55	0 16	1 23	2 42	22 53	0 29	1 57
T 23	4 12	26 0	3 39	13 34	2 22	18 25	7 24	20 44	0 56	20 54	0 16	1 25	2 42	22 53	0 29	1 58
W24	4 35	26 15	2 52	14 7	2 30	18 17	7 24	20 53	0 56	20 52	0 17	1 26	2 42	22 53	0 29	1 58
T 25	4 58	25 18	1 57	14 37	2 38	18 8	7 23	21 2	0 56	20 51	0 17	1 28	2 42	22 53	0 29	1 59
F 26	5 21	23 11	0 56	15 5	2 45	17 57	7 22	21 11	0 57	20 49	0 17	1 30	2 42	22 53	0 29	1 59
S 27	5 44	20 0	0n 8	15 29	2 50	17 45	7 20	21 20	0 57	20 48	0 17	1 32	2 42	22 52	0 29	2 0
S 28	6 7	15 52	1 13	15 50	2 55	17 31	7 17	21 28	0 57	20 47	0 17	1 34	2 42	22 52	0 29	2 1
M29	6 30	10 56	2 16	16 7	2 59	17 16	7 14	21 36	0 58	20 45	0 17	1 35	2 42	22 52	0 29	2 1
T 30	6 52	5 21	3 14	16 22	3 1	17 0	7 9	21 44	0 58	20 44	0 18	1 37	2 42	22 52	0 29	2 2
W31	7n15	0n37	4n 3	16n33	3n 3	16n42	7n 4	21n52	0n58	20s43	0s18	1n39	2n42	22n52	0n29	2n 3

Julian Day Number = 2251094.5, Delta T = 06m27s

Ecliptic obliquity = 23°30'43, Nutation = 0°00'16, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 17°05'00, Lahiri = 16°12'01 Julian Calendar 1 March 1451 == Greg. Calendar 10 March 1451

ASTRODIENST EPHEMERIS for the year 1451

geocentric

APRIL 1451 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	13 10 6	19°24'16	6°14	6♂43	25°R36	4♂ 8	29♂ 8	2°R 0	17°22	28°R19	3°R32	28°R24	28♂ 5	15♂44	10♂49	T 1
F 2	13 14 3	20°22'53	20°36	7° 0	24°Y59	4°47	29°15	1♂56	17°22	28°17	3♂32	28♂13	28° 1	15°50	10°53	F 2
S 3	13 18 0	21°21'28	5♂13	7°11	24°22	5°27	29°22	1°51	17°23	28°16	3°32	28° 1	27°58	15°57	10°57	S 3
S 4	13 21 56	22°20'02	19°59	7°R16	23°44	6° 6	29°28	1°47	17°24	28°14	3°31	27°51	27°55	16° 4	11° 1	S 4
M 5	13 25 53	23°18'33	4♂44	7°14	23° 7	6°44	29°35	1°43	17°25	28°13	3°31	27°43	27°52	16°10	11° 5	M 5
T 6	13 29 49	24°17'02	19°21	7° 8	22°29	7°23	29°41	1°39	17°26	28°11	3°31	27°37	27°49	16°17	11°10	T 6
W 7	13 33 46	25°15'29	3♂46	6°55	21°51	8° 2	29°47	1°35	17°27	28°10	3°D31	27°34	27°46	16°24	11°14	W 7
T 8	13 37 42	26°13'54	17°56	6°38	21°14	8°41	29°54	1°31	17°28	28° 9	3°31	27°33	27°42	16°30	11°18	T 8
F 9	13 41 39	27°12'17	1♂49	6°16	20°38	9°20	29°59	1°27	17°29	28° 7	3°31	27°33	27°39	16°37	11°22	F 9
S 10	13 45 35	28°10'37	15°26	5°50	20° 3	9°59	0♂ 5	1°23	17°30	28° 6	3°31	27°32	27°36	16°44	11°27	S 10
S 11	13 49 32	29° 8'55	28°49	5°20	19°29	10°38	0°11	1°19	17°32	28° 4	3°31	27°30	27°33	16°50	11°31	S 11
M12	13 53 29	0♂ 7'12	11♂59	4°47	18°56	11°17	0°16	1°15	17°33	28° 3	3°32	27°26	27°30	16°57	11°35	M12
T 13	13 57 25	1° 5'26	24°56	4°12	18°25	11°56	0°22	1°12	17°34	28° 2	3°32	27°18	27°27	17° 4	11°40	T 13
W14	14 1 22	2° 3'38	7♂43	3°34	17°56	12°34	0°27	1° 8	17°36	28° 0	3°32	27° 8	27°23	17°10	11°44	W14
T 15	14 5 18	3° 1'48	20°19	2°56	17°29	13°13	0°32	1° 4	17°37	27°59	3°32	26°55	27°20	17°17	11°49	T 15
F 16	14 9 15	3°59'56	2♂44	2°17	17° 4	13°52	0°36	1° 1	17°39	27°58	3°32	26°42	27°17	17°24	11°54	F 16
S 17	14 13 11	4°58'03	14°59	1°39	16°41	14°31	0°41	0°57	17°40	27°57	3°33	26°29	27°14	17°30	11°58	S 17
S 18	14 17 8	5°56'08	27° 4	1° 2	16°20	15° 9	0°46	0°54	17°42	27°55	3°33	26°17	27°11	17°37	12° 3	S 18
M19	14 21 4	6°54'12	9♂ 1	0°26	16° 1	15°48	0°50	0°51	17°44	27°54	3°33	26° 7	27° 7	17°44	12° 8	M19
T 20	14 25 1	7°52'14	20°53	29°Y52	15°45	16°27	0°54	0°47	17°45	27°53	3°33	25°59	27° 4	17°50	12°12	T 20
W21	14 28 58	8°50'14	2♂41	29°21	15°32	17° 5	0°58	0°44	17°47	27°52	3°34	25°55	27° 1	17°57	12°17	W21
T 22	14 32 54	9°48'13	14°30	28°53	15°20	17°44	1° 2	0°41	17°49	27°51	3°34	25°53	26°58	18° 4	12°22	T 22
F 23	14 36 51	10°46'11	26°25	28°29	15°12	18°23	1° 5	0°38	17°51	27°50	3°35	25°D52	26°55	18°11	12°27	F 23
S 24	14 40 47	11°44'08	8♂31	28° 9	15° 5	19° 1	1° 9	0°35	17°53	27°48	3°35	25°R52	26°52	18°17	12°32	S 24
S 25	14 44 44	12°42'03	20°52	27°53	15° 1	19°40	1°12	0°32	17°55	27°47	3°36	25°52	26°48	18°24	12°37	S 25
M26	14 48 40	13°39'56	3♂35	27°41	15°D 0	20°19	1°15	0°29	17°57	27°46	3°36	25°51	26°45	18°31	12°41	M26
T 27	14 52 37	14°37'49	16°43	27°33	15° 1	20°57	1°18	0°27	17°59	27°45	3°37	25°47	26°42	18°37	12°46	T 27
W28	14 56 33	15°35'40	0°Y20	27°D31	15° 4	21°36	1°20	0°24	18° 1	27°44	3°37	25°41	26°39	18°44	12°51	W28
T 29	15 0 30	16°33'30	14°25	27°33	15° 9	22°14	1°23	0°22	18° 3	27°43	3°38	25°32	26°36	18°51	12°57	T 29
F 30	15 4 27	17♂31'18	28°Y57	27°Y39	15°Y17	22♂53	1♂25	0♂19	18♂ 5	27♂42	3♂38	25♂23	26♂33	18♂57	13♂ 2	F 30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
T 1	7n37	6n44	4n39	16n41	3n 3	16n23	6n58	22n 0	0n59	20s41	0s18	1n40	2n42	22n52	0n29	T 1
F 2	7 59	12 40	4 58	16 45	3 2	16 3	6 51	22 8	0 59	20 40	0 18	1 42	2 42	22 52	0 29	F 2
S 3	8 21	17 59	4 58	16 46	2 59	15 42	6 43	22 15	0 59	20 39	0 18	1 44	2 42	22 52	0 29	S 3
S 4	8 43	22 15	4 39	16 44	2 56	15 20	6 34	22 22	1 0	20 37	0 18	1 45	2 41	22 52	0 29	S 4
M 5	9 5	25 5	4 1	16 39	2 50	14 58	6 25	22 29	1 0	20 36	0 19	1 47	2 41	22 51	0 29	M 5
T 6	9 27	26 11	3 7	16 31	2 44	14 34	6 15	22 36	1 0	20 35	0 19	1 48	2 41	22 51	0 29	T 6
W 7	9 48	25 30	2 2	16 19	2 36	14 10	6 5	22 43	1 1	20 34	0 19	1 50	2 41	22 51	0 29	W 7
T 8	10 9	23 9	0 51	16 5	2 27	13 46	5 53	22 49	1 1	20 33	0 19	1 52	2 41	22 51	0 29	T 8
F 9	10 31	19 27	0s23	15 47	2 16	13 21	5 42	22 55	1 1	20 32	0 19	1 53	2 41	22 51	0 29	F 9
S 10	10 51	14 47	1 33	15 27	2 4	12 56	5 29	23 2	1 1	20 31	0 19	1 54	2 41	22 51	0 29	S 10
S 11	11 12	9 28	2 37	15 5	1 51	12 31	5 16	23 8	1 2	20 30	0 20	1 56	2 41	22 50	0 29	S 11
M12	11 33	3 50	3 32	14 41	1 37	12 6	5 3	23 13	1 2	20 29	0 20	1 57	2 41	22 50	0 29	M12
T 13	11 53	1s52	4 14	14 15	1 22	11 42	4 50	23 19	1 2	20 28	0 20	1 59	2 41	22 50	0 29	T 13
W14	12 14	7 24	4 43	13 47	1 7	11 18	4 36	23 24	1 2	20 27	0 20	2 0	2 40	22 50	0 29	W14
T 15	12 34	12 33	4 58	13 19	0 50	10 55	4 22	23 29	1 3	20 26	0 20	2 1	2 40	22 50	0 29	T 15
F 16	12 53	17 7	4 58	12 50	0 33	10 32	4 8	23 34	1 3	20 25	0 21	2 3	2 40	22 49	0 29	F 16
S 17	13 13	20 55	4 45	12 20	0 16	10 10	3 53	23 39	1 3	20 24	0 21	2 4	2 40	22 49	0 29	S 17
S 18	13 32	23 45	4 19	11 51	0s 1	9 49	3 39	23 44	1 3	20 23	0 21	2 5	2 40	22 49	0 29	S 18
M19	13 52	25 30	3 41	11 22	0 18	9 28	3 25	23 48	1 4	20 23	0 21	2 6	2 40	22 49	0 29	M19
T 20	14 11	26 5	2 54	10 55	0 35	9 9	3 11	23 53	1 4	20 22	0 21	2 7	2 40	22 48	0 29	T 20
W21	14 29	25 29	2 0	10 28	0 52	8 50	2 56	23 57	1 4	20 21	0 21	2 9	2 39	22 48	0 29	W21
T 22	14 48	23 43	1 0	10 3	1 8	8 33	2 42	24 1	1 4	20 21	0 22	2 10	2 39	22 48	0 29	T 22
F 23	15 6	20 53	0n 3	9 40	1 24	8 17	2 29	24 4	1 5	20 20	0 22	2 11	2 39	22 48	0 29	F 23
S 24	15 24	17 7	1 7	9 19	1 39	8 2	2 15	24 8	1 5	20 19	0 22	2 12	2 39	22 47	0 29	S 24
S 25	15 42	12 33	2 9	9 0	1 53	7 48	2 2	24 11	1 5	20 19	0 22	2 13	2 39	22 47	0 29	S 25
M26	15 59	7 20	3 6	8 43	2 6	7 35	1 48	24 14	1 5	20 18	0 22	2 14	2 39	22 47	0 29	M26
T 27	16 17	1 38	3 56	8 29	2 18	7 24	1 35	24 17	1 5	20 18	0 23	2 15	2 38	22 46	0 29	T 27
W28	16 34	4n19	4 34	8 18	2 30	7 13	1 23	24 20	1 6	20 17	0 23	2 15	2 38	22 46	0 29	W28
T 29	16 50	10 16	4 57	8 8	2 40	7 4	1 11	24 23	1 6	20 17	0 23	2 16	2 38	22 46	0 29	T 29
F 30	17n 7	15n50	5n 2	8n 2	2s49	6n56	0n58	24n25	1n 6	20s17	0s23	2n17	2n38	22n46	0n29	F 30

Julian Day Number = 2251125.5, Delta T = 06m27s

Ecliptic obliquity = 23°30'43, Nutation = 0°00'14, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 17°05'04, Lahiri = 16°12'05 Julian Calendar 1 Apr. 1451 == Greg. Calendar 10 Apr. 1451

ASTRODIENST EPHEMERIS for the year 1451

geocentric

MAY 1451 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	15 8 23	18 ⁸ 29'06	13 ⁸ 49	27 ⁹ 50	15 ⁹ 27	23 ¹¹ 31	1 ⁸ 27	0°R17	18 ⁸ 7	27°R41	3 ⁸ 39	25°R12	26 ⁸ 29	19 ⁸ 4	13 ¹¹ 7	S 1
S 2	15 12 20	19°26'52	28°52	28° 6	15°39	24°10	1°29	0 ⁸ 15	18°10	27 ⁹ 41	3°39	25 ⁸ 3	26°26	19°11	13°12	S 2
M 3	15 16 16	20°24'37	13 ¹¹ 58	28°26	15°53	24°48	1°31	0°12	18°12	27°40	3°40	24°56	26°23	19°17	13°17	M 3
T 4	15 20 13	21°22'20	28°56	28°50	16° 9	25°27	1°33	0°10	18°14	27°39	3°41	24°51	26°20	19°24	13°22	T 4
W 5	15 24 9	22°20'01	13 ⁸ 39	29°19	16°27	26° 5	1°34	0° 8	18°17	27°38	3°42	24°49	26°17	19°31	13°27	W 5
T 6	15 28 6	23°17'41	28° 2	29°51	16°46	26°44	1°35	0° 6	18°19	27°37	3°42	24°D48	26°13	19°37	13°33	T 6
F 7	15 32 2	24°15'20	12 ⁸ 3	0 ⁸ 28	17° 8	27°22	1°36	0° 5	18°22	27°37	3°43	24°49	26°10	19°44	13°38	F 7
S 8	15 35 59	25°12'57	25°41	1° 8	17°31	28° 1	1°37	0° 3	18°24	27°36	3°44	24°R49	26° 7	19°51	13°43	S 8
S 9	15 39 56	26°10'32	9 ⁹ 0	1°53	17°56	28°39	1°38	0° 1	18°27	27°35	3°45	24°49	26° 4	19°57	13°48	S 9
M10	15 43 52	27° 8'06	22° 0	2°41	18°22	29°18	1°38	29 ⁹ 59	18°29	27°34	3°46	24°46	26° 1	20° 4	13°54	M10
T 11	15 47 49	28° 5'38	4 ⁸ 45	3°32	18°50	29°56	1°38	29°58	18°32	27°34	3°46	24°41	25°58	20°11	13°59	T 11
W12	15 51 45	29° 3'09	17°16	4°27	19°20	0 ⁸ 34	1°R38	29°57	18°34	27°33	3°47	24°34	25°54	20°17	14° 4	W12
T 13	15 55 42	0 ¹¹ 0'39	29°37	5°25	19°51	1°13	1°38	29°56	18°37	27°33	3°48	24°25	25°51	20°24	14°10	T 13
F 14	15 59 38	0°58'07	11 ¹¹ 48	6°27	20°23	1°51	1°38	29°55	18°40	27°32	3°49	24°15	25°48	20°31	14°15	F 14
S 15	16 3 35	1°55'35	23°52	7°32	20°57	2°29	1°37	29°54	18°43	27°32	3°50	24° 5	25°45	20°37	14°21	S 15
S 16	16 7 31	2°53'01	5 ⁸ 49	8°40	21°32	3° 8	1°37	29°53	18°45	27°31	3°51	23°56	25°42	20°44	14°26	S 16
M17	16 11 28	3°50'26	17°41	9°51	22° 8	3°46	1°36	29°52	18°48	27°31	3°52	23°49	25°39	20°51	14°31	M17
T 18	16 15 25	4°47'51	29°30	11° 5	22°46	4°24	1°35	29°51	18°51	27°30	3°53	23°44	25°35	20°57	14°37	T 18
W19	16 19 21	5°45'14	11 ⁸ 18	12°22	23°24	5° 3	1°33	29°51	18°54	27°30	3°54	23°41	25°32	21° 4	14°42	W19
T 20	16 23 18	6°42'37	23° 9	13°41	24° 4	5°41	1°32	29°50	18°57	27°29	3°55	23°D40	25°29	21°11	14°48	T 20
F 21	16 27 14	7°39'59	5 ⁸ 5	15° 4	24°45	6°19	1°30	29°50	19° 0	27°29	3°56	23°41	25°26	21°17	14°53	F 21
S 22	16 31 11	8°37'21	17°12	16°30	25°26	6°57	1°28	29°49	19° 3	27°29	3°57	23°42	25°23	21°24	14°59	S 22
S 23	16 35 7	9°34'42	29°33	17°58	26° 9	7°36	1°26	29°49	19° 6	27°28	3°59	23°43	25°19	21°31	15° 4	S 23
M24	16 39 4	10°32'02	12 ⁸ 14	19°29	26°53	8°14	1°24	29°49	19° 9	27°28	4° 0	23°R44	25°16	21°37	15°10	M24
T 25	16 43 0	11°29'22	25°19	21° 3	27°37	8°52	1°22	29°D49	19°12	27°28	4° 1	23°43	25°13	21°44	15°15	T 25
W26	16 46 57	12°26'41	8°9'51	22°40	28°23	9°30	1°19	29°49	19°15	27°28	4° 2	23°40	25°10	21°51	15°21	W26
T 27	16 50 54	13°24'00	22°51	24°20	29° 9	10° 9	1°16	29°49	19°18	27°28	4° 3	23°36	25° 7	21°57	15°26	T 27
F 28	16 54 50	14°21'18	7 ⁸ 19	26° 2	29°56	10°47	1°13	29°50	19°21	27°28	4° 5	23°31	25° 4	22° 4	15°32	F 28
S 29	16 58 47	15°18'37	22°10	27°47	0 ⁸ 44	11°25	1°10	29°50	19°24	27°28	4° 6	23°25	25° 0	22°11	15°37	S 29
S 30	17 2 43	16°15'54	7 ¹¹ 17	29°34	1°33	12° 3	1° 7	29°50	19°27	27°27	4° 7	23°20	24°57	22°17	15°43	S 30
M31	17 6 40	17 ¹¹ 13'12	22 ¹¹ 31	1 ¹¹ 24	2 ⁸ 22	12 ⁸ 41	1 ⁸ 4	29 ⁹ 51	19 ⁸ 31	27°D27	4 ⁸ 8	23 ⁸ 16	24 ⁸ 54	22 ⁸ 24	15 ¹¹ 48	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	17n23	20n36	4n47	7n58	2s58	6n49	0n47	24n27	1n 6	20s17	0s23	2n18	2n38	22n45	0n29	2n17	1n30	25n50	6n38	21s 9	20s55	26s11	17n35	4s54	
S 2	17 39	24 4	4 12	7 57	3 5	6 43	0 35	24 29	1 6	20 16	0 24	2 19	2 38	22 45	0 29	2 18	1 30	25 50	6 38	21 11	20 56	26 11	17 35	4 54	
M 3	17 54	25 51	3 20	7 58	3 12	6 38	0 24	24 31	1 6	20 16	0 24	2 19	2 37	22 45	0 29	2 18	1 30	25 50	6 38	21 12	20 56	26 11	17 36	4 54	
T 4	18 10	25 44	2 13	8 1	3 17	6 35	0 14	24 33	1 7	20 16	0 24	2 20	2 37	22 44	0 29	2 18	1 30	25 49	6 38	21 13	20 57	26 10	17 37	4 54	
W 5	18 25	23 47	0 59	8 7	3 22	6 32	0 3	24 34	1 7	20 16	0 24	2 21	2 37	22 44	0 29	2 19	1 30	25 49	6 37	21 14	20 58	26 10	17 37	4 54	
T 6	18 39	20 20	0s17	8 15	3 25	6 30	0s 7	24 35	1 7	20 16	0 24	2 21	2 37	22 44	0 29	2 19	1 29	25 49	6 37	21 14	20 58	26 10	17 38	4 54	
F 7	18 54	15 47	1 31	8 25	3 28	6 30	0 17	24 36	1 7	20 16	0 25	2 22	2 37	22 43	0 29	2 19	1 29	25 48	6 37	21 14	20 59	26 10	17 39	4 54	
S 8	19 8	10 32	2 37	8 37	3 30	6 30	0 26	24 37	1 7	20 16	0 25	2 22	2 36	22 43	0 29	2 20	1 29	25 48	6 37	21 14	20 59	26 10	17 39	4 54	
S 9	19 21	4 55	3 34	8 52	3 31	6 31	0 35	24 38	1 7	20 16	0 25	2 23	2 36	22 43	0 29	2 20	1 29	25 48	6 37	21 14	21 0	26 10	17 40	4 54	
M10	19 35	0s45	4 17	9 8	3 31	6 33	0 44	24 38	1 8	20 16	0 25	2 23	2 36	22 42	0 29	2 20	1 29	25 48	6 37	21 14	21 1	26 9	17 41	4 54	
T 11	19 48	6 17	4 47	9 26	3 31	6 36	0 52	24 38	1 8	20 16	0 25	2 23	2 36	22 42	0 29	2 20	1 29	25 47	6 37	21 15	21 1	26 9	17 41	4 54	
W12	20 0	11 28	5 3	9 45	3 29	6 39	1 1	24 38	1 8	20 16	0 26	2 24	2 35	22 41	0 29	2 20	1 29	25 47	6 37	21 17	21 2	26 9	17 42	4 54	
T 13	20 13	16 6	5 4	10 7	3 27	6 44	1 8	24 38	1 8	20 16	0 26	2 24	2 35	22 41	0 29	2 21	1 29	25 47	6 37	21 18	21 2	26 9	17 42	4 54	
F 14	20 25	20 2	4 51	10 30	3 24	6 49	1 16	24 38	1 8	20 17	0 26	2 24	2 35	22 41	0 29	2 21	1 29	25 46	6 37	21 20	21 3	26 8	17 43	4 54	
S 15	20 37	23 5	4 26	10 54	3 21	6 55	1 23	24 38	1 8	20 17	0 26	2 24	2 35	22 40	0 29	2 21	1 29	25 46	6 36	21 22	21 4	26 8	17 44	4 54	
S 16	20 48	25 5	3 48	11 20	3 17	7 2	1 30	24 37	1 8	20 17	0 26	2 25	2 35	22 40	0 29	2 21	1 29	25 46	6 36	21 23	21 4	26 8	17 44	4 54	
M17	20 59	25 57	3 1	11 47	3 12	7 9	1 37	24 36	1 9	20 18	0 27	2 25	2 34	22 40	0 29	2 21	1 29	25 45	6 36	21 24	21 5	26 8	17 45	4 54	
T 18	21 10	25 37	2 7	12 15	3 6	7 17	1 43	24 35	1 9	20 18	0 27	2 25	2 34	22 39	0 28	2 21	1 29	25 45	6 36	21 25	21 5	26 7	17 45	4 54	
W19	21 20	24 8	1 6	12 44	3 0	7 26	1 49	24 34	1 9	20 19	0 27	2 25	2 34	22 39	0 28	2 22	1 29	25 45	6 36	21 26	21 6	26 7	17 46	4 54	
T 20	21 30	21 34	0 3	13 14	2 54	7 35	1 55	24 32	1 9	20 19	0 27	2 25	2 34	22 38	0 28	2 22	1 29	25 44	6 36	21 26	21 6	26 7	17 47	4 54	
F 21	21 39	18 4	1n 1	13 45	2 46	7 45	2 0	24 30	1 9	20 20	0 27	2 25	2 33	22 38	0 28	2 22	1 29	25 44	6 36	21 26	21 7	26 7	17 47	4 54	
S 22	21 48	13 45	2 4	14 17	2 39	7 55	2 6	24 29	1 9	20 20	0 28	2 25	2 33	22 37	0 28	2 22	1 29	25 44	6 36	21 26	21 8	26 6	17 48	4 54	
S 23	21 57	8 49	3 2	14 50	2 30	8 6	2 11	24 27	1 9	20 21	0 28	2 25	2 33	22 37	0 28	2 22	1 29	25 43	6 36	21 25	21 8	26 6	17 48	4 54	
M24	22 6	3 24	3 53	15 23	2 22	8 17	2 15	24 24	1 9	20 22	0 28	2 24	2 33	22 37	0 28	2 22	1 29	25 43	6 36	21 25	21 9	26 6	17 49	4 54	
T 25	22 14	2n19	4 33	15 57	2 13	8 29	2 20	24 22	1 9	20 23	0 28	2 24	2 32	22 36	0 28	2 22	1 29	25 43	6 36	21 25	21 9	26 5	17 49	4 54	
W26	22 21	8 7	5 0	16 31	2 3	8 41	2 24	24 19	1 9	20 23	0 29	2 24	2 32	22 36	0 28	2 22	1 29	25 42	6 36	21 26	21 10	26 5	17 50	4 54	
T 27	22 29	13 43	5 10	17 5	1 53	8 54	2 28	24 17	1 10	20 24	0 29	2 24	2 32	22 35	0 28	2 22	1 29	25 42	6 36	21 27	21 11	26 5	17 50	4 54	
F 28	22 35	18 44	5 10	17 5	1 43	9 7	2 32	24 14	1 10	20 25	0 29	2 23	2 32	22 35	0 28	2 22	1 29	25 41	6 35	21 27	21 11	26 5	17 51	4 54	
S 29	22 42	22 45	4 33	18 13	1 32	9 20	2 36	24 11	1 10	20 26	0 29	2 23	2 32	22 34	0 28	2 22	1 29	25 41	6 35	21 28	21 12	26 4	17 51	4 54	
S 30	22 48	25 17	3 44	18 48	1 22	9 34	2 39	24 7	1 10	20 27	0 29	2 23	2 31	22 34	0 28	2 22	1 29	25 41	6 35	21 29	21 12	26 4	17 52	4 54	
M31	22n54	25n57	2n40	19n21	1s11	9n48	2s42	24n 4	1n10	20s28	0s30	2n22	2n31	22n33	0n28	2n22	1n28	25n40	6n35	21s30	21s13	26s 3	17n52	4s54	

ASTRODIENST EPHEMERIS for the year 1451

geocentric

JUNE 1451 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	17 10 36	18 ^{II} 10'28	7 [☾] 41	3 ^{II} 17	3 [☾] 12	13 [☾] 19	1°R 0	29 [♊] 52	19 [☾] 34	27 [♊] 27	4 [♊] 10	23°R13	24 [☾] 51	22 [♊] 31	15 ^{II} 54	T 1
W 2	17 14 33	19° 7'44	22°38	5°12	4° 3	13°58	0 [♊] 56	29°52	19°37	27°28	4°11	23°D13	24°48	22°37	15°59	W 2
T 3	17 18 29	20° 5'00	7 [♊] 15	7°10	4°54	14°36	0°52	29°53	19°40	27°28	4°12	23 [☾] 13	24°45	22°44	16° 5	T 3
F 4	17 22 26	21° 2'14	21°28	9°10	5°46	15°14	0°48	29°54	19°44	27°28	4°14	23°15	24°41	22°51	16°10	F 4
S 5	17 26 23	21°59'28	5 [♊] 15	11°12	6°39	15°52	0°44	29°55	19°47	27°28	4°15	23°16	24°38	22°57	16°16	S 5
S 6	17 30 19	22°56'41	18°37	13°16	7°32	16°30	0°39	29°57	19°50	27°28	4°16	23°R17	24°35	23° 4	16°21	S 6
M 7	17 34 16	23°53'54	1 [♊] 37	15°21	8°25	17° 8	0°34	29°58	19°54	27°28	4°18	23°17	24°32	23°11	16°27	M 7
T 8	17 38 12	24°51'05	14°17	17°29	9°19	17°46	0°30	29°59	19°57	27°28	4°19	23°15	24°29	23°17	16°32	T 8
W 9	17 42 9	25°48'17	26°42	19°37	10°14	18°25	0°25	0 [♊] 1	20° 1	27°29	4°21	23°13	24°25	23°24	16°38	W 9
T 10	17 46 5	26°45'28	8 [♊] 53	21°47	11° 9	19° 3	0°19	0° 2	20° 4	27°29	4°22	23° 9	24°22	23°31	16°43	T 10
F 11	17 50 2	27°42'38	20°56	23°57	12° 5	19°41	0°14	0° 4	20° 8	27°29	4°24	23° 5	24°19	23°37	16°49	F 11
S 12	17 53 58	28°39'48	2 [♊] 51	26° 8	13° 1	20°19	0° 9	0° 6	20°11	27°30	4°25	23° 1	24°16	23°44	16°54	S 12
S 13	17 57 55	29°36'58	14°42	28°18	13°57	20°57	0° 3	0° 8	20°14	27°30	4°27	22°57	24°13	23°51	17° 0	S 13
M14	18 1 52	0 [☾] 34'08	26°31	0 [☾] 29	14°54	21°35	2 [☾] 57	0°10	20°18	27°31	4°28	22°54	24°10	23°57	17° 5	M14
T 15	18 5 48	1°31'17	8 [☾] 21	2°40	15°52	22°13	29°52	0°12	20°22	27°31	4°30	22°52	24° 6	24° 4	17°11	T 15
W16	18 9 45	2°28'27	20°12	4°50	16°50	22°51	29°46	0°14	20°25	27°32	4°31	22°D52	24° 3	24°11	17°16	W16
T 17	18 13 41	3°25'37	2 [♊] 8	6°59	17°48	23°29	29°40	0°16	20°29	27°32	4°33	22°52	24° 0	24°17	17°21	T 17
F 18	18 17 38	4°22'46	14°11	9° 7	18°46	24° 7	29°33	0°18	20°32	27°33	4°34	22°53	23°57	24°24	17°27	F 18
S 19	18 21 34	5°19'56	26°25	11°13	19°45	24°45	29°27	0°21	20°36	27°33	4°36	22°54	23°54	24°31	17°32	S 19
S 20	18 25 31	6°17'06	8 [♊] 52	13°19	20°45	25°23	29°21	0°23	20°39	27°34	4°38	22°56	23°51	24°37	17°37	S 20
M21	18 29 28	7°14'17	21°35	15°23	21°45	26° 1	29°14	0°26	20°43	27°35	4°39	22°57	23°47	24°44	17°43	M21
T 22	18 33 24	8°11'27	4 [♊] 39	17°25	22°45	26°39	29° 7	0°29	20°46	27°35	4°41	22°R57	23°44	24°51	17°48	T 22
W23	18 37 21	9° 8'39	18° 6	19°26	23°45	27°17	29° 0	0°31	20°50	27°36	4°42	22°57	23°41	24°57	17°53	W23
T 24	18 41 17	10° 5'50	1 [☾] 58	21°25	24°46	27°55	28°54	0°34	20°54	27°37	4°44	22°56	23°38	25° 4	17°59	T 24
F 25	18 45 14	11° 3'03	16°14	23°22	25°47	28°33	28°47	0°37	20°57	27°38	4°46	22°55	23°35	25°11	18° 4	F 25
S 26	18 49 10	12° 0'16	0 ^{II} 53	25°17	26°48	29°11	28°40	0°40	21° 1	27°38	4°47	22°54	23°31	25°17	18° 9	S 26
S 27	18 53 7	12°57'29	15°48	27°11	27°50	29°50	28°32	0°44	21° 5	27°39	4°49	22°53	23°28	25°24	18°14	S 27
M28	18 57 3	13°54'43	0 [☾] 54	29° 2	28°51	0 [♊] 28	28°25	0°47	21° 8	27°40	4°51	22°52	23°25	25°31	18°20	M28
T 29	19 1 0	14°51'58	16° 2	0 [♊] 52	29°54	1° 6	28°18	0°50	21°12	27°41	4°53	22°D51	23°22	25°37	18°25	T 29
W30	19 4 57	15 [☾] 49'12	1 [♊] 1	2 [♊] 40	0 ^{II} 56	1 [♊] 44	28 [☾] 10	0 [♊] 54	21 [☾] 16	27 [♊] 42	4 [♊] 54	22 [☾] 51	23 [☾] 19	25 [♊] 44	18 ^{II} 30	W30

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
T 1	22n59	24n41	1n24	19n54	0s59	10n 2	2s45	24n 0	1n10	20s29	0s30	2n22	2n31	22n33	0n28	2n22	1n28	25n40	6n35	21s30	21s13	26s 3	17n53	4s55	
W 2	23 4	21 39	0 3	20 27	0 48	10 16	2 48	23 56	1 10	20 30	0 30	2 21	2 31	22 32	0 28	2 22	1 28	25 40	6 35	21 31	21 14	26 3	17 53	4 55	
T 3	23 8	17 17	1s16	20 58	0 37	10 31	2 51	23 52	1 10	20 31	0 30	2 21	2 30	22 32	0 28	2 22	1 28	25 39	6 35	21 30	21 15	26 2	17 54	4 55	
F 4	23 12	12 3	2 28	21 28	0 25	10 46	2 53	23 48	1 10	20 32	0 30	2 20	2 30	22 31	0 28	2 22	1 28	25 39	6 35	21 30	21 15	26 2	17 54	4 55	
S 5	23 16	6 21	3 30	21 57	0 14	11 1	2 55	23 44	1 10	20 33	0 31	2 19	2 30	22 31	0 28	2 22	1 28	25 38	6 35	21 30	21 16	26 2	17 55	4 55	
S 6	23 19	0 33	4 18	22 25	0 3	11 16	2 57	23 39	1 10	20 34	0 31	2 19	2 30	22 30	0 28	2 22	1 28	25 38	6 35	21 30	21 16	26 1	17 55	4 55	
M 7	23 22	5s 6	4 51	22 50	0n 8	11 32	2 59	23 34	1 10	20 36	0 31	2 18	2 29	22 30	0 28	2 21	1 28	25 38	6 35	21 30	21 17	26 1	17 55	4 55	
T 8	23 25	10 24	5 10	23 14	0 19	11 48	3 0	23 29	1 10	20 37	0 31	2 17	2 29	22 29	0 28	2 21	1 28	25 37	6 35	21 30	21 17	26 0	17 56	4 55	
W 9	23 27	15 11	5 13	23 35	0 29	12 3	3 2	23 24	1 10	20 38	0 31	2 16	2 29	22 29	0 28	2 21	1 28	25 37	6 35	21 31	21 18	26 0	17 56	4 56	
T 10	23 28	19 16	5 2	23 54	0 39	12 19	3 3	23 19	1 10	20 39	0 32	2 15	2 29	22 28	0 28	2 21	1 28	25 36	6 35	21 31	21 18	26 0	17 57	4 56	
F 11	23 29	22 30	4 37	24 11	0 49	12 35	3 4	23 13	1 10	20 41	0 32	2 15	2 28	22 28	0 28	2 21	1 28	25 36	6 35	21 32	21 19	25 59	17 57	4 56	
S 12	23 30	24 44	4 1	24 25	0 58	12 51	3 5	23 8	1 10	20 42	0 32	2 14	2 28	22 27	0 28	2 21	1 28	25 36	6 35	21 33	21 20	25 59	17 57	4 56	
S 13	23 31	25 51	3 15	24 36	1 6	13 7	3 6	23 2	1 10	20 43	0 32	2 13	2 28	22 27	0 28	2 20	1 28	25 35	6 35	21 33	21 20	25 58	17 58	4 56	
M14	23 31	25 48	2 20	24 44	1 14	13 23	3 6	22 56	1 10	20 45	0 32	2 12	2 28	22 26	0 28	2 20	1 28	25 35	6 35	21 34	21 21	25 58	17 58	4 56	
T 15	23 30	24 34	1 19	24 50	1 21	13 39	3 7	22 50	1 10	20 46	0 33	2 11	2 28	22 26	0 28	2 20	1 28	25 34	6 35	21 34	21 21	25 57	17 58	4 57	
W16	23 29	22 14	0 15	24 52	1 27	13 55	3 7	22 44	1 10	20 48	0 33	2 10	2 27	22 25	0 28	2 20	1 28	25 34	6 35	21 34	21 22	25 57	17 59	4 57	
T 17	23 28	18 55	0n51	24 52	1 33	14 11	3 7	22 37	1 11	20 49	0 33	2 8	2 27	22 25	0 28	2 19	1 28	25 34	6 35	21 34	21 22	25 56	17 59	4 57	
F 18	23 26	14 47	1 55	24 49	1 38	14 27	3 7	22 31	1 11	20 51	0 33	2 7	2 27	22 24	0 28	2 19	1 28	25 33	6 35	21 34	21 23	25 56	17 59	4 57	
S 19	23 24	10 0	2 55	24 44	1 42	14 43	3 7	22 24	1 11	20 52	0 33	2 6	2 27	22 24	0 28	2 19	1 28	25 33	6 35	21 34	21 23	25 55	17 59	4 57	
S 20	23 22	4 45	3 48	24 35	1 45	14 59	3 7	22 17	1 11	20 54	0 34	2 5	2 26	22 23	0 28	2 19	1 28	25 32	6 35	21 33	21 24	25 55	18 0	4 57	
M21	23 19	0n48	4 31	24 25	1 48	15 15	3 6	22 10	1 11	20 55	0 34	2 4	2 26	22 23	0 28	2 18	1 28	25 32	6 35	21 33	21 25	25 54	18 0	4 58	
T 22	23 15	6 27	5 1	24 11	1 50	15 31	3 6	22 2	1 11	20 57	0 34	2 2	2 26	22 22	0 28	2 18	1 28	25 32	6 35	21 33	21 25	25 54	18 0	4 58	
W23	23 12	11 59	5 16	23 56	1 51	15 46	3 5	21 55	1 11	20 59	0 34	2 1	2 26	22 21	0 28	2 18	1 28	25 31	6 35	21 33	21 26	25 53	18 1	4 58	
T 24	23 8	17 5	5 13	23 38	1 52	16 2	3 4	21 47	1 11	21 0	0 34	2 0	2 26	22 21	0 28	2 17	1 27	25 31	6 35	21 33	21 26	25 53	18 1	4 58	
F 25	23 3	21 23	4 51	23 19	1 52	16 17	3 4	21 40	1 11	21 2	0 34	1 58	2 25	22 20	0 28	2 17	1 27	25 30	6 35	21 33	21 27	25 52	18 1	4 59	
S 26	22 58	24 28	4 10	22 58	1 51	16 32	3 3	21 32	1 11	21 3	0 35	1 57	2 25	22 20	0 28	2 17	1 27	25 30	6 35	21 34	21 27	25 52	18 1	4 59	
S 27	22 53	25 55	3 11	22 35	1 49	16 47	3 1	21 24	1 11	21 5	0 35	1 55	2 25	22 19	0 28	2 16	1 27	25 29	6 35	21 34	21 28	25 51	18 1	4 59	
M28	22 47	25 29	1 59	22 10	1 47	17 2	3 0	21 16	1 10	21 7	0 35	1 54	2 25	22 19	0 28	2 16	1 27	25 29	6 35	21 34	21 28	25 51	18 2	4 59	
T 29	22 41	23 10	0 38	21 44	1 45	17 17	2 59	21 7	1 10	21 8	0 35	1 52	2 24	22 18	0 28	2 16	1 27	25 29	6 35	21 34	21 29	25 50	18 2	5 0	
W30	22n34	19n15	0s45	21n16	1n42	17n31	2s57	20n59	1n10	21s10	0s35	1n51	2n24	22n18	0n28	2n15	1n27	25n28	6n35	21s34	21s29	25s50	18n 2	5s 0	

ASTRODIENST EPHEMERIS for the year 1451

geocentric

JULY 1451 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	19 8 53	16°46'27	15°44	4°26	11°59	2°22	28°R 3	0°57	21°19	27°43	4°56	22°52	23°16	25°51	18°35	T 1
F 2	19 12 50	17°43'43	0°16	6°10	3° 2	3° 0	27°55	1° 1	21°23	27°44	4°58	22°52	23°12	25°57	18°40	F 2
S 3	19 16 46	18°40'58	14° 2	7°52	4° 5	3°38	27°48	1° 4	21°27	27°45	4°59	22°53	23° 9	26° 4	18°45	S 3
S 4	19 20 43	19°38'14	27°31	9°33	5° 8	4°16	27°40	1° 8	21°30	27°46	5° 1	22°53	23° 6	26°11	18°50	S 4
M 5	19 24 39	20°35'30	10°35	11°11	6°12	4°54	27°33	1°12	21°34	27°47	5° 3	22°53	23° 3	26°17	18°55	M 5
T 6	19 28 36	21°32'46	23°17	12°48	7°16	5°32	27°25	1°16	21°38	27°48	5° 5	22°R53	23° 0	26°24	19° 0	T 6
W 7	19 32 32	22°30'03	5°40	14°23	8°20	6°10	27°17	1°20	21°41	27°49	5° 6	22°D53	22°57	26°31	19° 5	W 7
T 8	19 36 29	23°27'20	17°49	15°56	9°24	6°48	27°10	1°24	21°45	27°50	5° 8	22°53	22°53	26°37	19°10	T 8
F 9	19 40 26	24°24'38	29°47	17°27	10°28	7°26	27° 2	1°28	21°49	27°52	5°10	22°53	22°50	26°44	19°15	F 9
S 10	19 44 22	25°21'56	11°38	18°56	11°33	8° 4	26°54	1°32	21°52	27°53	5°12	22°54	22°47	26°51	19°20	S 10
S 11	19 48 19	26°19'14	23°27	20°23	12°38	8°42	26°46	1°37	21°56	27°54	5°13	22°54	22°44	26°57	19°24	S 11
M12	19 52 15	27°16'34	5°16	21°49	13°43	9°20	26°38	1°41	22° 0	27°55	5°15	22°54	22°41	27° 4	19°29	M12
T 13	19 56 12	28°13'54	17° 9	23°12	14°48	9°58	26°31	1°45	22° 3	27°57	5°17	22°R54	22°37	27°11	19°34	T 13
W14	20 0 8	29°11'15	29° 7	24°34	15°54	10°36	26°23	1°50	22° 7	27°58	5°19	22°54	22°34	27°17	19°39	W14
T 15	20 4 5	0° 8'36	11°33	25°53	17° 0	11°14	26°15	1°55	22°11	27°59	5°21	22°54	22°31	27°24	19°43	T 15
F 16	20 8 1	1° 5'59	23°29	27°11	18° 5	11°52	26° 7	1°59	22°14	28° 1	5°22	22°53	22°28	27°31	19°48	F 16
S 17	20 11 58	2° 3'22	5°56	28°26	19°12	12°30	26° 0	2° 4	22°18	28° 2	5°24	22°52	22°25	27°37	19°52	S 17
S 18	20 15 55	3° 0'47	18°36	29°39	20°18	13° 8	25°52	2° 9	22°21	28° 4	5°26	22°51	22°22	27°44	19°57	S 18
M19	20 19 51	3°58'12	1°31	0°16	21°24	13°46	25°44	2°14	22°25	28° 5	5°28	22°50	22°18	27°51	20° 1	M19
T 20	20 23 48	4°55'39	14°41	1°58	22°31	14°24	25°37	2°19	22°29	28° 6	5°29	22°49	22°15	27°57	20° 6	T 20
W21	20 27 44	5°53'07	28° 9	3° 4	23°37	15° 2	25°29	2°24	22°32	28° 8	5°31	22°48	22°12	28° 4	20°10	W21
T 22	20 31 41	6°50'37	11°55	4° 8	24°44	15°40	25°22	2°29	22°36	28° 9	5°33	22°D48	22° 9	28°11	20°14	T 22
F 23	20 35 37	7°48'08	25°59	5° 9	25°51	16°19	25°14	2°34	22°39	28°11	5°35	22°48	22° 6	28°17	20°19	F 23
S 24	20 39 34	8°45'41	10°21	6° 7	26°59	16°57	25° 7	2°39	22°43	28°13	5°37	22°49	22° 2	28°24	20°23	S 24
S 25	20 43 30	9°43'15	24°57	7° 3	28° 6	17°35	25° 0	2°44	22°47	28°14	5°38	22°51	21°59	28°31	20°27	S 25
M26	20 47 27	10°40'50	9°53	7°55	29°14	18°13	24°52	2°50	22°50	28°16	5°40	22°52	21°56	28°37	20°31	M26
T 27	20 51 24	11°38'27	24°34	8°44	0°21	18°51	24°45	2°55	22°54	28°17	5°42	22°R52	21°53	28°44	20°35	T 27
W28	20 55 20	12°36'05	9°21	9°30	1°29	19°29	24°38	3° 1	22°57	28°19	5°44	22°51	21°50	28°50	20°40	W28
T 29	20 59 17	13°33'44	23°58	10°13	2°37	20° 7	24°31	3° 6	23° 1	28°21	5°46	22°50	21°47	28°57	20°44	T 29
F 30	21 3 13	14°31'25	8°17	10°52	3°45	20°45	24°24	3°12	23° 4	28°23	5°47	22°47	21°43	29° 4	20°48	F 30
S 31	21 7 10	15°29'06	22°15	11°27	4°53	21°23	24°17	3°18	23° 8	28°24	5°49	22°44	21°40	29°10	20°51	S 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	22n27	14n12	2 s 4	20n48	1n38	17n45	2s56	20n50	1n10	21s12	0s36	1n49	2n24	22n17	0n28	2n15
F 2	22 20	8 28	3 12	20 18	1 34	17 59	2 54	20 41	1 10	21 13	0 36	1 48	2 24	22 16	0 28	2 14
S 3	22 12	2 30	4 8	19 47	1 29	18 12	2 52	20 32	1 10	21 15	0 36	1 46	2 24	22 16	0 28	2 14
S 4	22 4	3s24	4 47	19 15	1 23	18 26	2 50	20 23	1 10	21 17	0 36	1 44	2 23	22 15	0 28	2 13
M 5	21 56	8 57	5 10	18 43	1 18	18 39	2 48	20 14	1 10	21 18	0 36	1 43	2 23	22 15	0 28	2 13
T 6	21 47	13 59	5 18	18 10	1 12	18 51	2 46	20 5	1 10	21 20	0 36	1 41	2 23	22 14	0 28	2 12
W 7	21 38	18 19	5 10	17 36	1 5	19 3	2 44	19 55	1 10	21 22	0 36	1 39	2 23	22 14	0 28	2 12
T 8	21 28	21 48	4 48	17 2	0 58	19 15	2 42	19 46	1 10	21 23	0 37	1 37	2 23	22 13	0 28	2 11
F 9	21 18	24 18	4 14	16 27	0 51	19 27	2 40	19 36	1 10	21 25	0 37	1 35	2 22	22 12	0 28	2 11
S 10	21 8	25 43	3 30	15 52	0 43	19 38	2 37	19 26	1 10	21 27	0 37	1 34	2 22	22 12	0 28	2 10
S 11	20 57	25 57	2 36	15 17	0 35	19 49	2 35	19 16	1 10	21 28	0 37	1 32	2 22	22 11	0 28	2 10
M12	20 46	25 1	1 36	14 42	0 26	20 0	2 32	19 6	1 10	21 30	0 37	1 30	2 22	22 11	0 28	2 9
T 13	20 35	22 56	0 32	14 6	0 18	20 10	2 30	18 55	1 10	21 32	0 37	1 28	2 22	22 10	0 28	2 9
W14	20 23	19 50	0n34	13 30	0 9	20 20	2 27	18 45	1 10	21 33	0 37	1 26	2 21	22 9	0 28	2 8
T 15	20 11	15 52	1 40	12 55	0s 1	20 29	2 24	18 35	1 10	21 35	0 38	1 24	2 21	22 9	0 28	2 8
F 16	19 58	11 11	2 42	12 20	0 10	20 38	2 21	18 24	1 10	21 36	0 38	1 22	2 21	22 8	0 29	2 7
S 17	19 46	6 0	3 37	11 44	0 20	20 46	2 18	18 13	1 10	21 38	0 38	1 20	2 21	22 8	0 29	2 6
S 18	19 33	0 30	4 22	11 9	0 30	20 54	2 16	18 2	1 10	21 39	0 38	1 18	2 21	22 7	0 29	2 6
M19	19 19	5n 7	4 55	10 35	0 41	21 2	2 13	17 51	1 10	21 41	0 38	1 16	2 20	22 7	0 29	2 5
T 20	19 5	10 37	5 13	10 1	0 51	21 9	2 9	17 40	1 9	21 43	0 38	1 13	2 20	22 6	0 29	2 5
W21	18 51	15 45	5 15	9 27	1 2	21 15	2 6	17 29	1 9	21 44	0 38	1 11	2 20	22 5	0 29	2 4
T 22	18 37	20 12	4 59	8 54	1 12	21 21	2 3	17 17	1 9	21 46	0 38	1 9	2 20	22 5	0 29	2 3
F 23	18 22	23 36	4 25	8 21	1 23	21 27	2 0	17 6	1 9	21 47	0 39	1 7	2 20	22 4	0 29	2 3
S 24	18 7	25 36	3 34	7 50	1 34	21 32	1 57	16 54	1 9	21 48	0 39	1 5	2 20	22 4	0 29	2 2
S 25	17 52	25 53	2 28	7 19	1 46	21 36	1 54	16 42	1 9	21 50	0 39	1 2	2 19	22 3	0 29	2 1
M26	17 37	24 21	1 12	6 49	1 57	21 40	1 50	16 31	1 9	21 51	0 39	1 0	2 19	22 3	0 29	2 1
T 27	17 21	21 7	0s 9	6 20	2 8	21 44	1 47	16 19	1 9	21 53	0 39	0 58	2 19	22 2	0 29	2 0
W28	17 5	16 32	1 30	5 53	2 19	21 47	1 44	16 6	1 9	21 54	0 39	0 55	2 19	22 1	0 29	1 59
T 29	16 48	11 0	2 43	5 26	2 30	21 49	1 40	15 54	1 9	21 55	0 39	0 53	2 19	22 1	0 29	1 59
F 30	16 31	5 1	3 45	5 1	2 41	21 51	1 37	15 42	1 8	21 57	0 39	0 51	2 19	22 0	0 29	1 58
S 31	16n14	1 s 4	4s31	4n38	2s52	21n52	1s33	15n30	1n 8	21s58	0s39	0n48	2n19	22n 0	0n29	1n57

Julian Day Number = 2251216.5, Delta T = 06m27s

Ecliptic obliquity = 23°30'41", Nutation = 0°00'17", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 17°05'17, Lahiri = 16°12'17 Julian Calendar 1 July 1451 == Greg. Calendar 10 July 1451

ASTRODIENST EPHEMERIS for the year 1451

geocentric

AUGUST 1451 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	21 11 6	16♌26'49	5♊48	11♏58	6♋2	22♏2	24°R11	3♊23	23♏11	28♏26	5♏51	22°R41	21♏37	29♏17	20♏55	S 1
M 2	21 15 3	17°24'33	18°57	12°24	7°10	22°40	24♋4	3°29	23°15	28°28	5°53	22♋38	21°34	29°24	20°59	M 2
T 3	21 18 59	18°22'18	1♌42	12°46	8°19	23°18	23°58	3°35	23°18	28°30	5°54	22°36	21°31	29°30	21°3	T 3
W 4	21 22 56	19°20'04	14°6	13°3	9°28	23°56	23°51	3°41	23°21	28°31	5°56	22°D35	21°28	29°37	21°6	W 4
T 5	21 26 53	20°17'51	26°15	13°15	10°37	24°34	23°45	3°47	23°25	28°33	5°58	22°35	21°24	29°44	21°10	T 5
F 6	21 30 49	21°15'40	8♏12	13°22	11°46	25°12	23°39	3°53	23°28	28°35	6°0	22°36	21°21	29°50	21°14	F 6
S 7	21 34 46	22°13'30	20°2	13°R23	12°55	25°50	23°33	3°59	23°32	28°37	6°1	22°37	21°18	29°57	21°17	S 7
S 8	21 38 42	23°11'21	1♋51	13°19	14°4	26°29	23°27	4°5	23°35	28°39	6°3	22°39	21°15	0♋4	21°21	S 8
M 9	21 42 39	24°9'14	13°42	13°8	15°13	27°7	23°21	4°11	23°38	28°41	6°5	22°40	21°12	0°10	21°24	M 9
T 10	21 46 35	25°7'07	25°40	12°52	16°23	27°45	23°16	4°17	23°41	28°43	6°7	22°R41	21°8	0°17	21°27	T 10
W 11	21 50 32	26°5'03	7♏47	12°30	17°32	28°23	23°10	4°23	23°45	28°45	6°8	22°39	21°5	0°24	21°31	W 11
T 12	21 54 28	27°2'59	20°6	12°2	18°42	29°1	23°5	4°30	23°48	28°46	6°10	22°37	21°2	0°30	21°34	T 12
F 13	21 58 25	28°0'57	2♏38	11°28	19°52	29°40	23°0	4°36	23°51	28°48	6°12	22°33	20°59	0°37	21°37	F 13
S 14	22 2 22	28°58'57	15°24	10°48	21°2	0♏18	22°55	4°42	23°54	28°50	6°13	22°27	20°56	0°44	21°40	S 14
S 15	22 6 18	29°56'59	28°25	10°3	22°12	0°56	22°50	4°49	23°57	28°52	6°15	22°21	20°53	0°50	21°43	S 15
M 16	22 10 15	0♏55'02	11♏38	9°14	23°22	1°34	22°46	4°55	24°1	28°54	6°17	22°15	20°49	0°57	21°46	M 16
T 17	22 14 11	1°53'07	25°5	8°21	24°32	2°13	22°41	5°2	24°4	28°56	6°18	22°9	20°46	1°4	21°49	T 17
W 18	22 18 8	2°51'15	8♏43	7°25	25°43	2°51	22°37	5°8	24°7	28°59	6°20	22°5	20°43	1°10	21°52	W 18
T 19	22 22 4	3°49'24	6°27	6°27	26°53	3°29	22°33	5°15	24°10	29°1	6°22	22°3	20°40	1°17	21°54	T 19
F 20	22 26 1	4°47'35	6♏32	5°29	28°4	4°8	22°29	5°21	24°13	29°3	6°23	22°D 2	20°37	1°24	21°57	F 20
S 21	22 29 57	5°45'49	20°41	4°30	29°15	4°46	22°25	5°28	24°16	29°5	6°25	22°3	20°34	1°30	22°0	S 21
S 22	22 33 54	6°44'04	4♏58	3°34	0♏26	5°24	22°21	5°35	24°19	29°7	6°26	22°4	20°30	1°37	22°2	S 22
M 23	22 37 51	7°42'22	19°21	2°41	1°36	6°3	22°18	5°42	24°22	29°9	6°28	22°R 5	20°27	1°44	22°5	M 23
T 24	22 41 47	8°40'42	3♏47	1°53	2°48	6°41	22°15	5°48	24°24	29°11	6°30	22°4	20°24	1°50	22°7	T 24
W 25	22 45 44	9°39'04	18°11	1°10	3°59	7°19	22°12	5°55	24°27	29°13	6°31	22°2	20°21	1°57	22°10	W 25
T 26	22 49 40	10°37'27	2♏28	0°33	5°10	7°58	22°9	6°2	24°30	29°15	6°33	21°57	20°18	2°3	22°12	T 26
F 27	22 53 37	11°35'53	16°33	0°5	6°21	8°36	22°6	6°9	24°33	29°17	6°34	21°50	20°14	2°10	22°14	F 27
S 28	22 57 33	12°34'20	0♊22	29♏45	7°33	9°15	22°3	6°16	24°36	29°20	6°36	21°42	20°11	2°17	22°16	S 28
S 29	23 1 30	13°32'49	13°51	29°33	8°44	9°53	22°1	6°23	24°38	29°22	6°37	21°33	20°8	2°23	22°18	S 29
M 30	23 5 26	14°31'20	26°57	29°D31	9°56	10°32	21°59	6°30	24°41	29°24	6°39	21°25	20°5	2°30	22°20	M 30
T 31	23 9 23	15♏29'52	9♏42	29♏38	11♏7	11♏10	21♋57	6♊37	24♏44	29♏26	6♏40	21♋38	20♋2	2♋37	22♏22	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	15n57	6s55	5s 1	4n16	3s 3	21n53	1s30	15n17	1n 8	21s59	0s39	0n46	2n18	21n59	0n29	1n57
M 2	15 40	12 16	5 14	3 57	3 14	21 53	1 26	15 5	1 8	22 1	0 39	0 43	2 18	21 59	0 29	1 56
T 3	15 22	16 57	5 11	3 39	3 24	21 52	1 23	14 52	1 8	22 2	0 40	0 41	2 18	21 58	0 29	1 55
W 4	15 4	20 46	4 53	3 23	3 34	21 51	1 19	14 39	1 8	22 3	0 40	0 39	2 18	21 57	0 29	1 54
T 5	14 46	23 37	4 22	3 10	3 43	21 50	1 16	14 26	1 8	22 4	0 40	0 36	2 18	21 57	0 29	1 54
F 6	14 27	25 22	3 40	2 59	3 52	21 48	1 12	14 13	1 8	22 5	0 40	0 34	2 18	21 56	0 29	1 53
S 7	14 9	25 57	2 50	2 51	4 1	21 45	1 8	14 0	1 8	22 6	0 40	0 31	2 18	21 56	0 29	1 52
S 8	13 50	25 22	1 52	2 45	4 8	21 41	1 5	13 47	1 7	22 7	0 40	0 29	2 17	21 55	0 29	1 51
M 9	13 31	23 37	0 49	2 43	4 15	21 38	1 1	13 34	1 7	22 8	0 40	0 26	2 17	21 55	0 29	1 51
T 10	13 11	20 48	0n16	2 44	4 20	21 33	0 58	13 20	1 7	22 9	0 40	0 23	2 17	21 54	0 29	1 50
W 11	12 52	17 4	1 22	2 49	4 25	21 28	0 54	13 7	1 7	22 10	0 40	0 21	2 17	21 54	0 29	1 49
T 12	12 32	12 33	2 24	2 56	4 28	21 22	0 50	12 54	1 7	22 11	0 40	0 18	2 17	21 53	0 29	1 48
F 13	12 12	7 27	3 21	3 8	4 30	21 16	0 47	12 40	1 7	22 12	0 40	0 16	2 17	21 52	0 29	1 47
S 14	11 52	1 57	4 8	3 22	4 30	21 9	0 43	12 26	1 7	22 13	0 40	0 13	2 17	21 52	0 29	1 47
S 15	11 31	3n42	4 44	3 41	4 28	21 1	0 40	12 13	1 6	22 14	0 40	0 10	2 17	21 51	0 29	1 46
M 16	11 11	9 17	5 5	4 2	4 25	20 53	0 36	11 59	1 6	22 15	0 40	0 8	2 17	21 51	0 29	1 45
T 17	10 50	14 32	5 10	4 27	4 20	20 45	0 33	11 45	1 6	22 15	0 40	0 5	2 16	21 50	0 29	1 44
W 18	10 29	19 8	4 57	4 54	4 12	20 35	0 29	11 31	1 6	22 16	0 40	0 2	2 16	21 50	0 29	1 43
T 19	10 8	22 46	4 28	5 24	4 3	20 25	0 26	11 17	1 6	22 17	0 40	0s 0	2 16	21 49	0 29	1 42
F 20	9 47	25 6	3 42	5 56	3 52	20 15	0 22	11 3	1 6	22 18	0 40	0 3	2 16	21 49	0 29	1 42
S 21	9 26	25 52	2 42	6 29	3 39	20 4	0 19	10 49	1 6	22 18	0 40	0 6	2 16	21 48	0 29	1 41
S 22	9 4	24 56	1 31	7 3	3 25	19 52	0 15	10 34	1 5	22 19	0 40	0 9	2 16	21 48	0 29	1 40
M 23	8 42	22 21	0 15	7 37	3 9	19 40	0 12	10 20	1 5	22 20	0 40	0 11	2 16	21 47	0 29	1 39
T 24	8 20	18 21	1s 3	8 10	2 52	19 28	0 8	10 5	1 5	22 20	0 40	0 14	2 16	21 47	0 29	1 38
W 25	7 58	13 16	2 16	8 42	2 33	19 14	0 5	9 51	1 5	22 21	0 40	0 17	2 16	21 46	0 29	1 37
T 26	7 36	7 31	3 20	9 13	2 15	19 1	0 2	9 36	1 5	22 21	0 41	0 20	2 16	21 46	0 29	1 37
F 27	7 14	1 28	4 11	9 41	1 55	18 46	0n 2	9 22	1 5	22 22	0 41	0 22	2 16	21 45	0 29	1 36
S 28	6 52	4s31	4 46	10 6	1 36	18 31	0 5	9 7	1 4	22 22	0 41	0 25	2 16	21 45	0 29	1 35
S 29	6 29	10 8	5 4	10 28	1 16	18 16	0 8	8 53	1 4	22 22	0 41	0 28	2 15	21 45	0 29	1 34
M 30	6 7	15 9	5 5	10 47	0 57	18 0	0 12	8 38	1 4	22 23	0 41	0 31	2 15	21 44	0 29	1 33
T 31	5n44	19s21	4s51	11n 2	0s39	17n43	0n15	8n23	1n 4	22s23	0s41	0s34	2n15	21n44	0n29	1n32

Julian Day Number = 2251247.5, Delta T = 06m27s
 Ecliptic obliquity = 23°30'41", Nutation = 0°00'17", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 17°05'21", Lahiri = 16°12'22" Julian Calendar 1 Aug. 1451 == Greg. Calendar 10 Aug. 1451

ASTRODIENST EPHEMERIS for the year 1451

geocentric

SEPTEMBER 1451 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	23 13 20	16 ^h 28'27"	22 ^m 7"	29 ^s 55	12 ^h 19	11 ^m 48	21°R55	6 ^h 44	24 ^s 46	29 ^m 28	6 ^h 42	21°R13	19 ^s 59	2 ^h 43	22 ^m 24	W 1
T 2	23 17 16	17°27'03"	4 ^h 16	0 ^m 21	13°31	12°27	21°54	6°51	24°49	29°30	6°43	21°30	19°55	2°50	22°26	T 2
F 3	23 21 13	18°25'41"	16°13	0°56	14°43	13° 5	21°52	6°58	24°51	29°33	6°44	21°D 9	19°52	2°57	22°27	F 3
S 4	23 25 9	19°24'20"	28° 3	1°40	15°55	13°44	21°51	7° 5	24°54	29°35	6°46	21° 9	19°49	3° 3	22°29	S 4
S 5	23 29 6	20°23'02"	9 ^h 52	2°32	17° 7	14°23	21°50	7°12	24°56	29°37	6°47	21°10	19°46	3°10	22°30	S 5
M 6	23 33 2	21°21'45"	21°45	3°32	18°19	15° 1	21°49	7°19	24°59	29°39	6°49	21°R10	19°43	3°17	22°32	M 6
T 7	23 36 59	22°20'29"	3 ^h 46	4°39	19°31	15°40	21°49	7°26	25° 1	29°41	6°50	21° 9	19°40	3°23	22°33	T 7
W 8	23 40 55	23°19'16"	16° 0	5°52	20°44	16°18	21°48	7°33	25° 4	29°44	6°51	21° 6	19°36	3°30	22°34	W 8
T 9	23 44 52	24°18'04"	28°31	7°11	21°56	16°57	21°48	7°41	25° 6	29°46	6°53	21° 1	19°33	3°37	22°36	T 9
F 10	23 48 49	25°16'54"	11 ^h 19	8°36	23° 9	17°35	21°D48	7°48	25° 8	29°48	6°54	20°53	19°30	3°43	22°37	F 10
S 11	23 52 45	26°15'47"	24°26	10° 4	24°21	18°14	21°48	7°55	25°10	29°50	6°55	20°43	19°27	3°50	22°38	S 11
S 12	23 56 42	27°14'41"	7 ^h 50	11°37	25°34	18°53	21°49	8° 2	25°12	29°53	6°56	20°32	19°24	3°57	22°39	S 12
M13	0 0 38	28°13'37"	21°30	13°13	26°47	19°31	21°49	8° 9	25°15	29°55	6°58	20°21	19°20	4° 3	22°39	M13
T 14	0 4 35	29°12'35"	5 ^h 21	14°51	27°59	20°10	21°50	8°17	25°17	29°57	6°59	20°11	19°17	4°10	22°40	T 14
W15	0 8 31	0 ^h 11'36"	19°20	16°32	29°12	20°49	21°51	8°24	25°19	29°59	7° 0	20° 3	19°14	4°16	22°41	W15
T 16	0 12 28	1°10'39"	3 ^h 23	18°14	0 ^m 25	21°27	21°52	8°31	25°21	0 ^h 2	7° 1	19°58	19°11	4°23	22°42	T 16
F 17	0 16 24	2° 9'45"	17°30	19°58	1°38	22° 6	21°54	8°39	25°23	0° 4	7° 2	19°55	19° 8	4°30	22°42	F 17
S 18	0 20 21	3° 8'53"	1 ^h 36	21°43	2°51	22°45	21°55	8°46	25°24	0° 6	7° 4	19°D54	19° 5	4°36	22°43	S 18
S 19	0 24 18	4° 8'03"	15°42	23°29	4° 5	23°24	21°57	8°53	25°26	0° 8	7° 5	19°R55	19° 1	4°43	22°43	S 19
M20	0 28 14	5° 7'15"	29°47	25°15	5°18	24° 2	21°59	9° 0	25°28	0°10	7° 6	19°54	18°58	4°50	22°43	M20
T 21	0 32 11	6° 6'30"	13 ^h 49	27° 1	6°31	24°41	22° 1	9° 8	25°30	0°13	7° 7	19°52	18°55	4°56	22°44	T 21
W22	0 36 7	7° 5'47"	27°48	28°47	7°44	25°20	22° 3	9°15	25°32	0°15	7° 8	19°48	18°52	5° 3	22°44	W22
T 23	0 40 4	8° 5'07"	11 ^h 39	0 ^h 34	8°58	25°59	22° 6	9°22	25°33	0°17	7° 9	19°41	18°49	5°10	22°R44	T 23
F 24	0 44 0	9° 4'28"	25°21	2°20	10°11	26°38	22° 9	9°30	25°35	0°19	7°10	19°31	18°45	5°16	22°44	F 24
S 25	0 47 57	10° 3'52"	8 ^h 51	4° 6	11°25	27°17	22°12	9°37	25°36	0°22	7°11	19°18	18°42	5°23	22°44	S 25
S 26	0 51 53	11° 3'18"	22° 5	5°51	12°39	27°55	22°15	9°44	25°38	0°24	7°12	19° 5	18°39	5°30	22°43	S 26
M27	0 55 50	12° 2'46"	5 ^h 1	7°36	13°52	28°34	22°18	9°52	25°39	0°26	7°13	18°53	18°36	5°36	22°43	M27
T 28	0 59 46	13° 2'15"	17°40	9°20	15° 6	29°13	22°21	9°59	25°41	0°28	7°14	18°41	18°33	5°43	22°43	T 28
W29	1 3 43	14° 1'47"	0 ^h 1	11° 4	16°20	29°52	22°25	10° 6	25°42	0°30	7°15	18°32	18°30	5°50	22°42	W29
T 30	1 7 40	15 ^h 1'21"	12 ^m 8"	12 ^s 47	17 ^h 34	0 ^h 31	22°29	10 ^h 14	25°43	0 ^h 33	7 ^h 15	18°26	18°26	5°56	22°II42	T 30

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	5n21	22s35	4s23	11n13	0s21	17n26	0n18	8n 8	1n 4	22s23	0s41	0s37	2n15	21n43	0n29	1n31
T 2	4 58	24 44	3 44	11 19	0 4	17 9	0 21	7 53	1 3	22 24	0 41	0 39	2 15	21 43	0 29	1 30
F 3	4 35	25 43	2 56	11 22	0n12	16 51	0 24	7 38	1 3	22 24	0 41	0 42	2 15	21 42	0 29	1 30
S 4	4 12	25 31	2 1	11 20	0 27	16 33	0 27	7 23	1 3	22 24	0 41	0 45	2 15	21 42	0 30	1 29
S 5	3 49	24 9	1 0	11 14	0 41	16 14	0 30	7 8	1 3	22 24	0 41	0 48	2 15	21 41	0 30	1 28
M 6	3 26	21 42	0n 3	11 4	0 53	15 54	0 33	6 53	1 3	22 24	0 41	0 51	2 15	21 41	0 30	1 27
T 7	3 3	18 17	1 7	10 50	1 5	15 34	0 36	6 38	1 2	22 24	0 41	0 54	2 15	21 41	0 30	1 26
W 8	2 40	14 2	2 9	10 33	1 15	15 14	0 38	6 22	1 2	22 24	0 41	0 56	2 15	21 40	0 30	1 25
T 9	2 16	9 8	3 5	10 11	1 24	14 53	0 41	6 7	1 2	22 24	0 41	0 59	2 15	21 40	0 30	1 24
F 10	1 53	3 44	3 54	9 47	1 31	14 32	0 44	5 52	1 2	22 24	0 41	1 2	2 15	21 39	0 30	1 23
S 11	1 29	1n56	4 32	9 19	1 38	14 10	0 46	5 37	1 2	22 24	0 41	1 5	2 15	21 39	0 30	1 22
S 12	1 6	7 38	4 55	8 49	1 43	13 48	0 49	5 21	1 1	22 24	0 41	1 8	2 15	21 39	0 30	1 21
M13	0 42	13 4	5 2	8 16	1 47	13 26	0 52	5 6	1 1	22 24	0 41	1 11	2 15	21 38	0 30	1 21
T 14	0 19	17 55	4 52	7 41	1 50	13 3	0 54	4 50	1 1	22 24	0 41	1 14	2 15	21 38	0 30	1 20
W15	0s 5	21 51	4 24	7 3	1 52	12 40	0 56	4 35	1 1	22 24	0 41	1 17	2 15	21 38	0 30	1 19
T 16	0 28	24 30	3 40	6 25	1 54	12 16	0 59	4 19	1 0	22 24	0 41	1 19	2 15	21 37	0 30	1 18
F 17	0 52	25 38	2 43	5 44	1 54	11 52	1 4	4 4	1 0	22 24	0 41	1 22	2 15	21 37	0 30	1 17
S 18	1 15	25 6	1 36	5 2	1 54	11 28	1 3	3 48	1 0	22 23	0 41	1 25	2 15	21 37	0 30	1 16
S 19	1 39	22 57	0 22	4 20	1 53	11 4	1 5	3 33	1 0	22 23	0 41	1 28	2 15	21 36	0 30	1 15
M20	2 2	19 24	0s52	3 36	1 51	10 39	1 7	3 17	0 59	22 23	0 40	1 31	2 15	21 36	0 30	1 15
T 21	2 26	14 46	2 3	2 51	1 49	10 13	1 9	3 1	0 59	22 22	0 40	1 34	2 15	21 36	0 30	1 14
W22	2 50	9 22	3 6	2 6	1 46	9 48	1 11	2 46	0 59	22 22	0 40	1 37	2 15	21 36	0 30	1 13
T 23	3 13	3 33	3 58	1 21	1 43	9 22	1 13	2 30	0 59	22 21	0 40	1 40	2 15	21 35	0 30	1 12
F 24	3 36	2s21	4 35	0 35	1 39	8 56	1 15	2 14	0 58	22 21	0 40	1 42	2 15	21 35	0 30	1 11
S 25	4 0	8 2	4 56	0s11	1 35	8 29	1 17	1 59	0 58	22 21	0 40	1 45	2 15	21 35	0 30	1 10
S 26	4 23	13 15	5 0	0 57	1 31	8 3	1 18	1 43	0 58	22 20	0 40	1 48	2 15	21 35	0 30	1 9
M27	4 47	17 46	4 49	1 43	1 26	7 36	1 20	1 27	0 58	22 19	0 40	1 51	2 15	21 34	0 30	1 8
T 28	5 10	21 22	4 24	2 28	1 21	7 8	1 22	1 11	0 57	22 19	0 40	1 54	2 15	21 34	0 30	1 8
W29	5 33	23 54	3 46	3 14	1 15	6 41	1 23	0 55	0 57	22 18	0 40	1 57	2 15	21 34	0 30	1 7
T 30	5s56	25s16	2s59	4s 0	1n10	6n13	1n24	0n40	0n57	22s18	0s40	2s 0	2n15	21n34	0n30	1n 6

Julian Day Number = 2251278.5, Delta T = 06m26s

Ecliptic obliquity = 23°30'42", Nutation = 0°00'16", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 17°05'25", Lahiri = 16°12'26" Julian Calendar 1 Sept. 1451 == Greg. Calendar 10 Sept. 1451

ASTRODIENST EPHEMERIS for the year 1451

geocentric

OCTOBER 1451 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	1 11 36	16 [♂] 0'56	24 [♂] 4	14 [♂] 30	18 [♂] 48	1 [♂] 10	22 [♂] 33	10 [♂] 21	25 [♂] 45	0 [♂] 35	7 [♂] 16	18 [♂] R23	18 [♂] 23	6 [♂] 3	22 [♂] R41	F 1
S 2	1 15 33	17 [♂] 0'34	5 [♂] 33	16 [♂] 12	20 [♂] 2	1 [♂] 49	22 [♂] 37	10 [♂] 28	25 [♂] 46	0 [♂] 37	7 [♂] 17	18 [♂] 21	18 [♂] 20	6 [♂] 9	22 [♂] II41	S 2
S 3	1 19 29	18 [♂] 0'13	17 [♂] 41	17 [♂] 53	21 [♂] 16	2 [♂] 28	22 [♂] 42	10 [♂] 35	25 [♂] 47	0 [♂] 39	7 [♂] 18	18 [♂] 21	18 [♂] 17	6 [♂] 16	22 [♂] 40	S 3
M 4	1 23 26	18 [♂] 59'53	29 [♂] 33	19 [♂] 34	22 [♂] 30	3 [♂] 7	22 [♂] 46	10 [♂] 43	25 [♂] 48	0 [♂] 41	7 [♂] 19	18 [♂] 21	18 [♂] 14	6 [♂] 23	22 [♂] 39	M 4
T 5	1 27 22	19 [♂] 59'36	11 [♂] 35	21 [♂] 14	23 [♂] 44	3 [♂] 46	22 [♂] 51	10 [♂] 50	25 [♂] 49	0 [♂] 43	7 [♂] 19	18 [♂] 20	18 [♂] 11	6 [♂] 29	22 [♂] 38	T 5
W 6	1 31 19	20 [♂] 59'20	23 [♂] 52	22 [♂] 53	24 [♂] 58	4 [♂] 25	22 [♂] 56	10 [♂] 57	25 [♂] 50	0 [♂] 45	7 [♂] 20	18 [♂] 17	18 [♂] 7	6 [♂] 36	22 [♂] 37	W 6
T 7	1 35 15	21 [♂] 59'06	6 [♂] 28	24 [♂] 32	26 [♂] 12	5 [♂] 4	23 [♂] 1	11 [♂] 5	25 [♂] 51	0 [♂] 48	7 [♂] 21	18 [♂] 11	18 [♂] 4	6 [♂] 43	22 [♂] 36	T 7
F 8	1 39 12	22 [♂] 58'54	19 [♂] 26	26 [♂] 11	27 [♂] 26	5 [♂] 44	23 [♂] 6	11 [♂] 12	25 [♂] 52	0 [♂] 50	7 [♂] 21	18 [♂] 2	18 [♂] 1	6 [♂] 49	22 [♂] 35	F 8
S 9	1 43 9	23 [♂] 58'43	2 [♂] 48	27 [♂] 48	28 [♂] 41	6 [♂] 23	23 [♂] 12	11 [♂] 19	25 [♂] 53	0 [♂] 52	7 [♂] 22	17 [♂] 51	17 [♂] 58	6 [♂] 56	22 [♂] 34	S 9
S 10	1 47 5	24 [♂] 58'35	16 [♂] 32	29 [♂] 25	29 [♂] 55	7 [♂] 2	23 [♂] 17	11 [♂] 26	25 [♂] 54	0 [♂] 54	7 [♂] 23	17 [♂] 39	17 [♂] 55	7 [♂] 3	22 [♂] 32	S 10
M 11	1 51 2	25 [♂] 58'28	0 [♂] 36	1 [♂] 11	1 [♂] 9	7 [♂] 41	23 [♂] 23	11 [♂] 33	25 [♂] 54	0 [♂] 56	7 [♂] 23	17 [♂] 27	17 [♂] 51	7 [♂] 9	22 [♂] 31	M 11
T 12	1 54 58	26 [♂] 58'23	14 [♂] 54	2 [♂] 38	2 [♂] 24	8 [♂] 20	23 [♂] 29	11 [♂] 40	25 [♂] 55	0 [♂] 58	7 [♂] 24	17 [♂] 16	17 [♂] 48	7 [♂] 16	22 [♂] 29	T 12
W 13	1 58 55	27 [♂] 58'21	29 [♂] 20	4 [♂] 14	3 [♂] 38	8 [♂] 59	23 [♂] 35	11 [♂] 48	25 [♂] 56	1 [♂] 0	7 [♂] 24	17 [♂] 7	17 [♂] 45	7 [♂] 23	22 [♂] 28	W 13
T 14	2 2 51	28 [♂] 58'20	13 [♂] 48	5 [♂] 49	4 [♂] 53	9 [♂] 39	23 [♂] 41	11 [♂] 55	25 [♂] 56	1 [♂] 2	7 [♂] 25	17 [♂] 0	17 [♂] 42	7 [♂] 29	22 [♂] 26	T 14
F 15	2 6 48	29 [♂] 58'22	28 [♂] 13	7 [♂] 24	6 [♂] 7	10 [♂] 18	23 [♂] 48	12 [♂] 2	25 [♂] 57	1 [♂] 4	7 [♂] 25	16 [♂] 57	17 [♂] 39	7 [♂] 36	22 [♂] 24	F 15
S 16	2 10 44	0 [♂] 158'26	12 [♂] 31	8 [♂] 58	7 [♂] 22	10 [♂] 57	23 [♂] 54	12 [♂] 9	25 [♂] 57	1 [♂] 6	7 [♂] 26	16 [♂] D56	17 [♂] 36	7 [♂] 43	22 [♂] 23	S 16
S 17	2 14 41	1 [♂] 58'32	26 [♂] 39	10 [♂] 32	8 [♂] 36	11 [♂] 37	24 [♂] 1	12 [♂] 16	25 [♂] 58	1 [♂] 8	7 [♂] 26	16 [♂] R56	17 [♂] 32	7 [♂] 49	22 [♂] 21	S 17
M 18	2 18 38	2 [♂] 58'40	10 [♂] 38	12 [♂] 5	9 [♂] 51	12 [♂] 16	24 [♂] 8	12 [♂] 23	25 [♂] 58	1 [♂] 10	7 [♂] 26	16 [♂] 56	17 [♂] 29	7 [♂] 56	22 [♂] 19	M 18
T 19	2 22 34	3 [♂] 58'51	24 [♂] 26	13 [♂] 38	11 [♂] 6	12 [♂] 55	24 [♂] 15	12 [♂] 30	25 [♂] 58	1 [♂] 12	7 [♂] 27	16 [♂] 54	17 [♂] 26	8 [♂] 2	22 [♂] 17	T 19
W 20	2 26 31	4 [♂] 59'03	8 [♂] 11	15 [♂] 11	12 [♂] 20	13 [♂] 35	24 [♂] 22	12 [♂] 37	25 [♂] 59	1 [♂] 14	7 [♂] 27	16 [♂] 50	17 [♂] 23	8 [♂] 9	22 [♂] 15	W 20
T 21	2 30 27	5 [♂] 59'17	21 [♂] 33	16 [♂] 43	13 [♂] 35	14 [♂] 14	24 [♂] 30	12 [♂] 44	25 [♂] 59	1 [♂] 16	7 [♂] 27	16 [♂] 44	17 [♂] 20	8 [♂] 16	22 [♂] 13	T 21
F 22	2 34 24	6 [♂] 59'34	4 [♂] 50	18 [♂] 15	14 [♂] 50	14 [♂] 53	24 [♂] 37	12 [♂] 51	25 [♂] 59	1 [♂] 18	7 [♂] 28	16 [♂] 34	17 [♂] 17	8 [♂] 22	22 [♂] 10	F 22
S 23	2 38 20	7 [♂] 59'52	17 [♂] 56	19 [♂] 46	16 [♂] 5	15 [♂] 33	24 [♂] 45	12 [♂] 58	25 [♂] 59	1 [♂] 20	7 [♂] 28	16 [♂] 23	17 [♂] 13	8 [♂] 29	22 [♂] 8	S 23
S 24	2 42 17	9 [♂] 0'12	0 [♂] 11	21 [♂] 17	17 [♂] 20	16 [♂] 12	24 [♂] 53	13 [♂] 5	25 [♂] R59	1 [♂] 22	7 [♂] 28	16 [♂] 10	17 [♂] 10	8 [♂] 36	22 [♂] 6	S 24
M 25	2 46 13	10 [♂] 0'34	13 [♂] 29	22 [♂] 48	18 [♂] 35	16 [♂] 52	25 [♂] 1	13 [♂] 11	25 [♂] 59	1 [♂] 23	7 [♂] 28	15 [♂] 58	17 [♂] 7	8 [♂] 42	22 [♂] 3	M 25
T 26	2 50 10	11 [♂] 0'58	25 [♂] 56	24 [♂] 18	19 [♂] 50	17 [♂] 31	25 [♂] 9	13 [♂] 18	25 [♂] 59	1 [♂] 25	7 [♂] 28	15 [♂] 47	17 [♂] 4	8 [♂] 49	22 [♂] 1	T 26
W 27	2 54 7	12 [♂] 1'24	8 [♂] 9	25 [♂] 48	21 [♂] 5	18 [♂] 11	25 [♂] 17	13 [♂] 25	25 [♂] 59	1 [♂] 27	7 [♂] 29	15 [♂] 39	17 [♂] 1	8 [♂] 56	21 [♂] 58	W 27
T 28	2 58 3	13 [♂] 1'51	20 [♂] 10	27 [♂] 18	22 [♂] 20	18 [♂] 51	25 [♂] 26	13 [♂] 32	25 [♂] 58	1 [♂] 29	7 [♂] 29	15 [♂] 33	16 [♂] 57	9 [♂] 2	21 [♂] 56	T 28
F 29	3 2 0	14 [♂] 2'19	2 [♂] 3	28 [♂] 47	23 [♂] 35	19 [♂] 30	25 [♂] 34	13 [♂] 38	25 [♂] 58	1 [♂] 31	7 [♂] 29	15 [♂] 29	16 [♂] 54	9 [♂] 9	21 [♂] 53	F 29
S 30	3 5 56	15 [♂] 2'49	13 [♂] 50	0 [♂] 16	24 [♂] 50	20 [♂] 10	25 [♂] 43	13 [♂] 45	25 [♂] 58	1 [♂] 32	7 [♂] 29	15 [♂] D28	16 [♂] 51	9 [♂] 16	21 [♂] 50	S 30
S 31	3 9 53	16 [♂] 3'21	25 [♂] 37	1 [♂] 44	26 [♂] 5	20 [♂] 49	25 [♂] 52	13 [♂] 52	25 [♂] 58	1 [♂] 34	7 [♂] R29	15 [♂] 29	16 [♂] 48	9 [♂] 22	21 [♂] 47	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
F 1	6s19	25s27	2s 5	4s45	1n 4	5n46	1n26	0n24	0n57	22s17	0s40	2s 2	2n15	21n33	0n30	1n 5
S 2	6 42	24 28	1 6	5 30	0 58	5 18	1 27	0 8	0 56	22 16	0 40	2 5	2 15	21 33	0 30	1 4
S 3	7 5	22 24	0 4	6 14	0 52	4 49	1 28	0s 8	0 56	22 15	0 40	2 8	2 15	21 33	0 30	1 3
M 4	7 28	19 21	0n59	6 58	0 45	4 21	1 29	0 24	0 56	22 15	0 40	2 11	2 15	21 33	0 30	1 2
T 5	7 50	15 27	2 0	7 42	0 39	3 53	1 30	0 39	0 55	22 14	0 40	2 14	2 15	21 33	0 31	1 2
W 6	8 13	10 50	2 56	8 25	0 33	3 24	1 31	0 55	0 55	22 13	0 40	2 16	2 15	21 33	0 31	1 1
T 7	8 35	5 41	3 45	9 8	0 26	2 55	1 32	1 11	0 55	22 12	0 40	2 19	2 15	21 32	0 31	1 0
F 8	8 58	0 8	4 25	9 50	0 19	2 26	1 33	1 27	0 55	22 11	0 40	2 22	2 15	21 32	0 31	0 59
S 9	9 20	5n33	4 50	10 32	0 13	1 57	1 33	1 43	0 54	22 10	0 40	2 25	2 15	21 32	0 31	0 58
S 10	9 42	11 8	5 1	11 13	0 6	1 28	1 34	1 58	0 54	22 9	0 40	2 28	2 15	21 32	0 31	0 58
M 11	10 4	16 17	4 53	11 53	0s 1	0 59	1 34	2 14	0 54	22 8	0 40	2 30	2 16	21 32	0 31	0 57
T 12	10 25	20 36	4 27	12 33	0 7	0 30	1 35	2 30	0 53	22 7	0 40	2 33	2 16	21 32	0 31	0 56
W 13	10 47	23 42	3 44	13 11	0 14	0 0	1 35	2 46	0 53	22 6	0 40	2 36	2 16	21 32	0 31	0 55
T 14	11 8	25 16	2 46	13 50	0 21	0s29	1 36	3 2	0 53	22 5	0 40	2 38	2 16	21 32	0 31	0 54
F 15	11 30	25 7	1 37	14 27	0 28	0 58	1 36	3 17	0 52	22 4	0 40	2 41	2 16	21 32	0 31	0 54
S 16	11 51	23 19	0 23	15 4	0 34	1 28	1 36	3 33	0 52	22 3	0 40	2 44	2 16	21 32	0 31	0 53
S 17	12 12	20 3	0s51	15 40	0 41	1 57	1 36	3 49	0 52	22 2	0 40	2 47	2 16	21 32	0 31	0 52
M 18	12 32	15 40	2 2	16 16	0 47	2 26	1 36	4 4	0 51	22 0	0 40	2 49	2 16	21 32	0 31	0 51
T 19	12 53	10 30	3 5	16 50	0 54	2 56	1 36	4 20	0 51	21 59	0 40	2 52	2 16	21 31	0 31	0 51
W 20	13 13	4 55	3 56	17 24	1 0	3 25	1 36	4 36	0 51	21 58	0 40	2 54	2 16	21 31	0 31	0 50
T 21	13 33	0s50	4 34	17 56	1 6	3 54	1 36	4 51	0 50	21 56	0 40	2 57	2 16	21 31	0 31	0 49
F 22	13 53	6 27	4 56	18 28	1 12	4 24	1 35	5 7	0 50	21 55	0 40	3 0	2 16	21 31	0 31	0 4

ASTRODIENST EPHEMERIS for the year 1451
geocentric

NOVEMBER 1451 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	3 13 49	17 ¹¹ 3'53	7 ²² 27	3 ²⁷ 12	27 ²¹ 20	21 ²¹ 29	26 ²⁶ 3	13 ²¹ 58	25 ²⁵ R57	1 ²¹ 36	7 ²⁰ R29	15 ²³ 29	16 ²³ 45	9 ²³ 29	21 ²¹ R44	M 1
T 2	3 17 46	18 ²⁰ 4'27	19 ²⁰ 27	4 ²³ 39	28 ²⁸ 35	22 ²² 9	26 ²⁶ 10	14 ¹⁴ 5	25 ²⁵ 57	1 ²¹ 37	7 ²⁰ R29	15 ²³ R30	16 ²³ 42	9 ²³ 36	21 ²¹ R41	T 2
W 3	3 21 42	19 ²⁰ 5'02	1 ²¹ 41	6 ²¹ 6	29 ²⁹ 50	22 ²² 48	26 ²⁶ 19	14 ¹⁴ 11	25 ²⁵ 56	1 ²¹ 39	7 ²⁰ 29	15 ²³ 29	16 ²³ 38	9 ²³ 42	21 ²¹ 38	W 3
T 4	3 25 39	20 ²⁰ 5'38	14 ¹⁴ 16	7 ²³ 32	1 ²¹ 5	23 ²³ 28	26 ²⁶ 28	14 ¹⁴ 17	25 ²⁵ 55	1 ²¹ 41	7 ²⁰ 29	15 ²³ 26	16 ²³ 35	9 ²³ 49	21 ²¹ 35	T 4
F 5	3 29 36	21 ²¹ 6'16	27 ²⁷ 15	8 ²⁵ 58	2 ²² 20	24 ²⁴ 8	26 ²⁶ 38	14 ¹⁴ 24	25 ²⁵ 55	1 ²¹ 42	7 ²⁰ 28	15 ²³ 21	16 ²³ 32	9 ²³ 55	21 ²¹ 32	F 5
S 6	3 33 32	22 ²² 6'55	10 ²¹ 40	10 ²² 22	3 ²³ 35	24 ²⁴ 47	26 ²⁶ 47	14 ¹⁴ 30	25 ²⁵ 54	1 ²¹ 44	7 ²⁰ 28	15 ²³ 14	16 ²³ 29	10 ²² 2	21 ²¹ 29	S 6
S 7	3 37 29	23 ²³ 7'35	24 ²⁴ 33	11 ²⁴ 46	4 ²⁵ 51	25 ²⁵ 27	26 ²⁶ 57	14 ¹⁴ 36	25 ²⁵ 53	1 ²¹ 46	7 ²⁰ 28	15 ²³ 5	16 ²³ 26	10 ²² 9	21 ²¹ 26	S 7
M 8	3 41 25	24 ²⁴ 8'16	8 ²⁵ 51	13 ²³ 9	6 ²⁶ 6	26 ²⁶ 7	27 ²⁷ 7	14 ¹⁴ 43	25 ²⁵ 53	1 ²¹ 47	7 ²⁰ 28	14 ¹⁴ 56	16 ²³ 22	10 ²² 15	21 ²¹ 23	M 8
T 9	3 45 22	25 ²⁵ 8'58	23 ²³ 28	14 ²⁴ 31	7 ²⁶ 21	26 ²⁶ 47	27 ²⁷ 17	14 ¹⁴ 49	25 ²⁵ 52	1 ²¹ 49	7 ²⁰ 28	14 ¹⁴ 48	16 ²³ 19	10 ²² 22	21 ²¹ 19	T 9
W10	3 49 18	26 ²⁶ 9'42	8 ²⁵ 18	15 ²⁵ 52	8 ²⁶ 36	27 ²⁷ 27	27 ²⁷ 27	14 ¹⁴ 55	25 ²⁵ 51	1 ²¹ 50	7 ²⁰ 27	14 ¹⁴ 42	16 ²³ 16	10 ²² 29	21 ²¹ 16	W10
T 11	3 53 15	27 ²⁷ 10'28	23 ²³ 12	17 ²⁶ 11	9 ²⁷ 51	28 ²⁸ 7	27 ²⁷ 37	15 ¹⁵ 1	25 ²⁵ 50	1 ²¹ 52	7 ²⁰ 27	14 ¹⁴ 38	16 ²³ 13	10 ²² 35	21 ²¹ 13	T 11
F 12	3 57 11	28 ²⁸ 11'15	8 ²⁵ 3	18 ²⁸ 29	11 ²⁸ 7	28 ²⁸ 46	27 ²⁷ 48	15 ¹⁵ 7	25 ²⁵ 49	1 ²¹ 53	7 ²⁰ 27	14 ¹⁴ D36	16 ²³ 10	10 ²² 42	21 ²¹ 9	F 12
S 13	4 1 8	29 ²⁹ 12'03	22 ²² 42	19 ²⁸ 44	12 ²⁹ 22	29 ²⁹ 26	27 ²⁷ 58	15 ¹⁵ 13	25 ²⁵ 48	1 ²¹ 54	7 ²⁰ 26	14 ¹⁴ 36	16 ²³ 7	10 ²² 49	21 ²¹ 6	S 13
S 14	4 5 5	0 ⁰ 12'53	7 ²⁰ 6	20 ²⁰ 58	13 ²³ 37	0 ⁰ 6	28 ²⁸ 8	15 ¹⁵ 19	25 ²⁵ 47	1 ²¹ 56	7 ²⁰ 26	14 ¹⁴ 37	16 ²³ 3	10 ²² 55	21 ²¹ 2	S 14
M15	4 9 1	1 ¹ 13'44	21 ²¹ 13	22 ²² 9	14 ²⁵ 53	0 ⁰ 46	28 ²⁸ 19	15 ¹⁵ 25	25 ²⁵ 46	1 ²¹ 57	7 ²⁰ 26	14 ¹⁴ 38	16 ²³ 0	11 ²² 2	20 ²⁰ 59	M15
T 16	4 12 58	2 ² 14'36	5 ²¹ 1	23 ²³ 18	16 ²⁶ 8	1 ²⁶ 26	28 ²⁸ 30	15 ¹⁵ 31	25 ²⁵ 44	1 ²¹ 58	7 ²⁰ 25	14 ¹⁴ R39	15 ²⁵ 57	11 ²² 9	20 ²⁰ 55	T 16
W17	4 16 54	3 ³ 15'30	18 ²⁸ 32	24 ²⁴ 23	17 ²⁷ 23	2 ²⁷ 6	28 ²⁸ 41	15 ¹⁵ 36	25 ²⁵ 43	2 ²⁷ 0	7 ²⁰ 25	14 ¹⁴ 38	15 ²⁵ 54	11 ²² 15	20 ²⁰ 52	W17
T 18	4 20 51	4 ⁴ 16'25	1 ²¹ 46	25 ²⁵ 24	18 ²⁸ 39	2 ²⁴ 46	28 ²⁸ 52	15 ¹⁵ 42	25 ²⁵ 42	2 ²⁷ 1	7 ²⁰ 24	14 ¹⁴ 35	15 ²⁵ 51	11 ²² 22	20 ²⁰ 48	T 18
F 19	4 24 47	5 ⁵ 17'22	14 ²⁴ 45	26 ²⁶ 21	19 ²⁹ 54	3 ²⁶ 26	29 ²⁹ 3	15 ¹⁵ 48	25 ²⁵ 41	2 ²⁷ 2	7 ²⁰ 24	14 ¹⁴ 30	15 ²⁵ 48	11 ²² 29	20 ²⁰ 44	F 19
S 20	4 28 44	6 ⁶ 18'20	27 ²⁷ 30	27 ²⁷ 14	21 ²¹ 10	4 ²⁷ 6	29 ²⁹ 14	15 ¹⁵ 53	25 ²⁵ 39	2 ²⁷ 3	7 ²⁰ 23	14 ¹⁴ 23	15 ²⁵ 44	11 ²² 35	20 ²⁰ 40	S 20
S 21	4 32 40	7 ⁷ 19'19	10 ²¹ 3	28 ²⁸ 0	22 ²² 25	4 ²⁷ 47	29 ²⁹ 25	15 ¹⁵ 59	25 ²⁵ 38	2 ²⁷ 5	7 ²⁰ 23	14 ¹⁴ 16	15 ²⁵ 41	11 ²² 42	20 ²⁰ 37	S 21
M22	4 36 37	8 ⁸ 20'19	22 ²² 25	28 ²⁸ 41	23 ²³ 40	5 ²⁷ 27	29 ²⁹ 37	16 ¹⁶ 4	25 ²⁵ 36	2 ²⁷ 6	7 ²⁰ 22	14 ¹⁴ 9	15 ²⁵ 38	11 ²² 48	20 ²⁰ 33	M22
T 23	4 40 34	9 ⁹ 21'21	4 ²¹ 37	29 ²⁹ 14	24 ²⁴ 56	6 ²⁷ 7	29 ²⁹ 48	16 ¹⁶ 9	25 ²⁵ 35	2 ²⁷ 7	7 ²⁰ 22	14 ¹⁴ 3	15 ²⁵ 35	11 ²² 55	20 ²⁰ 29	T 23
W24	4 44 30	10 ²² 22'33	16 ²⁶ 39	29 ²⁹ 40	26 ²⁶ 11	6 ²⁷ 47	29 ²⁹ 59	16 ¹⁶ 15	25 ²⁵ 33	2 ²⁷ 8	7 ²⁰ 21	13 ²³ 59	15 ²⁵ 32	12 ²² 2	20 ²⁰ 25	W24
T 25	4 48 27	11 ²³ 23'26	28 ²⁸ 34	29 ²⁹ 56	27 ²⁷ 27	7 ²⁷ 27	0 ⁰ 11	16 ¹⁶ 20	25 ²⁵ 31	2 ²⁷ 9	7 ²⁰ 20	13 ²³ 56	15 ²⁵ 28	12 ²² 8	20 ²⁰ 21	T 25
F 26	4 52 23	12 ²⁴ 24'30	10 ²³ 23	0 ⁰ R 3	28 ²⁸ 42	8 ²⁷ 7	0 ⁰ 23	16 ¹⁶ 25	25 ²⁵ 30	2 ²⁷ 10	7 ²⁰ 20	13 ²³ D54	15 ²⁵ 25	12 ²² 15	20 ²⁰ 18	F 26
S 27	4 56 20	13 ²⁵ 25'34	22 ²² 10	29 ²⁹ 59	29 ²⁹ 57	8 ²⁸ 48	0 ⁰ 35	16 ¹⁶ 30	25 ²⁵ 28	2 ²⁷ 11	7 ²⁰ 19	13 ²³ 55	15 ²⁵ 22	12 ²² 22	20 ²⁰ 14	S 27
S 28	5 0 16	14 ²⁶ 26'39	3 ²¹ 56	29 ²⁹ 45	1 ²¹ 13	9 ²⁸ 28	0 ⁰ 47	16 ¹⁶ 35	25 ²⁵ 26	2 ²⁷ 12	7 ²⁰ 18	13 ²³ 56	15 ²⁵ 19	12 ²² 28	20 ²⁰ 10	S 28
M29	5 4 13	15 ²⁷ 27'45	15 ²⁴ 46	29 ²⁹ 19	2 ²² 28	10 ²⁸ 8	0 ⁰ 59	16 ¹⁶ 40	25 ²⁵ 25	2 ²⁷ 13	7 ²⁰ 17	13 ²³ 58	15 ²⁵ 16	12 ²² 35	20 ²⁰ 6	M29
T 30	5 8 9	16 ²⁸ 28'50	27 ²⁷ 45	28 ²⁸ 41	3 ²¹ 44	10 ²⁸ 49	1 ²¹ 11	16 ¹⁶ 45	25 ²⁵ 23	2 ²⁷ 14	7 ²⁰ 17	14 ²⁴ 3	15 ²⁵ 13	12 ²² 42	20 ²⁰ 2	T 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	16s59	16s36	1n55	22s54	2s 4	9s10	1n29	7s41	0n46	21s40	0s40	3s25	2n18	21n32	0n31	0n42	1n27	25n 8	6n56	22s37	22s28	23s49	17n18	5s58					
T 2	17 16	12 19	2 52	23 14	2 8	9 38	1 28	7 56	0 46	21 38	0 40	3 27	2 18	21 32	0 32	0 41	1 27	25 9	6 56	22 36	22 28	23 48	17 18	5 58					
W 3	17 33	7 27	3 42	23 33	2 12	10 6	1 27	8 11	0 46	21 36	0 40	3 29	2 18	21 32	0 32	0 40	1 27	25 9	6 56	22 37	22 28	23 47	17 17	5 58					
T 4	17 49	2 10	4 23	23 52	2 15	10 33	1 26	8 26	0 45	21 34	0 40	3 32	2 18	21 33	0 32	0 40	1 27	25 9	6 56	22 37	22 29	23 45	17 17	5 59					
F 5	18 5	3n22	4 52	24 8	2 18	11 0	1 24	8 42	0 45	21 33	0 40	3 34	2 18	21 33	0 32	0 39	1 27	25 10	6 57	22 38	22 29	23 44	17 16	5 59					
S 6	18 21	8 55	5 6	24 24	2 21	11 27	1 23	8 57	0 44	21 31	0 40	3 36	2 18	21 33	0 32	0 38	1 27	25 10	6 57	22 38	22 29	23 42	17 15	6 0					
S 7	18 37	14 14	5 3	24 38	2 23	11 53	1 22	9 11	0 44	21 29	0 40	3 39	2 19	21 33	0 32	0 38	1 27	25 10	6 57	22 39	22 30	23 41	17 15	6 0					
M 8	18 52	18 55	4 41	24 51	2 25	12 20	1 20	9 26	0 44	21 27	0 40	3 41	2 19	21 33	0 32	0 37	1 27	25 10	6 57	22 40	22 30	23 40	17 14	6 0					
T 9	19 7	22 34	4 0	25 2	2 27	12 46	1 19	9 41	0 43	21 25	0 40	3 43	2 19	21 33	0 32	0 37	1 27	25 11	6 58	22 41	22 31	23 38	17 14	6 1					
W10	19 21	24 46	3 3	25 12	2 28	13 11	1 18	9 56	0 43	21 23	0 40	3 45	2 19	21 34	0 32	0 36	1 27	25 11	6 58	22 42	22 31	23 37	17 13	6 1					
T 11	19 35	25 13	1 53	25 21	2 28	13 37	1 16	10 11	0 42	21 21	0 40	3 48	2 19	21 34	0 32	0 36	1 27	25 11	6 58	22 42	22 31	23 35	17 13	6 1					
F 12	19 49	23 51	0 35	25 28	2 28	14 2	1 14	10 25	0 42	21 19	0 40	3 50	2 19	21 34	0 32	0 35	1 27	25 12	6 58	22 43	22 32	23 34	17 12	6 2					
S 13	20 2	20 52	0s44	25 33	2 27	14 26	1 13	10 40	0 41	21 17	0 40	3 52	2 19	21 34	0 32	0 35	1 27	25 12	6 59	22 43	22 32	23 33	17 12	6 2					
S 14	20 15	16 38	1 59	25 37	2 26	14 51	1 11	10 54	0 41	21 15	0 40	3 54	2 20	21 35	0 32	0 34	1 28	25 12	6 59	22 42	22 33	23 31	17 11	6 2					
M15	20 28	11 33	3 5	25 40	2 23	15 15	1 9	11 9	0 41	21 12	0 40	3 56	2 20	21 35	0 32	0 34	1 28	25 13	6 59	22 42	22 33	23 30	17 11	6 2					
T 16	20 40	5 59	3 59	25 41	2 20	15 38	1 7	11 23	0 40	21 10	0 40	3 58	2 20	21 35	0 32	0 33	1 28	25 13	6 59	22 42	22 33	23 28	17 10	6 3					
W17	20 52	0 16	4 39	25 40	2 17	16 1	1 6	11 37	0 40	21 8	0 40	4 0	2 20	21 35	0 32	0 33	1 28	25 14	7 0	22 42	22 34	23 27	17 9	6 3					
T 18	21 4	5s20	5 3	25 38	2 12	16 24	1 4	11 51	0 39	21 6	0 40	4 2	2 20	21 36	0 32	0 32	1 28	25 14	7 0	22 43	22 34	23 25	17 9	6 3					
F 19	21 15	10 35	5 10	25 34	2 6	16 46	1 2	12 5	0 39	21 3	0 40	4 4	2 21	21 36	0 32	0 32	1 28	25 14	7 0	22 43	22 34	23 24	17 8	6 4					
S 20	21 26	15 19	5 2	25 29	2 0	17 8	1 0	12 20	0 38	21 1	0 40	4 6	2 21	21 36	0 32	0 31	1 28	25 15	7 0	22 44	22 35	23 23	17 8	6 4					
S 21	21 36	19 18	4 40	25 22	1 52	17 30	0 58	12 33	0 38	20 59	0 40	4 8	2 21	21 36	0 32	0 31	1 28	25 15	7 1	22 45	22 35	23 21	17 7	6 4					
M22	21 46	22 22	4 4	25 13	1 43	17 51	0 56	12 47	0 37	20 56	0 40	4 10	2 21	21 37	0 32	0 30	1 28	25 15	7 1	22 45	22 36	23 20	17 7	6 4					
T 23	21 55	24 22	3 18	25 3	1 33	18 11	0 54	13 1	0 37	20 54	0 40	4 12	2 21	21 37	0 32	0 30	1 28	25 16	7 1	22 46	22 36	23 18	17 7	6 4					
W24	22 4	25 13	2 24	24 52	1 21	18 31	0 52	13 15	0 36	20 52	0 40	4 14	2 22	21 37	0 32	0 30	1 28	25 16	7 1	22 47	22 36	23 17	17 6	6 5					
T 25	22 13	24 53	1 23	24 39	1 8	18 51	0 50	13 28	0 36	20 49	0 40	4 16	2 22	21 38	0 32	0 29	1 28	25 17	7 2	22 47	22 37	23 15	17 6	6 5					
F 26	22 21	23 25	0 19	24 25	0 54	19 10	0 47	13 42	0 35	20 47	0 40	4 17	2 22	21 38	0 32	0 29	1 28	25 17	7 2	22 47	22 37	23 14	17 5	6 5					
S 27	22 29	20 56	0n45	24 9	0 39	19 28	0 45	13 55	0 35	20 44	0 40	4 19	2 22	21 38	0 32	0 29	1 28	25 17	7 2	22 47	22 37	23 12	17 5	6 5					
S 28	22 36	17 35	1 48	23 52	0 22	19 46	0 43	14 9	0 34	20 41	0 40	4 21	2 22	21 39	0 32	0 28	1 28	25 18	7 2	22 47	22 38	23 11	17 4	6 5					
M29	22 43	13 30	2 46	23 34	0 4	20 3	0 41	14 22	0 34	20 39	0 40	4 23	2 23	21 39	0 32	0 28	1 28	25 18	7 3	22 47	22 38	23 9	17 4	6 6					
T 30	22s49	8s52	3n38	23s15	0n15	20s20	0n38	14s35	0n33	20s36	0s40	4s24	2n23	21n39	0n32	0n28	1n28	25n19	7n 3	22s46	22s38	23s 8	17n 3	6s					

ASTRODIENST EPHEMERIS for the year 1451

geocentric

DECEMBER 1451 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	5 12 6	17°29'57	9°57	27°R53	4°59	11°M29	1°23	16°50	25°R21	2°15	7°R16	14°R 1	15°R 9	12°R48	19°R58	W 1
T 2	5 16 3	18°31'03	22°27	26°53	6°15	12° 9	1°35	16°54	25°R19	2°16	7°R15	14°R 1	15° 6	12°55	19°R54	T 2
F 3	5 19 59	19°32'10	5°Y20	25°45	7°30	12°50	1°48	16°59	25°17	2°16	7°14	14° 0	15° 3	13° 2	19°50	F 3
S 4	5 23 56	20°33'17	18°38	24°29	8°46	13°30	2° 0	17° 3	25°15	2°17	7°13	13°58	15° 0	13° 8	19°46	S 4
S 5	5 27 52	21°34'24	2°R25	23° 8	10° 1	14°10	2°12	17° 8	25°13	2°18	7°12	13°55	14°57	13°15	19°42	S 5
M 6	5 31 49	22°35'32	16°40	21°46	11°17	14°51	2°25	17°12	25°11	2°19	7°11	13°52	14°54	13°21	19°39	M 6
T 7	5 35 45	23°36'40	1°II21	20°24	12°32	15°31	2°38	17°16	25° 9	2°19	7°10	13°49	14°50	13°28	19°35	T 7
W 8	5 39 42	24°37'48	16°20	19° 5	13°47	16°12	2°50	17°21	25° 7	2°20	7°10	13°47	14°47	13°35	19°31	W 8
T 9	5 43 39	25°38'57	1°R29	17°52	15° 3	16°52	3° 3	17°25	25° 5	2°20	7° 9	13°45	14°44	13°41	19°27	T 9
F 10	5 47 35	26°40'05	16°40	16°47	16°18	17°33	3°16	17°29	25° 2	2°21	7° 8	13°D45	14°41	13°48	19°23	F 10
S 11	5 51 32	27°41'15	1°R43	15°51	17°34	18°13	3°29	17°33	25° 0	2°22	7° 7	13°46	14°38	13°55	19°19	S 11
S 12	5 55 28	28°42'24	16°29	15° 5	18°49	18°54	3°42	17°37	24°58	2°22	7° 5	13°47	14°34	14° 1	19°15	S 12
M13	5 59 25	29°43'34	0°M53	14°30	20° 5	19°35	3°55	17°40	24°56	2°23	7° 4	13°48	14°31	14° 8	19°11	M13
T 14	6 3 21	0°R44'44	14°54	14° 5	21°20	20°15	4° 8	17°44	24°53	2°23	7° 3	13°49	14°28	14°15	19° 7	T 14
W15	6 7 18	1°45'55	28°30	13°50	22°36	20°56	4°21	17°48	24°51	2°23	7° 2	13°R49	14°25	14°21	19° 4	W15
T 16	6 11 14	2°47'06	11°R42	13°D46	23°51	21°37	4°34	17°51	24°49	2°24	7° 1	13°49	14°22	14°28	19° 0	T 16
F 17	6 15 11	3°48'17	24°34	13°50	25° 7	22°17	4°47	17°55	24°46	2°24	7° 0	13°48	14°19	14°35	18°56	F 17
S 18	6 19 8	4°49'29	7°M 8	14° 3	26°22	22°58	5° 1	17°58	24°44	2°24	6°59	13°47	14°15	14°41	18°52	S 18
S 19	6 23 4	5°50'41	19°27	14°24	27°38	23°39	5°14	18° 1	24°42	2°25	6°58	13°46	14°12	14°48	18°49	S 19
M20	6 27 1	6°51'53	1°R35	14°51	28°53	24°20	5°28	18° 4	24°39	2°25	6°57	13°45	14° 9	14°55	18°45	M20
T 21	6 30 57	7°53'05	13°34	15°25	0°R 9	25° 0	5°41	18° 7	24°37	2°25	6°55	13°44	14° 6	15° 1	18°41	T 21
W22	6 34 54	8°54'17	25°27	16° 5	1°24	25°41	5°55	18°10	24°34	2°25	6°54	13°44	14° 3	15° 8	18°38	W22
T 23	6 38 50	9°55'29	7°R16	16°50	2°40	26°22	6° 8	18°13	24°32	2°25	6°53	13°44	14° 0	15°14	18°34	T 23
F 24	6 42 47	10°56'40	19° 4	17°39	3°55	27° 3	6°22	18°16	24°29	2°25	6°52	13°D44	13°56	15°21	18°31	F 24
S 25	6 46 43	11°57'52	0°R51	18°33	5°11	27°44	6°36	18°19	24°27	2°26	6°50	13°44	13°53	15°28	18°27	S 25
S 26	6 50 40	12°59'03	12°41	19°30	6°26	28°25	6°49	18°21	24°24	2°R26	6°49	13°44	13°50	15°34	18°24	S 26
M27	6 54 37	14° 0'13	24°36	20°31	7°41	29° 6	7° 3	18°24	24°22	2°26	6°48	13°R44	13°47	15°41	18°20	M27
T 28	6 58 33	15° 1'23	6°R39	21°34	8°57	29°47	7°17	18°26	24°19	2°25	6°47	13°44	13°44	15°48	18°17	T 28
W29	7 2 30	16° 2'32	18°53	22°40	10°12	0°R28	7°31	18°28	24°16	2°25	6°45	13°43	13°40	15°54	18°13	W29
T 30	7 6 26	17° 3'40	1°Y23	23°48	11°28	1° 9	7°45	18°30	24°14	2°25	6°44	13°43	13°37	16° 1	18°10	T 30
F 31	7 10 23	18°R 4'48	14°Y11	24°R59	12°R43	1°R50	7°R58	18°R32	24°R11	2°R25	6°R43	13°D43	13°R34	16°R 8	18°R 7	F 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
W 1	22s55	3s49	4n21	22s54	0n35	20s36	0n36	14s48	0n33	20s33	0s40	4s26	2n23	21n40	0n32	0n27
T 2	23 1	1n29	4 53	22 33	0 55	20 52	0 34	15 1	0 32	20 31	0 40	4 27	2 23	21 40	0 32	0 27
F 3	23 6	6 53	5 12	22 11	1 15	21 7	0 31	15 14	0 32	20 28	0 40	4 29	2 23	21 41	0 33	0 27
S 4	23 10	12 10	5 14	21 49	1 35	21 21	0 29	15 26	0 31	20 25	0 40	4 30	2 24	21 41	0 33	0 27
S 5	23 15	17 1	4 59	21 27	1 53	21 35	0 27	15 39	0 31	20 22	0 40	4 32	2 24	21 41	0 33	0 26
M 6	23 18	21 6	4 25	21 5	2 10	21 48	0 24	15 51	0 30	20 20	0 40	4 33	2 24	21 42	0 33	0 26
T 7	23 21	23 58	3 34	20 45	2 25	22 0	0 22	16 4	0 30	20 17	0 40	4 35	2 24	21 42	0 33	0 26
W 8	23 24	25 14	2 26	20 26	2 38	22 12	0 20	16 16	0 29	20 14	0 40	4 36	2 25	21 43	0 33	0 26
T 9	23 26	24 38	1 7	20 9	2 49	22 23	0 17	16 28	0 29	20 11	0 40	4 38	2 25	21 43	0 33	0 25
F 10	23 28	22 12	0s16	19 55	2 57	22 34	0 15	16 40	0 28	20 8	0 40	4 39	2 25	21 43	0 33	0 25
S 11	23 29	18 15	1 38	19 44	3 2	22 43	0 12	16 52	0 28	20 5	0 40	4 40	2 25	21 44	0 33	0 25
S 12	23 30	13 13	2 52	19 36	3 6	22 53	0 10	17 4	0 27	20 2	0 40	4 41	2 26	21 44	0 33	0 25
M13	23 31	7 34	3 53	19 31	3 7	23 1	0 7	17 15	0 26	19 59	0 40	4 43	2 26	21 45	0 33	0 25
T 14	23 31	1 42	4 38	19 28	3 6	23 9	0 5	17 27	0 26	19 56	0 40	4 44	2 26	21 45	0 33	0 25
W15	23 30	4s 5	5 6	19 29	3 4	23 16	0 2	17 38	0 25	19 53	0 40	4 45	2 26	21 46	0 33	0 25
T 16	23 29	9 30	5 17	19 32	3 1	23 22	0 0	17 49	0 25	19 50	0 40	4 46	2 27	21 46	0 33	0 25
F 17	23 27	14 22	5 12	19 37	2 56	23 28	0s 2	18 0	0 24	19 46	0 40	4 47	2 27	21 46	0 33	0 24
S 18	23 25	18 31	4 52	19 45	2 50	23 32	0 5	18 11	0 24	19 43	0 40	4 48	2 27	21 47	0 33	0 24
S 19	23 23	21 47	4 18	19 53	2 43	23 37	0 7	18 22	0 23	19 40	0 40	4 49	2 27	21 47	0 33	0 24
M20	23 20	24 1	3 34	20 4	2 36	23 40	0 10	18 33	0 22	19 37	0 40	4 50	2 28	21 48	0 33	0 24
T 21	23 17	25 9	2 40	20 15	2 28	23 43	0 12	18 43	0 22	19 33	0 40	4 51	2 28	21 48	0 33	0 24
W22	23 13	25 6	1 40	20 28	2 20	23 45	0 14	18 54	0 21	19 30	0 40	4 52	2 28	21 49	0 33	0 24
T 23	23 8	23 54	0 36	20 41	2 12	23 46	0 17	19 4	0 21	19 27	0 40	4 53	2 28	21 49	0 33	0 24
F 24	23 4	21 40	0n30	20 54	2 3	23 46	0 19	19 14	0 20	19 23	0 40	4 54	2 29	21 50	0 33	0 24
S 25	22 58	18 30	1 34	21 8	1 54	23 46	0 21	19 24	0 19	19 20	0 40	4 54	2 29	21 50	0 33	0 24
S 26	22 53	14 35	2 34	21 21	1 45	23 45	0 24	19 34	0 19	19 17	0 40	4 55	2 29	21 51	0 33	0 24
M27	22 46	10 5	3 28	21 35	1 36	23 43	0 26	19 43	0 18	19 13	0 40	4 56	2 29	21 51	0 33	0 24
T 28	22 40	5 10	4 14	21 48	1 26	23 41	0 28	19 53	0 17	19 10	0 40	4 56	2 30	21 52	0 33	0 24
W29	22 33	0n 1	4 49	22 1	1 17	23 38	0 31	20 2	0 17	19 6	0 41	4 57	2 30	21 52	0 33	0 25
T 30	22 25	5 18	5 11	22 14	1 8	23 34	0 33	20 11	0 16	19 3	0 41	4 58	2 30	21 52	0 33	0 25
F 31	22s17	10n29	5n18	22s26	0n59	23s29	0s35	20s20	0n15	18s59	0s41	4s58	2n30	21n53	0n33	0n25

Julian Day Number = 2251369.5, Delta T = 06m26s

Ecliptic obliquity = 23°30'40, Nutation = 0°00'16, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 17°05'38, Lahiri = 16°12'38 Julian Calendar 1 Dec. 1451 == Greg. Calendar 10 Dec. 1451