



# Astrodienst Ephemeris Tables for the year 2111

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 2111  
geocentric

JANUARY 2111

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	6 40 19	9♌54'51	12♏40	22♊23	3♈22	2♋47	27♏22	20♈2	3♐R31	11♌20	13♐R 2	16♊39	18♏13	9♌55	25♈31	T 1
F 2	6 44 16	10°55'59	25° 6	23°49	4°37	3°33	27°24	20° 8	3♐II30	11°20	13♐R 1	16°40	18°10	10° 2	25°34	F 2
S 3	6 48 12	11°57'08	7♌51	25°16	5°52	4°19	27°26	20°14	3°28	11°21	13° 1	16°R41	18° 7	10° 8	25°38	S 3
S 4	6 52 9	12°58'17	21° 0	26°44	7° 6	5° 5	27°28	20°20	3°26	11°21	13° 0	16°41	18° 4	10°15	25°41	S 4
M 5	6 56 6	13°59'26	4♏35	28°12	8°21	5°51	27°29	20°27	3°24	11°21	13° 0	16°39	18° 0	10°22	25°45	M 5
T 6	7 0 2	15° 0'36	18°38	29°41	9°36	6°37	27°30	20°33	3°23	11°21	12°59	16°36	17°57	10°28	25°48	T 6
W 7	7 3 59	16° 1'46	3♊8	1♌10	10°51	7°23	27°32	20°39	3°21	11°22	12°59	16°32	17°54	10°35	25°52	W 7
T 8	7 7 55	17° 2'57	18° 2	2°40	12° 5	8° 9	27°33	20°46	3°19	11°22	12°59	16°27	17°51	10°42	25°55	T 8
F 9	7 11 52	18° 4'07	3♌11	4°10	13°20	8°56	27°33	20°52	3°18	11°22	12°58	16°23	17°48	10°48	25°59	F 9
S 10	7 15 48	19° 5'18	18°27	5°41	14°35	9°42	27°34	20°59	3°16	11°22	12°58	16°20	17°45	10°55	26° 2	S 10
S 11	7 19 45	20° 6'28	3♈39	7°12	15°49	10°28	27°34	21° 5	3°15	11°22	12°57	16°18	17°41	11° 2	26° 6	S 11
M12	7 23 41	21° 7'38	18°38	8°43	17° 4	11°14	27°35	21°12	3°13	11°22	12°57	16°D18	17°38	11° 8	26°10	M12
T 13	7 27 38	22° 8'47	3♋15	10°15	18°19	12° 0	27°R35	21°19	3°12	11°R22	12°57	16°18	17°35	11°15	26°13	T 13
W14	7 31 35	23° 9'56	17°26	11°48	19°33	12°46	27°34	21°25	3°10	11°22	12°57	16°20	17°32	11°22	26°17	W14
T 15	7 35 31	24°11'05	1♏10	13°21	20°48	13°32	27°34	21°32	3° 9	11°22	12°56	16°21	17°29	11°28	26°21	T 15
F 16	7 39 28	25°12'12	14°27	14°54	22° 2	14°18	27°33	21°39	3° 8	11°22	12°56	16°23	17°25	11°35	26°25	F 16
S 17	7 43 24	26°13'19	27°20	16°28	23°17	15° 4	27°33	21°45	3° 6	11°22	12°56	16°R23	17°22	11°42	26°29	S 17
S 18	7 47 21	27°14'26	9♌54	18° 2	24°31	15°50	27°32	21°52	3° 5	11°22	12°56	16°22	17°19	11°48	26°32	S 18
M19	7 51 17	28°15'32	22°10	19°37	25°46	16°36	27°31	21°59	3° 4	11°22	12°55	16°21	17°16	11°55	26°36	M19
T 20	7 55 14	29°16'37	4♏15	21°13	27° 0	17°22	27°29	22° 6	3° 3	11°21	12°55	16°19	17°13	12° 2	26°40	T 20
W21	7 59 10	0♈17'41	16°11	22°49	28°14	18° 8	27°28	22°13	3° 2	11°21	12°55	16°16	17°10	12° 8	26°44	W21
T 22	8 3 7	1°18'44	28° 2	24°25	29°29	18°54	27°26	22°20	3° 1	11°21	12°55	16°14	17° 6	12°15	26°48	T 22
F 23	8 7 4	2°19'47	9♌51	26° 2	0♋43	19°40	27°24	22°27	3° 0	11°20	12°55	16°11	17° 3	12°22	26°52	F 23
S 24	8 11 0	3°20'49	21°41	27°39	1°57	20°25	27°22	22°34	2°59	11°20	12°55	16°10	17° 0	12°28	26°56	S 24
S 25	8 14 57	4°21'51	3♊33	29°17	3°11	21°11	27°20	22°40	2°58	11°20	12°55	16° 8	16°57	12°35	27° 0	S 25
M26	8 18 53	5°22'51	15°30	0♈56	4°26	21°57	27°17	22°48	2°57	11°19	12°55	16°D 8	16°54	12°42	27° 4	M26
T 27	8 22 50	6°23'51	27°33	2°35	5°40	22°43	27°15	22°55	2°57	11°19	12°D55	16° 8	16°51	12°48	27° 8	T 27
W28	8 26 46	7°24'50	9♏44	4°15	6°54	23°29	27°12	23° 2	2°56	11°18	12°55	16° 9	16°47	12°55	27°12	W28
T 29	8 30 43	8°25'48	22° 6	5°56	8° 8	24°14	27° 9	23° 9	2°55	11°18	12°55	16°10	16°44	13° 2	27°16	T 29
F 30	8 34 39	9°26'46	4♌41	7°37	9°22	25° 0	27° 5	23°16	2°55	11°17	12°55	16°11	16°41	13° 8	27°20	F 30
S 31	8 38 36	10°27'43	17♌32	9°19	10♋36	25°46	27♏2	23°23	2♏II54	11♌17	12♐55	16♊11	16♏38	13♌15	27°24	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	
T 1	23s 3	8n55	2n18	22s48	0n24	20s57	1s36	11s25	1s 1	2n12	1n15	15s52	1s 8	20n43	0s 8	3s 8	1n28	0n21	16s 6	15n50	15n22	19n52	7s26	5n55										
F 2	22 58	4 56	3 15	23 0	0 16	20 40	1 37	11 8	1 0	2 11	1 15	15 50	1 8	20 43	0 8	3 8	1 28	0 21	16 6	15 50	15 22	19 52	7 25	5 54										
S 3	22 53	0 38	4 4	23 12	0 9	20 22	1 37	10 50	0 59	2 11	1 16	15 48	1 8	20 42	0 8	3 8	1 28	0 21	16 6	15 49	15 23	19 52	7 24	5 54										
S 4	22 47	3s49	4 42	23 22	0 1	20 4	1 38	10 33	0 58	2 10	1 16	15 46	1 8	20 42	0 8	3 8	1 28	0 21	16 5	15 50	15 24	19 53	7 23	5 54										
M 5	22 41	8 14	5 6	23 31	0s 6	19 45	1 38	10 15	0 57	2 10	1 16	15 44	1 8	20 42	0 8	3 8	1 28	0 21	16 5	15 50	15 25	19 53	7 23	5 53										
T 6	22 35	12 20	5 13	23 39	0 13	19 25	1 39	9 57	0 57	2 10	1 16	15 42	1 8	20 41	0 8	3 8	1 28	0 22	16 5	15 51	15 26	19 53	7 22	5 53										
W 7	22 28	15 52	5 0	23 46	0 21	19 6	1 39	9 39	0 56	2 9	1 17	15 40	1 8	20 41	0 8	3 8	1 28	0 22	16 5	15 52	15 27	19 53	7 21	5 53										
T 8	22 20	18 27	4 27	23 51	0 28	18 45	1 40	9 21	0 55	2 9	1 17	15 38	1 8	20 41	0 8	3 8	1 28	0 22	16 4	15 54	15 28	19 53	7 20	5 53										
F 9	22 12	19 48	3 35	23 56	0 34	18 24	1 40	9 3	0 54	2 9	1 17	15 36	1 8	20 40	0 8	3 8	1 28	0 22	16 4	15 55	15 29	19 54	7 19	5 52										
S 10	22 4	19 43	2 27	23 59	0 41	18 3	1 40	8 45	0 53	2 9	1 18	15 34	1 8	20 40	0 8	3 8	1 28	0 22	16 4	15 56	15 30	19 54	7 18	5 52										
S 11	21 55	18 12	1 9	24 1	0 47	17 41	1 40	8 27	0 52	2 9	1 18	15 32	1 8	20 40	0 8	3 8	1 29	0 23	16 3	15 56	15 31	19 54	7 17	5 52										
M12	21 46	15 26	0s13	24 2	0 54	17 18	1 40	8 8	0 51	2 9	1 18	15 29	1 8	20 40	0 8	3 8	1 29	0 23	16 3	15 56	15 32	19 54	7 16	5 52										
T 13	21 36	11 44	1 32	24 1	1 0	16 55	1 40	7 50	0 50	2 10	1 18	15 27	1 8	20 39	0 8	3 8	1 29	0 23	16 3	15 56	15 33	19 54	7 15	5 51										
W14	21 26	7 28	2 43	23 59	1 6	16 32	1 40	7 32	0 49	2 10	1 19	15 25	1 8	20 39	0 8	3 8	1 29	0 23	16 2	15 56	15 34	19 54	7 14	5 51										
T 15	21 16	2 57	3 43	23 56	1 11	16 8	1 40	7 13	0 49	2 10	1 19	15 23	1 8	20 39	0 8	3 8	1 29	0 24	16 2	15 55	15 35	19 55	7 13	5 51										
F 16	21 5	1n34	4 28	23 52	1 17	15 44	1 40	6 55	0 48	2 11	1 19	15 21	1 8	20 39	0 8	3 8	1 29	0 24	16 2	15 55	15 36	19 55	7 12	5 51										
S 17	20 54	5 52	4 59	23 46	1 22	15 19	1 39	6 36	0 47	2 11	1 19	15 19	1 8	20 38	0 8	3 8	1 29	0 24	16 1	15 55	15 37	19 55	7 11	5 50										
S 18	20 42	9 48	5 14	23 39	1 27	14 54	1 39	6 17	0 46	2 12	1 20	15 17	1 8	20 38	0 8	3 8	1 29	0 24	16 1	15 55	15 38	19 55	7 10	5 50										
M19	20 30	13 14	5 14	23 30	1 32	14 28	1 38	5 59	0 45	2 13	1 20	15 14	1 8	20 38	0 8	3 8	1 29	0 25	16 1	15 56	15 39	19 55	7 9	5 50										
T 20	20 17	16 3	5 1	23 20	1 36	14 2	1 38	5 40	0 44	2 14	1 20	15 12	1 8	20 38	0 8	3 7	1 29	0 25	16 0	15 56	15 40	19 55	7 8	5 50										
W21	20 4	18 10	4 34	23 8	1 40	13 36	1 37	5 21	0 43	2 14	1 21	15 10	1 8	20 38	0 8	3 7	1 29	0 25	16 0	15 57	15 41	19 55	7 7	5 50										
T 22	19 51	19 29	3 56	22 56	1 44	13 9	1 37	5 3	0 42	2 15	1 21	15 8	1 8	20 37	0 7	3 7	1 29	0 25	16 0	15 58	15 42	19 55	7 5	5 49										
F 23	19 38	19 56	3 8	22 41	1 48	12 42	1 36	4 44	0 42	2 16	1 21	15 6	1 8	20 37	0 7	3 7	1 29	0 26	15 59	15 58	15 43	19 56	7 4	5 49										
S 24	19 24	19 31	2 12	22 26	1 51	12 15	1 35	4 25	0 41	2 18	1 21	15 3	1 8	20 37	0 7	3 7	1 29	0 26	15 59	15 59	15 44	19 56	7 3	5 49										
S 25	19 9	18 13	1 9	22 8	1 54	11 47	1 34	4 6	0 40	2 19	1 22	15 1	1 8	20 37	0 7	3 6	1 29	0 26	15 58	15 59	15 45	19 56	7 2	5 49										
M26	18 55	16 7	0 4	21 50	1 57	11 19	1 33	3 47	0 39	2 20	1 22	14 59	1 8	20 37	0 7	3 6	1 29	0 27	15 58	15 59	15 46	19 56	7 1	5 49										
T 27	18 40	13 18	1n 3	21 30	1 59	10 51	1 32	3 28	0 38	2 21	1 22	14 56	1 8	20 37	0 7	3 6	1 29	0 27	15 58	15 59	15 47	19 56	7 0	5 48										
W28	18 24	9 53	2 7	21 8	2 1	10 22	1 31	3 10	0 37	2 23	1 22	14 54	1 8	20 37	0 7	3 6	1 29	0 27	15 57	15 59	15 48	19 56	6 58	5 48										
T 29	18 9	5 59	3 7	20 45	2 2	9 54	1 29	2 51	0 36	2 24	1 23	14 52	1 8	20 36	0 7	3 6	1 30	0 28	15 57	15 59	15 49	19 56	6 57	5 48										
F 30	17 53	1 47	3 58	20 21	2 4	9 25	1 28	2 32	0 36	2 26	1 23	14 50	1 8	20 36	0 7	3 5	1 30	0 28	15 57	15 59	15 50	19 56	6 56	5 48										
S 31	17s36	2s34	4n39	19s55	2s 5	8s55	1s27	2s13	0s35	2n27	1n23	14s47	1s 8	20n36	0s 7	3s 5	1n30	0n28	15s56	15n58	15n50	19n56	6s55	5n48										

# ASTRODIENST EPHEMERIS for the year 2111

## geocentric

FEBRUARY 2111

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	8 42 33	11 <sup>h</sup> 28'40"	0 <sup>h</sup> 41'	11 <sup>h</sup> 22'	11 <sup>h</sup> 50'	26 <sup>h</sup> 31'	26 <sup>h</sup> 58'	23 <sup>h</sup> 30'	2 <sup>h</sup> 54'	11 <sup>h</sup> 16'	12 <sup>h</sup> 55'	16 <sup>h</sup> 12'	16 <sup>h</sup> 35'	13 <sup>h</sup> 22'	27 <sup>h</sup> 29'	S 1
M 2	8 46 29	12 <sup>h</sup> 29'36"	14 <sup>h</sup> 10'	12 <sup>h</sup> 45'	13 <sup>h</sup> 4'	27 <sup>h</sup> 17'	26 <sup>h</sup> 55'	23 <sup>h</sup> 37'	2 <sup>h</sup> 53'	11 <sup>h</sup> 15'	12 <sup>h</sup> 55'	16 <sup>h</sup> 12'	16 <sup>h</sup> 31'	13 <sup>h</sup> 28'	27 <sup>h</sup> 33'	M 2
T 3	8 50 26	13 <sup>h</sup> 30'31"	28 <sup>h</sup> 0'	14 <sup>h</sup> 29'	14 <sup>h</sup> 18'	28 <sup>h</sup> 3'	26 <sup>h</sup> 51'	23 <sup>h</sup> 44'	2 <sup>h</sup> 53'	11 <sup>h</sup> 15'	12 <sup>h</sup> 55'	16 <sup>h</sup> 12'	16 <sup>h</sup> 28'	13 <sup>h</sup> 35'	27 <sup>h</sup> 37'	T 3
W 4	8 54 22	14 <sup>h</sup> 31'25"	12 <sup>h</sup> 13'	16 <sup>h</sup> 13'	15 <sup>h</sup> 31'	28 <sup>h</sup> 48'	26 <sup>h</sup> 47'	23 <sup>h</sup> 52'	2 <sup>h</sup> 52'	11 <sup>h</sup> 14'	12 <sup>h</sup> 55'	16 <sup>h</sup> 11'	16 <sup>h</sup> 25'	13 <sup>h</sup> 42'	27 <sup>h</sup> 41'	W 4
T 5	8 58 19	15 <sup>h</sup> 32'19"	26 <sup>h</sup> 46'	17 <sup>h</sup> 58'	16 <sup>h</sup> 45'	29 <sup>h</sup> 34'	26 <sup>h</sup> 42'	23 <sup>h</sup> 59'	2 <sup>h</sup> 52'	11 <sup>h</sup> 13'	12 <sup>h</sup> 56'	16 <sup>h</sup> 11'	16 <sup>h</sup> 22'	13 <sup>h</sup> 48'	27 <sup>h</sup> 45'	T 5
F 6	9 2 15	16 <sup>h</sup> 33'12"	11 <sup>h</sup> 34'	19 <sup>h</sup> 44'	17 <sup>h</sup> 59'	0 <sup>h</sup> 19'	26 <sup>h</sup> 38'	24 <sup>h</sup> 6'	2 <sup>h</sup> 52'	11 <sup>h</sup> 12'	12 <sup>h</sup> 56'	16 <sup>h</sup> D11'	16 <sup>h</sup> 19'	13 <sup>h</sup> 55'	27 <sup>h</sup> 49'	F 6
S 7	9 6 12	17 <sup>h</sup> 34'04"	26 <sup>h</sup> 33'	21 <sup>h</sup> 30'	19 <sup>h</sup> 13'	1 <sup>h</sup> 5'	26 <sup>h</sup> 33'	24 <sup>h</sup> 13'	2 <sup>h</sup> 52'	11 <sup>h</sup> 12'	12 <sup>h</sup> 56'	16 <sup>h</sup> 11'	16 <sup>h</sup> 16'	14 <sup>h</sup> 2'	27 <sup>h</sup> 54'	S 7
S 8	9 10 8	18 <sup>h</sup> 34'55"	11 <sup>h</sup> 33'	23 <sup>h</sup> 17'	20 <sup>h</sup> 26'	1 <sup>h</sup> 50'	26 <sup>h</sup> 29'	24 <sup>h</sup> 20'	2 <sup>h</sup> 51'	11 <sup>h</sup> 11'	12 <sup>h</sup> 56'	16 <sup>h</sup> R11'	16 <sup>h</sup> 12'	14 <sup>h</sup> 8'	27 <sup>h</sup> 58'	S 8
M 9	9 14 5	19 <sup>h</sup> 35'45"	26 <sup>h</sup> 27'	25 <sup>h</sup> 5'	21 <sup>h</sup> 40'	2 <sup>h</sup> 36'	26 <sup>h</sup> 24'	24 <sup>h</sup> 28'	2 <sup>h</sup> 51'	11 <sup>h</sup> 10'	12 <sup>h</sup> 57'	16 <sup>h</sup> 11'	16 <sup>h</sup> 9'	14 <sup>h</sup> 15'	28 <sup>h</sup> 2'	M 9
T 10	9 18 2	20 <sup>h</sup> 36'34"	11 <sup>h</sup> 36'	26 <sup>h</sup> 53'	22 <sup>h</sup> 53'	3 <sup>h</sup> 21'	26 <sup>h</sup> 19'	24 <sup>h</sup> 35'	2 <sup>h</sup> D51'	11 <sup>h</sup> 9'	12 <sup>h</sup> 57'	16 <sup>h</sup> 11'	16 <sup>h</sup> 6'	14 <sup>h</sup> 22'	28 <sup>h</sup> 6'	T 10
W11	9 21 58	21 <sup>h</sup> 37'21"	25 <sup>h</sup> 24'	28 <sup>h</sup> 41'	24 <sup>h</sup> 7'	4 <sup>h</sup> 7'	26 <sup>h</sup> 13'	24 <sup>h</sup> 42'	2 <sup>h</sup> 51'	11 <sup>h</sup> 8'	12 <sup>h</sup> 57'	16 <sup>h</sup> 11'	16 <sup>h</sup> 3'	14 <sup>h</sup> 28'	28 <sup>h</sup> 11'	W11
T 12	9 25 55	22 <sup>h</sup> 38'06"	9 <sup>h</sup> 18'	0 <sup>h</sup> 30'	25 <sup>h</sup> 20'	4 <sup>h</sup> 52'	26 <sup>h</sup> 8'	24 <sup>h</sup> 49'	2 <sup>h</sup> 51'	11 <sup>h</sup> 7'	12 <sup>h</sup> 57'	16 <sup>h</sup> 10'	16 <sup>h</sup> 0'	14 <sup>h</sup> 35'	28 <sup>h</sup> 15'	T 12
F 13	9 29 51	23 <sup>h</sup> 38'51"	22 <sup>h</sup> 44'	2 <sup>h</sup> 19'	26 <sup>h</sup> 34'	5 <sup>h</sup> 37'	26 <sup>h</sup> 2'	24 <sup>h</sup> 57'	2 <sup>h</sup> 52'	11 <sup>h</sup> 6'	12 <sup>h</sup> 58'	16 <sup>h</sup> 9'	15 <sup>h</sup> 57'	14 <sup>h</sup> 42'	28 <sup>h</sup> 19'	F 13
S 14	9 33 48	24 <sup>h</sup> 39'33"	5 <sup>h</sup> 46'	4 <sup>h</sup> 8'	27 <sup>h</sup> 47'	6 <sup>h</sup> 22'	25 <sup>h</sup> 57'	25 <sup>h</sup> 4'	2 <sup>h</sup> 52'	11 <sup>h</sup> 5'	12 <sup>h</sup> 58'	16 <sup>h</sup> 8'	15 <sup>h</sup> 53'	14 <sup>h</sup> 48'	28 <sup>h</sup> 23'	S 14
S 15	9 37 44	25 <sup>h</sup> 40'14"	18 <sup>h</sup> 24'	5 <sup>h</sup> 56'	29 <sup>h</sup> 0'	7 <sup>h</sup> 8'	25 <sup>h</sup> 51'	25 <sup>h</sup> 11'	2 <sup>h</sup> 52'	11 <sup>h</sup> 4'	12 <sup>h</sup> 59'	16 <sup>h</sup> 8'	15 <sup>h</sup> 50'	14 <sup>h</sup> 55'	28 <sup>h</sup> 28'	S 15
M16	9 41 41	26 <sup>h</sup> 40'54"	0 <sup>h</sup> 43'	7 <sup>h</sup> 45'	0 <sup>h</sup> 13'	7 <sup>h</sup> 53'	25 <sup>h</sup> 45'	25 <sup>h</sup> 18'	2 <sup>h</sup> 52'	11 <sup>h</sup> 3'	12 <sup>h</sup> 59'	16 <sup>h</sup> D 8'	15 <sup>h</sup> 47'	15 <sup>h</sup> 2'	28 <sup>h</sup> 32'	M16
T 17	9 45 37	27 <sup>h</sup> 41'31"	12 <sup>h</sup> 48'	9 <sup>h</sup> 32'	1 <sup>h</sup> 27'	8 <sup>h</sup> 38'	25 <sup>h</sup> 39'	25 <sup>h</sup> 26'	2 <sup>h</sup> 53'	11 <sup>h</sup> 2'	12 <sup>h</sup> 59'	16 <sup>h</sup> 8'	15 <sup>h</sup> 44'	15 <sup>h</sup> 8'	28 <sup>h</sup> 36'	T 17
W18	9 49 34	28 <sup>h</sup> 42'07"	24 <sup>h</sup> 42'	11 <sup>h</sup> 19'	2 <sup>h</sup> 40'	9 <sup>h</sup> 23'	25 <sup>h</sup> 33'	25 <sup>h</sup> 33'	2 <sup>h</sup> 53'	11 <sup>h</sup> 1'	13 <sup>h</sup> 0'	16 <sup>h</sup> 9'	15 <sup>h</sup> 41'	15 <sup>h</sup> 15'	28 <sup>h</sup> 40'	W18
T 19	9 53 31	29 <sup>h</sup> 42'42"	6 <sup>h</sup> 32'	13 <sup>h</sup> 5'	3 <sup>h</sup> 53'	10 <sup>h</sup> 8'	25 <sup>h</sup> 26'	25 <sup>h</sup> 40'	2 <sup>h</sup> 54'	11 <sup>h</sup> 0'	13 <sup>h</sup> 0'	16 <sup>h</sup> 10'	15 <sup>h</sup> 37'	15 <sup>h</sup> 22'	28 <sup>h</sup> 45'	T 19
F 20	9 57 27	0 <sup>h</sup> 43'14"	18 <sup>h</sup> 20'	14 <sup>h</sup> 49'	5 <sup>h</sup> 5'	10 <sup>h</sup> 53'	25 <sup>h</sup> 20'	25 <sup>h</sup> 47'	2 <sup>h</sup> 54'	10 <sup>h</sup> 59'	13 <sup>h</sup> 1'	16 <sup>h</sup> 12'	15 <sup>h</sup> 34'	15 <sup>h</sup> 28'	28 <sup>h</sup> 49'	F 20
S 21	10 1 24	1 <sup>h</sup> 43'45"	0 <sup>h</sup> 11'	16 <sup>h</sup> 31'	6 <sup>h</sup> 18'	11 <sup>h</sup> 38'	25 <sup>h</sup> 13'	25 <sup>h</sup> 54'	2 <sup>h</sup> 55'	10 <sup>h</sup> 58'	13 <sup>h</sup> 1'	16 <sup>h</sup> 13'	15 <sup>h</sup> 31'	15 <sup>h</sup> 35'	28 <sup>h</sup> 53'	S 21
S 22	10 5 20	2 <sup>h</sup> 44'15"	12 <sup>h</sup> 8'	18 <sup>h</sup> 11'	7 <sup>h</sup> 31'	12 <sup>h</sup> 23'	25 <sup>h</sup> 7'	26 <sup>h</sup> 2'	2 <sup>h</sup> 55'	10 <sup>h</sup> 56'	13 <sup>h</sup> 2'	16 <sup>h</sup> R14'	15 <sup>h</sup> 28'	15 <sup>h</sup> 42'	28 <sup>h</sup> 57'	S 22
M23	10 9 17	3 <sup>h</sup> 44'42"	24 <sup>h</sup> 13'	19 <sup>h</sup> 47'	8 <sup>h</sup> 44'	13 <sup>h</sup> 8'	25 <sup>h</sup> 0'	26 <sup>h</sup> 9'	2 <sup>h</sup> 56'	10 <sup>h</sup> 55'	13 <sup>h</sup> 3'	16 <sup>h</sup> 13'	15 <sup>h</sup> 25'	15 <sup>h</sup> 48'	29 <sup>h</sup> 2'	M23
T 24	10 13 13	4 <sup>h</sup> 45'08"	6 <sup>h</sup> 29'	21 <sup>h</sup> 20'	9 <sup>h</sup> 56'	13 <sup>h</sup> 53'	24 <sup>h</sup> 53'	26 <sup>h</sup> 16'	2 <sup>h</sup> 57'	10 <sup>h</sup> 54'	13 <sup>h</sup> 3'	16 <sup>h</sup> 12'	15 <sup>h</sup> 22'	15 <sup>h</sup> 55'	29 <sup>h</sup> 6'	T 24
W25	10 17 10	5 <sup>h</sup> 45'32"	18 <sup>h</sup> 57'	22 <sup>h</sup> 49'	11 <sup>h</sup> 9'	14 <sup>h</sup> 38'	24 <sup>h</sup> 36'	26 <sup>h</sup> 23'	2 <sup>h</sup> 57'	10 <sup>h</sup> 53'	13 <sup>h</sup> 4'	16 <sup>h</sup> 10'	15 <sup>h</sup> 18'	16 <sup>h</sup> 2'	29 <sup>h</sup> 10'	W25
T 26	10 21 6	6 <sup>h</sup> 45'55"	1 <sup>h</sup> 38'	24 <sup>h</sup> 13'	12 <sup>h</sup> 21'	15 <sup>h</sup> 23'	24 <sup>h</sup> 39'	26 <sup>h</sup> 30'	2 <sup>h</sup> 58'	10 <sup>h</sup> 51'	13 <sup>h</sup> 4'	16 <sup>h</sup> 7'	15 <sup>h</sup> 15'	16 <sup>h</sup> 8'	29 <sup>h</sup> 14'	T 26
F 27	10 25 3	7 <sup>h</sup> 46'16"	14 <sup>h</sup> 32'	25 <sup>h</sup> 32'	13 <sup>h</sup> 34'	16 <sup>h</sup> 7'	24 <sup>h</sup> 32'	26 <sup>h</sup> 38'	2 <sup>h</sup> 59'	10 <sup>h</sup> 50'	13 <sup>h</sup> 5'	16 <sup>h</sup> 4'	15 <sup>h</sup> 12'	16 <sup>h</sup> 15'	29 <sup>h</sup> 19'	F 27
S 28	10 28 59	8 <sup>h</sup> 46'36"	27 <sup>h</sup> 39'	26 <sup>h</sup> 45'	14 <sup>h</sup> 46'	16 <sup>h</sup> 52'	24 <sup>h</sup> 25'	26 <sup>h</sup> 45'	3 <sup>h</sup> II 0'	10 <sup>h</sup> 49'	13 <sup>h</sup> 6'	16 <sup>h</sup> 1 1'	15 <sup>h</sup> 12'	16 <sup>h</sup> 22'	29 <sup>h</sup> 23'	S 28

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
S 1	17s20	6s55	5n 6	19s27	2s 5	8s26	1s25	1s54	0s34	2n29	1n23	14s45	1s 8	20n36	0s 7	3s 5
M 2	17 3	11 1	5 18	18 58	2 5	7 56	1 23	1 35	0 33	2 30	1 24	14 43	1 8	20 36	0 7	3 4
T 3	16 45	14 39	5 11	18 28	2 5	7 26	1 22	1 16	0 32	2 32	1 24	14 40	1 8	20 36	0 7	3 4
W 4	16 28	17 31	4 46	17 56	2 4	6 56	1 20	0 57	0 31	2 34	1 24	14 38	1 8	20 36	0 7	3 4
T 5	16 10	19 21	4 2	17 23	2 3	6 26	1 18	0 38	0 30	2 36	1 24	14 36	1 8	20 36	0 7	3 3
F 6	15 52	19 55	3 1	16 48	2 1	5 55	1 16	0 19	0 30	2 38	1 25	14 33	1 8	20 36	0 7	3 3
S 7	15 33	19 5	1 47	16 12	1 58	5 25	1 15	0 1	0 29	2 40	1 25	14 31	1 8	20 36	0 7	3 3
S 8	15 15	16 54	0 26	15 34	1 56	4 54	1 13	0n18	0 28	2 42	1 25	14 29	1 8	20 36	0 7	3 2
M 9	14 56	13 35	0s57	14 55	1 52	4 23	1 10	0 37	0 27	2 44	1 25	14 26	1 9	20 36	0 7	3 2
T 10	14 37	9 28	2 14	14 14	1 48	3 52	1 8	0 56	0 26	2 47	1 26	14 24	1 9	20 36	0 7	3 2
W11	14 17	4 54	3 21	13 33	1 44	3 21	1 6	1 15	0 25	2 49	1 26	14 21	1 9	20 36	0 7	3 1
T 12	13 58	0 13	4 14	12 50	1 39	2 50	1 4	1 33	0 25	2 51	1 26	14 19	1 9	20 36	0 7	3 1
F 13	13 38	4n19	4 52	12 5	1 33	2 18	1 2	1 52	0 24	2 54	1 26	14 17	1 9	20 36	0 7	3 0
S 14	13 18	8 31	5 12	11 20	1 27	1 47	0 59	2 11	0 23	2 56	1 26	14 14	1 9	20 36	0 7	3 0
S 15	12 57	12 12	5 17	10 34	1 20	1 16	0 57	2 29	0 22	2 58	1 27	14 12	1 9	20 36	0 7	2 59
M16	12 37	15 16	5 7	9 46	1 12	0 44	0 54	2 48	0 21	3 1	1 27	14 10	1 9	20 36	0 7	2 59
T 17	12 16	17 37	4 44	8 58	1 3	0 13	0 51	3 7	0 20	3 4	1 27	14 7	1 9	20 36	0 7	2 59
W18	11 55	19 11	4 9	8 9	0 54	0n19	0 49	3 25	0 20	3 6	1 27	14 5	1 9	20 36	0 7	2 58
T 19	11 34	19 53	3 23	7 20	0 45	0 50	0 46	3 43	0 19	3 9	1 27	14 2	1 9	20 36	0 7	2 58
F 20	11 13	19 43	2 29	6 30	0 34	1 22	0 43	4 2	0 18	3 12	1 28	14 0	1 9	20 37	0 7	2 57
S 21	10 51	18 40	1 28	5 40	0 23	1 53	0 40	4 20	0 17	3 14	1 28	13 58	1 9	20 37	0 7	2 57
S 22	10 29	16 47	0 23	4 51	0 11	2 24	0 38	4 38	0 16	3 17	1 28	13 55	1 9	20 37	0 7	2 56
M23	10 8	14 8	0n44	4 1	0n 1	2 56	0 35	4 57	0 15	3 20	1 28	13 53	1 9	20 37	0 7	2 56
T 24	9 46	10 49	1 50	3 13	0 14	3 27	0 32	5 15	0 15	3 23	1 28	13 51	1 10	20 37	0 7	2 55
W25	9 24	7 0	2 51	2 26	0 28	3 58	0 29	5 33	0 14	3 26	1 28	13 48	1 10	20 37	0 7	2 55
T 26	9 1	2 48	3 45	1 39	0 41	4 29	0 25	5 51	0 13	3 29	1 29	13 46	1 10	20 37	0 7	2 54
F 27	8 39	1s36	4 29	0 55	0 56	5 0	0 22	6 9	0 12	3 32	1 29	13 43	1 10	20 38	0 7	2 54
S 28	8s16	5s59	4n59	0s13	1n10	5n31	0s19	6n27	0s12	3n35	1n29	13s41	1s10	20n38	0s 7	2s53

Julian Day Number = 2492117.5, Delta T = 98.56 sec  
 Ecliptic obliquity = 23°25'23", Nutation = - 0°00'11", out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 26°17'33", Lahiri = 25°24'33"

# ASTRODIENST EPHEMERIS for the year 2111

## geocentric

MARCH 2111

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	10 32 56	9♂46'54	11♂ 0	27♂51	15♂58	17♂37	24♂R17	26♂52	3♂II 1	10♂R47	13♂ 6	15♂R58	15♂ 6	16♂28	29♂27	S 1
M 2	10 36 53	10°47'11	24°35	28°50	17°10	18°22	24♂10	26°59	3° 2	10♂46	13° 7	15♂56	15° 2	16°35	29°31	M 2
T 3	10 40 49	11°47'26	8♂23	29°42	18°22	19° 6	24° 2	27° 6	3° 3	10°45	13° 8	15°D55	14°59	16°42	29°35	T 3
W 4	10 44 46	12°47'40	22°25	0♂24	19°34	19°51	23°55	27°13	3° 4	10°43	13° 9	15°55	14°56	16°48	29°40	W 4
T 5	10 48 42	13°47'53	6♂39	0°59	20°46	20°35	23°47	27°20	3° 5	10°42	13° 9	15°56	14°53	16°55	29°44	T 5
F 6	10 52 39	14°48'04	21° 4	1°24	21°58	21°20	23°40	27°27	3° 6	10°40	13°10	15°58	14°50	17° 2	29°48	F 6
S 7	10 56 35	15°48'14	5♂36	1°40	23°10	22° 4	23°32	27°34	3° 8	10°39	13°11	15°59	14°47	17° 8	29°52	S 7
S 8	11 0 32	16°48'21	20°11	1°R46	24°21	22°49	23°24	27°41	3° 9	10°37	13°12	15°R59	14°43	17°15	29°56	S 8
M 9	11 4 28	17°48'28	4♂43	1°44	25°33	23°33	23°17	27°48	3°10	10°36	13°12	15°58	14°40	17°22	0♂ 0	M 9
T 10	11 8 25	18°48'32	19° 7	1°32	26°44	24°17	23° 9	27°55	3°12	10°34	13°13	15°55	14°37	17°28	0° 4	T 10
W 11	11 12 22	19°48'34	3♂16	1°12	27°56	25° 2	23° 1	28° 2	3°13	10°33	13°14	15°50	14°34	17°35	0° 8	W 11
T 12	11 16 18	20°48'35	17° 7	0°43	29° 7	25°46	22°53	28° 9	3°15	10°31	13°15	15°45	14°31	17°42	0°12	T 12
F 13	11 20 15	21°48'33	0♂35	0° 7	0♂18	26°30	22°45	28°16	3°16	10°30	13°16	15°39	14°28	17°48	0°16	F 13
S 14	11 24 11	22°48'29	13°40	29♂25	1°29	27°14	22°38	28°23	3°18	10°28	13°17	15°33	14°24	17°55	0°20	S 14
S 15	11 28 8	23°48'24	26°22	28°37	2°40	27°58	22°30	28°30	3°20	10°27	13°18	15°28	14°21	18° 2	0°24	S 15
M 16	11 32 4	24°48'16	8♂44	27°45	3°51	28°42	22°22	28°36	3°21	10°25	13°19	15°25	14°18	18° 8	0°28	M 16
T 17	11 36 1	25°48'06	20°51	26°50	5° 2	29°26	22°14	28°43	3°23	10°24	13°20	15°D24	14°15	18°15	0°32	T 17
W 18	11 39 57	26°47'53	2♂47	25°54	6°12	0♂10	22° 6	28°50	3°25	10°22	13°21	15°24	14°12	18°22	0°36	W 18
T 19	11 43 54	27°47'39	14°36	24°57	7°23	0°54	21°59	28°57	3°27	10°20	13°22	15°25	14° 8	18°28	0°40	T 19
F 20	11 47 51	28°47'22	26°25	24° 0	8°33	1°38	21°51	29° 3	3°29	10°19	13°23	15°27	14° 5	18°35	0°44	F 20
S 21	11 51 47	29°47'03	8♂17	23° 6	9°43	2°22	21°43	29°10	3°31	10°17	13°24	15°28	14° 2	18°42	0°48	S 21
S 22	11 55 44	0♂46'42	20°19	22°14	10°53	3° 6	21°36	29°16	3°33	10°16	13°25	15°R28	13°59	18°48	0°52	S 22
M 23	11 59 40	1°46'18	2♂32	21°26	12° 3	3°49	21°28	29°23	3°35	10°14	13°26	15°26	13°56	18°55	0°55	M 23
T 24	12 3 37	2°45'53	15° 1	20°43	13°13	4°33	21°20	29°29	3°37	10°12	13°27	15°23	13°53	19° 2	0°59	T 24
W 25	12 7 33	3°45'25	27°46	20° 5	14°23	5°17	21°13	29°36	3°39	10°11	13°28	15°17	13°49	19° 8	1° 3	W 25
T 26	12 11 30	4°44'55	10♂49	19°32	15°32	6° 0	21° 5	29°42	3°41	10° 9	13°29	15° 9	13°46	19°15	1° 7	T 26
F 27	12 15 26	5°44'23	24° 7	19° 5	16°42	6°44	20°58	29°49	3°43	10° 7	13°30	15° 0	13°43	19°22	1°10	F 27
S 28	12 19 23	6°43'50	7♂39	18°44	17°51	7°27	20°51	29°55	3°45	10° 6	13°31	14°51	13°40	19°28	1°14	S 28
S 29	12 23 19	7°43'14	21°23	18°29	19° 0	8°11	20°43	0♂ 1	3°48	10° 4	13°32	14°43	13°37	19°35	1°18	S 29
M 30	12 27 16	8°42'37	5♂15	18°20	20° 9	8°54	20°36	0° 7	3°50	10° 2	13°34	14°37	13°34	19°42	1°21	M 30
T 31	12 31 13	9♂41'58	19♂15	18°D17	21♂18	9♂38	20♂29	0♂14	3♂II52	10♂ 1	13♂35	14♂33	13♂30	19♂48	1♂25	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	7s54	10s 9	5n13	0n27	1n25	6n 2	0s16	6n45	0s11	3n38	1n29	13s39	1s10	20n38	0s 7	2s52	1n31
M 2	7 31	13 52	5 11	1 4	1 39	6 33	0 12	7 2	0 10	3 41	1 29	13 36	1 10	20 38	0 7	2 52	1 31
T 3	7 8	16 54	4 51	1 37	1 54	7 3	0 9	7 20	0 9	3 44	1 29	13 34	1 10	20 38	0 7	2 51	1 31
W 4	6 45	19 0	4 13	2 7	2 8	7 34	0 6	7 38	0 8	3 47	1 29	13 32	1 10	20 39	0 7	2 51	1 31
T 5	6 22	19 56	3 19	2 34	2 22	8 4	0 2	7 55	0 8	3 50	1 29	13 29	1 10	20 39	0 7	2 50	1 31
F 6	5 59	19 35	2 13	2 56	2 35	8 34	0n 1	8 12	0 7	3 53	1 30	13 27	1 10	20 39	0 7	2 50	1 31
S 7	5 36	17 57	0 57	3 13	2 48	9 4	0 5	8 30	0 6	3 56	1 30	13 25	1 10	20 39	0 7	2 49	1 31
S 8	5 12	15 7	0s23	3 26	2 59	9 34	0 8	8 47	0 5	3 59	1 30	13 22	1 11	20 40	0 7	2 48	1 31
M 9	4 49	11 20	1 41	3 35	3 9	10 3	0 12	9 4	0 5	4 3	1 30	13 20	1 11	20 40	0 7	2 48	1 31
T 10	4 25	6 56	2 51	3 38	3 18	10 32	0 15	9 21	0 4	4 6	1 30	13 18	1 11	20 40	0 7	2 47	1 31
W 11	4 2	2 13	3 50	3 37	3 25	11 1	0 19	9 38	0 3	4 9	1 30	13 15	1 11	20 41	0 7	2 46	1 31
T 12	3 38	2n30	4 34	3 31	3 31	11 30	0 23	9 55	0 2	4 12	1 30	13 13	1 11	20 41	0 7	2 46	1 31
F 13	3 15	6 58	5 1	3 20	3 35	11 59	0 26	10 11	0 2	4 15	1 30	13 11	1 11	20 41	0 7	2 45	1 31
S 14	2 51	10 59	5 11	3 5	3 37	12 27	0 30	10 28	0 1	4 18	1 30	13 9	1 11	20 42	0 7	2 45	1 31
S 15	2 27	14 22	5 6	2 46	3 37	12 55	0 34	10 45	0 0	4 21	1 30	13 6	1 11	20 42	0 7	2 44	1 31
M 16	2 4	17 2	4 46	2 24	3 35	13 23	0 37	11 1	0n 1	4 24	1 30	13 4	1 11	20 42	0 7	2 43	1 31
T 17	1 40	18 53	4 14	1 58	3 31	13 50	0 41	11 17	0 1	4 28	1 30	13 2	1 12	20 43	0 7	2 43	1 31
W 18	1 16	19 52	3 31	1 30	3 25	14 17	0 45	11 33	0 2	4 31	1 30	13 0	1 12	20 43	0 7	2 42	1 31
T 19	0 53	19 59	2 40	1 0	3 17	14 44	0 49	11 49	0 3	4 34	1 30	12 57	1 12	20 43	0 7	2 41	1 31
F 20	0 29	19 12	1 42	0 29	3 8	15 10	0 52	12 5	0 3	4 37	1 30	12 55	1 12	20 44	0 7	2 41	1 31
S 21	0 5	17 33	0 39	0s 2	2 57	15 36	0 56	12 21	0 4	4 40	1 30	12 53	1 12	20 44	0 7	2 40	1 31
S 22	0n19	15 7	0n26	0 34	2 44	16 2	1 0	12 37	0 5	4 43	1 30	12 51	1 12	20 44	0 7	2 39	1 31
M 23	0 42	11 59	1 31	1 5	2 31	16 27	1 4	12 52	0 6	4 46	1 30	12 49	1 12	20 45	0 7	2 39	1 31
T 24	1 6	8 15	2 33	1 35	2 17	16 52	1 8	13 8	0 6	4 49	1 30	12 46	1 12	20 45	0 7	2 38	1 31
W 25	1 30	4 4	3 28	2 3	2 2	17 17	1 11	13 23	0 7	4 52	1 30	12 44	1 12	20 46	0 7	2 38	1 31
T 26	1 53	0s23	4 14	2 30	1 47	17 41	1 15	13 38	0 8	4 55	1 30	12 42	1 13	20 46	0 7	2 37	1 32
F 27	2 17	4 54	4 47	2 55	1 32	18 4	1 19	13 53	0 8	4 58	1 30	12 40	1 13	20 46	0 7	2 36	1 32
S 28	2 40	9 15	5 4	3 17	1 16	18 28	1 23	14 8	0 9	5 0	1 30	12 38	1 13	20 47	0 7	2 36	1 32
S 29	3 4	13 12	5 4	3 37	1 1	18 51	1 26	14 23	0 10	5 3	1 30	12 36	1 13	20 47	0 7	2 35	1 32
M 30	3 27	16 27	4 47	3 55	0 46	19 13	1 30	14 37	0 10	5 6	1 30	12 34	1 13	20 48	0 6	2 34	1 32
T 31	3n50	18s48	4n12	4s10	0n31	19n35	1n34	14n52	0n11	5n 9	1n30	12s32	1s13	20n48	0s 6	2s34	1n32

Julian Day Number = 2492145.5, Delta T = 98.60 sec  
 Ecliptic obliquity = 23°25'23", Nutation = - 0°00'12", out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 26°17'36", Lahiri = 25°24'37"

# ASTRODIENST EPHEMERIS for the year 2111

## geocentric

APRIL 2111

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	12 35 9	10°41'17	3°18	18°19	22°27	10°21	20°R22	0°20	3°55	9°R59	13°R36	14°R31	13°27	19°55	1°28	W 1
T 2	12 39 6	11°40'35	17°25	18°27	23°35	11° 4	20°15	0°26	3°57	9°58	13°37	14°D31	13°24	20° 1	1°32	T 2
F 3	12 43 2	12°39'50	1°34	18°40	24°43	11°47	20° 9	0°32	3°59	9°56	13°38	14°R32	13°21	20° 8	1°35	F 3
S 4	12 46 59	13°39'04	15°44	18°59	25°52	12°31	20° 2	0°38	4° 2	9°54	13°39	14°R32	13°18	20°15	1°39	S 4
S 5	12 50 55	14°38'16	29°52	19°22	27° 0	13°14	19°55	0°44	4° 4	9°53	13°41	14°31	13°14	20°21	1°42	S 5
M 6	12 54 52	15°37'27	13°58	19°50	28° 8	13°57	19°49	0°49	4° 7	9°51	13°42	14°28	13°11	20°28	1°45	M 6
T 7	12 58 48	16°36'35	27°56	20°22	29°15	14°40	19°43	0°55	4°10	9°49	13°43	14°22	13° 8	20°35	1°49	T 7
W 8	13 2 45	17°35'42	11°44	20°59	0°23	15°23	19°36	1° 1	4°12	9°48	13°44	14°13	13° 5	20°41	1°52	W 8
T 9	13 6 42	18°34'46	25°18	21°39	1°30	16° 6	19°30	1° 7	4°15	9°46	13°45	14° 3	13° 2	20°48	1°55	T 9
F 10	13 10 38	19°33'48	8°36	22°23	2°37	16°49	19°24	1°12	4°18	9°44	13°47	13°52	12°59	20°55	1°58	F 10
S 11	13 14 35	20°32'49	21°34	23°10	3°44	17°32	19°18	1°18	4°20	9°43	13°48	13°40	12°55	21° 1	2° 1	S 11
S 12	13 18 31	21°31'47	4°13	24° 1	4°51	18°14	19°13	1°23	4°23	9°41	13°49	13°31	12°52	21° 8	2° 4	S 12
M13	13 22 28	22°30'43	16°35	24°55	5°58	18°57	19° 7	1°29	4°26	9°39	13°51	13°23	12°49	21°15	2° 8	M13
T 14	13 26 24	23°29'37	28°41	25°52	7° 4	19°40	19° 2	1°34	4°29	9°38	13°52	13°18	12°46	21°21	2°11	T 14
W15	13 30 21	24°28'28	10°37	26°52	8°10	20°23	18°56	1°40	4°32	9°36	13°53	13°15	12°43	21°28	2°13	W15
T 16	13 34 17	25°27'18	22°27	27°55	9°16	21° 5	18°51	1°45	4°34	9°35	13°54	13°D14	12°39	21°35	2°16	T 16
F 17	13 38 14	26°26'05	4°15	29° 0	10°22	21°48	18°46	1°50	4°37	9°33	13°56	13°14	12°36	21°41	2°19	F 17
S 18	13 42 11	27°24'50	16° 9	0°Y 8	11°27	22°30	18°42	1°55	4°40	9°32	13°57	13°R14	12°33	21°48	2°22	S 18
S 19	13 46 7	28°23'32	28°12	1°18	12°33	23°13	18°37	2° 0	4°43	9°30	13°58	13°13	12°30	21°55	2°25	S 19
M20	13 50 4	29°22'13	10°31	2°30	13°38	23°55	18°32	2° 5	4°46	9°29	14° 0	13°10	12°27	22° 1	2°28	M20
T 21	13 54 0	0°20'51	23° 8	3°45	14°42	24°38	18°28	2°10	4°49	9°27	14° 1	13° 5	12°24	22° 8	2°30	T 21
W22	13 57 57	1°19'27	6° 6	5° 2	15°47	25°20	18°24	2°15	4°52	9°25	14° 2	12°57	12°20	22°15	2°33	W22
T 23	14 1 53	2°18'01	19°26	6°21	16°51	26° 2	18°20	2°20	4°55	9°24	14° 4	12°47	12°17	22°21	2°36	T 23
F 24	14 5 50	3°16'33	3°16	7°42	17°55	26°45	18°16	2°25	4°58	9°22	14° 5	12°35	12°14	22°28	2°38	F 24
S 25	14 9 46	4°15'03	17° 4	9° 5	18°59	27°27	18°12	2°29	5° 2	9°21	14° 6	12°23	12°11	22°35	2°41	S 25
S 26	14 13 43	5°13'31	1°15	10°30	20° 2	28° 9	18° 9	2°34	5° 5	9°20	14° 8	12°12	12° 8	22°41	2°43	S 26
M27	14 17 40	6°11'58	15°33	11°57	21° 5	28°51	18° 5	2°38	5° 8	9°18	14° 9	12° 3	12° 5	22°48	2°46	M27
T 28	14 21 36	7°10'23	29°54	13°26	22° 8	29°33	18° 2	2°43	5°11	9°17	14°10	11°57	12° 1	22°55	2°48	T 28
W29	14 25 33	8° 8'46	14°12	14°56	23°11	0°15	17°59	2°47	5°14	9°15	14°12	11°53	11°58	23° 1	2°50	W29
T 30	14 29 29	9° 7'08	28°25	16°Y29	24°11	0°15	17°56	2°51	5°18	9°14	14°13	11°52	11°55	23° 8	2°52	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	4n14	20s 0	3n22	4s22	0n16	19n56	1n38	15n 6	0n12	5n11	1n30	12s30	1s13	20n49	0s 6	2s33	1n32	0n57	15s39	16n28	16n46	19n55	5s30	5n49			
T 2	4 37	19 58	2 20	4 32	0 2	20 17	1 41	15 20	0 12	5 14	1 30	12 28	1 14	20 49	0 6	2 32	1 32	0 57	15 38	16 28	16 47	19 54	5 29	5 49			
F 3	5 0	18 41	1 9	4 40	0s12	20 38	1 45	15 34	0 13	5 17	1 30	12 26	1 14	20 50	0 6	2 32	1 32	0 58	15 38	16 28	16 48	19 54	5 27	5 49			
S 4	5 23	16 13	0s 6	4 45	0 25	20 58	1 48	15 48	0 14	5 19	1 30	12 24	1 14	20 50	0 6	2 31	1 32	0 58	15 38	16 28	16 49	19 54	5 26	5 50			
S 5	5 46	12 46	1 21	4 47	0 38	21 17	1 52	16 2	0 14	5 22	1 30	12 22	1 14	20 51	0 6	2 30	1 32	0 59	15 38	16 28	16 50	19 54	5 25	5 50			
M 6	6 9	8 37	2 30	4 47	0 50	21 36	1 56	16 15	0 15	5 24	1 29	12 20	1 14	20 51	0 6	2 30	1 32	0 59	15 38	16 29	16 51	19 54	5 23	5 50			
T 7	6 31	4 2	3 30	4 45	1 1	21 55	1 59	16 29	0 16	5 27	1 29	12 18	1 14	20 52	0 6	2 29	1 32	1 0	15 38	16 31	16 52	19 54	5 22	5 50			
W 8	6 54	0n42	4 16	4 41	1 12	22 13	2 3	16 42	0 16	5 29	1 29	12 16	1 14	20 52	0 6	2 28	1 32	1 0	15 37	16 33	16 53	19 53	5 21	5 50			
T 9	7 17	5 19	4 47	4 34	1 22	22 30	2 6	16 55	0 17	5 31	1 29	12 14	1 15	20 53	0 6	2 28	1 32	1 1	15 37	16 36	16 54	19 53	5 19	5 51			
F 10	7 39	9 35	5 2	4 26	1 32	22 47	2 9	17 8	0 18	5 33	1 29	12 12	1 15	20 53	0 6	2 27	1 32	1 1	15 37	16 39	16 55	19 53	5 18	5 51			
S 11	8 1	13 18	5 0	4 15	1 41	23 3	2 13	17 20	0 18	5 36	1 29	12 10	1 15	20 54	0 6	2 26	1 32	1 2	15 37	16 43	16 55	19 53	5 17	5 51			
S 12	8 23	16 19	4 44	4 3	1 50	23 19	2 16	17 33	0 19	5 38	1 29	12 8	1 15	20 54	0 6	2 26	1 32	1 2	15 37	16 45	16 56	19 53	5 15	5 51			
M13	8 45	18 32	4 14	3 49	1 57	23 34	2 19	17 45	0 19	5 40	1 29	12 7	1 15	20 55	0 6	2 25	1 32	1 3	15 37	16 48	16 57	19 52	5 14	5 51			
T 14	9 7	19 51	3 34	3 33	2 5	23 49	2 23	17 58	0 20	5 42	1 29	12 5	1 15	20 55	0 6	2 25	1 32	1 3	15 36	16 49	16 58	19 52	5 13	5 52			
W15	9 29	20 16	2 44	3 15	2 11	24 3	2 26	18 10	0 21	5 44	1 28	12 3	1 15	20 56	0 6	2 24	1 32	1 4	15 36	16 50	16 59	19 52	5 12	5 52			
T 16	9 50	19 46	1 48	2 56	2 17	24 17	2 29	18 22	0 21	5 46	1 28	12 1	1 16	20 56	0 6	2 23	1 32	1 4	15 36	16 50	17 0	19 52	5 10	5 52			
F 17	10 12	18 25	0 48	2 35	2 23	24 29	2 32	18 33	0 22	5 47	1 28	12 0	1 16	20 57	0 6	2 23	1 32	1 5	15 36	16 50	17 1	19 52	5 9	5 52			
S 18	10 33	16 14	0n16	2 12	2 27	24 42	2 35	18 45	0 23	5 49	1 28	11 58	1 16	20 57	0 6	2 22	1 32	1 5	15 36	16 50	17 2	19 51	5 8	5 53			
S 19	10 54	13 19	1 19	1 48	2 32	24 53	2 38	18 56	0 23	5 51	1 28	11 56	1 16	20 58	0 6	2 22	1 32	1 6	15 36	16 50	17 3	19 51	5 7	5 53			
M20	11 15	9 46	2 19	1 23	2 35	25 4	2 40	19 7	0 24	5 53	1 28	11 55	1 16	20 58	0 6	2 21	1 32	1 6	15 36	16 51	17 3	19 51	5 6	5 53			
T 21	11 35	5 43	3 15	0 56	2 38	25 15	2 43	19 18	0 24	5 54	1 28	11 53	1 16	20 59	0 6	2 20	1 32	1 7	15 36	16 53	17 4	19 51	5 4	5 53			
W22	11 56	1 17	4 2	0 28	2 41	25 25	2 46	19 29	0 25	5 56	1 27	11 52	1 17	21 0	0 6	2 20	1 31	1 7	15 36	16 55	17 5	19 50	5 3	5 54			
T 23	12 16	3s20	4 37	0n 2	2 43	25 34	2 48	19 40	0 25	5 57	1 27	11 50	1 17	21 0	0 6	2 19	1 31	1 8	15 36	16 58	17 6	19 50	5 2	5 54			
F 24	12 36	7 53	4 57	0 33	2 44	25 43	2 51	19 50	0 26	5 58	1 27	11 48	1 17	21 1	0 6	2 19	1 31	1 8	15 35	17 1	17 7	19 50	5 1	5 54			
S 25	12 56	12 8	5 0	1 4	2 45	25 51	2 53	20 0	0 27	6 0	1 27	11 47	1 17	21 1	0 6	2 18	1 31	1 8	15 35	17 5	17 8	19 50	5 0	5 54			
S 26	13 15	15 45	4 45	1 37	2 45	25 58	2 56	20 11	0 27	6 1	1 27	11 45	1 17	21 2	0 6	2 18	1 31	1 9	15 35	17 8	17 9	19 49	4 59	5 55			
M27	13 35	18 28	4 11	2 12	2 45	26 5	2 58	20 20	0 28	6 2	1 27	11 44	1 18	21 2	0 6	2 17	1 31	1 9	15 35	17 10	17 10	19 49	4 57	5 55			
T 28	13 54	20 3	3 22	2 47	2 44	26 11	3 0	20 30	0 28	6 3	1 26	11 43	1 18	21 3	0 6	2 16	1 31	1 10	15 35	17 12	17 11	19 49	4 56	5 55			
W29	14 13	20 20	2 21	3 23	2 42	26 17	3 2	20 40	0 29	6 4	1 26	11 41	1 18	21 4	0 6	2 16	1 31	1 10	15 35	17 13	17 11	19 49	4 55	5 55			
T 30	14n32	19s19	1n11	4n 1	2s40	26n21	3n 4	20n49	0n29	6n 5	1n26	11s40	1s18	21n 4	0s 6	2s15	1n31	1n11	15s35	17n13	17n12	19n48	4s54	5n56			

# ASTRODIENST EPHEMERIS for the year 2111

## geocentric

MAY 2111

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	14 33 26	10♌ 5'29	12♋31	18♊ 3	25♏15	1♏39	17♏54	2♏56	5♏21	9♏13	14♏14	11♏52	11♏52	23♏14	2♏55	F 1
S 2	14 37 22	11° 3'47	26°30	19°40	26°16	2°21	17♏51	3° 0	5°24	9♏11	14°16	11♏51	11°49	23°21	2°57	S 2
S 3	14 41 19	12° 2'05	10♌21	21°18	27°18	3° 3	17°49	3° 4	5°27	9°10	14°17	11°50	11°45	23°28	2°59	S 3
M 4	14 45 15	13° 0'20	24° 4	22°58	28°18	3°45	17°47	3° 8	5°31	9° 8	14°19	11°46	11°42	23°34	3° 1	M 4
T 5	14 49 12	13°58'34	7♊37	24°40	29°19	4°26	17°45	3°12	5°34	9° 7	14°20	11°38	11°39	23°41	3° 3	T 5
W 6	14 53 9	14°56'47	21° 1	26°23	0♏19	5° 8	17°43	3°15	5°37	9° 6	14°21	11°29	11°36	23°48	3° 5	W 6
T 7	14 57 5	15°54'58	4♌12	28° 9	1°19	5°50	17°42	3°19	5°41	9° 5	14°23	11°17	11°33	23°54	3° 7	T 7
F 8	15 1 2	16°53'08	17°10	29°56	2°18	6°32	17°40	3°23	5°44	9° 3	14°24	11° 4	11°30	24° 1	3° 9	F 8
S 9	15 4 58	17°51'15	29°54	1♌45	3°17	7°13	17°39	3°26	5°47	9° 2	14°25	10°51	11°26	24° 8	3°10	S 9
S 10	15 8 55	18°49'21	12♏23	3°36	4°16	7°55	17°38	3°30	5°51	9° 1	14°27	10°39	11°23	24°14	3°12	S 10
M 11	15 12 51	19°47'26	24°38	5°29	5°14	8°36	17°37	3°33	5°54	9° 0	14°28	10°30	11°20	24°21	3°14	M 11
T 12	15 16 48	20°45'28	6♌40	7°24	6°12	9°18	17°37	3°36	5°58	8°59	14°29	10°23	11°17	24°28	3°15	T 12
W 13	15 20 44	21°43'29	18°34	9°20	7° 9	9°59	17°36	3°40	6° 1	8°58	14°31	10°19	11°14	24°34	3°17	W 13
T 14	15 24 41	22°41'28	0♏22	11°18	8° 5	10°40	17°36	3°43	6° 4	8°56	14°32	10°17	11°11	24°41	3°18	T 14
F 15	15 28 38	23°39'25	12°10	13°19	9° 2	11°22	17°D36	3°46	6° 8	8°55	14°33	10°D17	11° 7	24°48	3°20	F 15
S 16	15 32 34	24°37'21	24° 3	15°20	9°57	12° 3	17°36	3°49	6°11	8°54	14°35	10°R17	11° 4	24°54	3°21	S 16
S 17	15 36 31	25°35'14	6♏6	17°24	10°52	12°44	17°36	3°51	6°15	8°53	14°36	10°16	11° 1	25° 1	3°23	S 17
M 18	15 40 27	26°33'06	18°25	19°29	11°47	13°26	17°37	3°54	6°18	8°52	14°38	10°14	10°58	25° 8	3°24	M 18
T 19	15 44 24	27°30'56	1♌4	21°35	12°41	14° 7	17°37	3°57	6°22	8°51	14°39	10°10	10°55	25°14	3°25	T 19
W 20	15 48 20	28°28'44	14° 8	23°43	13°35	14°48	17°38	3°59	6°25	8°50	14°40	10° 4	10°51	25°21	3°26	W 20
T 21	15 52 17	29°26'31	27°37	25°52	14°27	15°29	17°39	4° 2	6°29	8°49	14°41	9°55	10°48	25°27	3°27	T 21
F 22	15 56 13	0♏24'16	11♏32	28° 2	15°19	16°10	17°41	4° 4	6°32	8°49	14°43	9°45	10°45	25°34	3°28	F 22
S 23	16 0 10	1°22'00	25°48	0♏13	16°11	16°51	17°42	4° 7	6°36	8°48	14°44	9°34	10°42	25°41	3°29	S 23
S 24	16 4 7	2°19'42	10♌22	2°24	17° 2	17°32	17°43	4° 9	6°39	8°47	14°45	9°24	10°39	25°47	3°30	S 24
M 25	16 8 3	3°17'23	25° 5	4°36	17°52	18°13	17°45	4°11	6°43	8°46	14°47	9°17	10°36	25°54	3°31	M 25
T 26	16 12 0	4°15'03	9♌50	6°48	18°41	18°54	17°47	4°13	6°46	8°45	14°48	9°11	10°32	26° 1	3°32	T 26
W 27	16 15 56	5°12'42	24°30	8°59	19°30	19°35	17°49	4°15	6°50	8°45	14°49	9° 8	10°29	26° 7	3°32	W 27
T 28	16 19 53	6°10'20	8♌59	11°10	20°18	20°15	17°51	4°17	6°53	8°44	14°51	9°D 8	10°26	26°14	3°33	T 28
F 29	16 23 49	7° 7'57	23°15	13°20	21° 5	20°56	17°54	4°18	6°57	8°43	14°52	9° 8	10°23	26°21	3°34	F 29
S 30	16 27 46	8° 5'32	7♌15	15°29	21°51	21°37	17°56	4°20	7° 0	8°42	14°53	9°R 8	10°20	26°27	3°34	S 30
S 31	16 31 42	9♏3'07	21♌0	17♏37	22♏36	22♏18	17♏59	4♏22	7♏4	8♏42	14♏54	9♏8	10♏17	26♏34	3♏35	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	14n50	17s 6	0s 4	4n39	2s38	26n26	3n 6	20n58	0n30	6n 6	1n26	11s38	1s18	21n 5	0s 6	F 1
S 2	15 8	13 52	1 17	5 18	2 35	26 30	3 7	21 7	0 30	6 7	1 26	11 37	1 18	21 5	0 6	S 2
S 3	15 26	9 55	2 25	5 58	2 31	26 33	3 9	21 16	0 31	6 7	1 25	11 36	1 19	21 6	0 6	S 3
M 4	15 44	5 28	3 23	6 39	2 27	26 35	3 10	21 24	0 32	6 8	1 25	11 35	1 19	21 7	0 6	M 4
T 5	16 1	0 48	4 10	7 20	2 22	26 37	3 12	21 32	0 32	6 9	1 25	11 33	1 19	21 7	0 6	T 5
W 6	16 19	3n50	4 42	8 3	2 17	26 38	3 13	21 41	0 33	6 9	1 25	11 32	1 19	21 8	0 6	W 6
T 7	16 35	8 14	4 58	8 45	2 12	26 39	3 14	21 48	0 33	6 9	1 25	11 31	1 19	21 8	0 6	T 7
F 8	16 52	12 10	4 59	9 29	2 5	26 39	3 15	21 56	0 34	6 10	1 24	11 30	1 20	21 9	0 6	F 8
S 9	17 8	15 29	4 44	10 13	1 59	26 39	3 16	22 4	0 34	6 10	1 24	11 29	1 20	21 10	0 6	S 9
S 10	17 25	18 2	4 16	10 57	1 52	26 38	3 17	22 11	0 35	6 10	1 24	11 28	1 20	21 10	0 6	S 10
M 11	17 40	19 42	3 37	11 42	1 44	26 36	3 17	22 18	0 35	6 10	1 24	11 27	1 20	21 11	0 6	M 11
T 12	17 56	20 27	2 48	12 27	1 36	26 34	3 18	22 25	0 36	6 10	1 24	11 26	1 20	21 11	0 6	T 12
W 13	18 11	20 17	1 53	13 12	1 28	26 31	3 18	22 32	0 36	6 10	1 23	11 25	1 21	21 12	0 6	W 13
T 14	18 26	19 12	0 52	13 58	1 19	26 28	3 18	22 38	0 37	6 10	1 23	11 24	1 21	21 13	0 6	T 14
F 15	18 40	17 18	0n10	14 43	1 10	26 25	3 18	22 44	0 37	6 10	1 23	11 23	1 21	21 13	0 6	F 15
S 16	18 55	14 38	1 13	15 28	1 0	26 20	3 18	22 51	0 38	6 10	1 23	11 22	1 21	21 14	0 6	S 16
S 17	19 9	11 19	2 13	16 12	0 51	26 16	3 18	22 56	0 38	6 10	1 23	11 21	1 21	21 14	0 6	S 17
M 18	19 22	7 28	3 8	16 56	0 40	26 10	3 17	23 2	0 39	6 9	1 22	11 20	1 22	21 15	0 6	M 18
T 19	19 36	3 11	3 56	17 40	0 30	26 5	3 16	23 7	0 39	6 9	1 22	11 19	1 22	21 16	0 6	T 19
W 20	19 48	1s23	4 33	18 22	0 20	25 58	3 15	23 13	0 40	6 8	1 22	11 19	1 22	21 16	0 6	W 20
T 21	20 1	6 1	4 56	19 4	0 9	25 52	3 14	23 18	0 40	6 8	1 22	11 18	1 22	21 17	0 6	T 21
F 22	20 13	10 29	5 3	19 44	0n 1	25 45	3 13	23 23	0 40	6 7	1 21	11 17	1 22	21 17	0 6	F 22
S 23	20 25	14 29	4 51	20 22	0 12	25 37	3 12	23 27	0 41	6 6	1 21	11 17	1 23	21 18	0 6	S 23
S 24	20 37	17 42	4 20	21 0	0 22	25 29	3 10	23 32	0 41	6 6	1 21	11 16	1 23	21 19	0 6	S 24
M 25	20 48	19 48	3 32	21 35	0 33	25 21	3 8	23 36	0 42	6 5	1 21	11 15	1 23	21 19	0 6	M 25
T 26	20 59	20 34	2 30	22 8	0 43	25 12	3 6	23 40	0 42	6 4	1 21	11 15	1 23	21 20	0 6	T 26
W 27	21 9	19 56	1 17	22 39	0 52	25 3	3 4	23 43	0 43	6 3	1 20	11 14	1 23	21 20	0 6	W 27
T 28	21 19	17 59	0 1	23 7	1 2	24 53	3 2	23 47	0 43	6 2	1 20	11 14	1 24	21 21	0 6	T 28
F 29	21 29	14 56	1s15	23 33	1 10	24 43	2 59	23 50	0 44	6 0	1 20	11 13	1 24	21 22	0 6	F 29
S 30	21 39	11 5	2 24	23 56	1 19	24 33	2 56	23 53	0 44	5 59	1 20	11 13	1 24	21 22	0 6	S 30
S 31	21n48	6s42	3s24	24n17	1n27	24n22	2n53	23n56	0n44	5n58	1n20	11s13	1s24	21n23	0s 6	S 31

Julian Day Number = 2492206.5, Delta T = 98.68 sec  
 Ecliptic obliquity = 23°25'23, Nutation = - 0°00'14, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 26°17'45, Lahiri = 25°24'45

# ASTRODIENST EPHEMERIS for the year 2111

## geocentric

JUNE 2111

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	16 35 39	10 <sup>II</sup> 0'42	4 <sup>VI</sup> 30	19 <sup>II</sup> 43	23 <sup>III</sup> 21	22 <sup>II</sup> 58	18 <sup>II</sup> 2	4 <sup>II</sup> 23	7 <sup>II</sup> 7	8°R41	14 <sup>III</sup> 56	9°R 5	10 <sup>II</sup> 13	26 <sup>III</sup> 41	3 <sup>II</sup> 35	M 1
T 2	16 39 36	10°58'15	17°47	21°47	24° 4	23°39	18° 5	4°24	7°11	8 <sup>II</sup> 41	14°57	9 <sup>II</sup> 0	10°10	26°47	3°36	T 2
W 3	16 43 32	11°55'47	0 <sup>III</sup> 49	23°50	24°46	24°19	18° 8	4°26	7°14	8°40	14°58	8°53	10° 7	26°54	3°36	W 3
T 4	16 47 29	12°53'19	13°40	25°51	25°28	25° 0	18°12	4°27	7°18	8°39	14°59	8°44	10° 4	27° 1	3°36	T 4
F 5	16 51 25	13°50'50	26°18	27°49	26° 8	25°40	18°16	4°28	7°21	8°39	15° 1	8°35	10° 1	27° 7	3°36	F 5
S 6	16 55 22	14°48'19	8 <sup>II</sup> 44	29°45	26°48	26°21	18°19	4°29	7°25	8°39	15° 2	8°25	9°57	27°14	3°36	S 6
S 7	16 59 18	15°45'48	20°59	1 <sup>III</sup> 38	27°26	27° 1	18°23	4°30	7°28	8°38	15° 3	8°16	9°54	27°21	3°R36	S 7
M 8	17 3 15	16°43'16	3 <sup>III</sup> 4	3°29	28° 3	27°42	18°27	4°30	7°32	8°38	15° 4	8° 9	9°51	27°27	3°36	M 8
T 9	17 7 11	17°40'43	15° 1	5°18	28°39	28°22	18°32	4°31	7°35	8°37	15° 5	8° 4	9°48	27°34	3°36	T 9
W10	17 11 8	18°38'09	26°50	7° 4	29°13	29° 2	18°36	4°32	7°39	8°37	15° 7	8° 1	9°45	27°40	3°36	W10
T11	17 15 5	19°35'34	8 <sup>II</sup> 37	8°47	29°46	29°43	18°41	4°32	7°42	8°37	15° 8	8°D 1	9°42	27°47	3°36	T11
F12	17 19 1	20°32'58	20°24	10°28	0 <sup>II</sup> 18	0 <sup>III</sup> 23	18°45	4°33	7°46	8°36	15° 9	8° 1	9°38	27°54	3°36	F12
S13	17 22 58	21°30'21	2 <sup>III</sup> 17	12° 6	0°49	1° 3	18°50	4°33	7°49	8°36	15°10	8° 3	9°35	28° 0	3°35	S13
S14	17 26 54	22°27'42	14°19	13°42	1°17	1°43	18°55	4°33	7°53	8°36	15°11	8° 4	9°32	28° 7	3°35	S14
M15	17 30 51	23°25'03	26°37	15°14	1°45	2°23	19° 0	4°R33	7°56	8°36	15°12	8°R 4	9°29	28°14	3°35	M15
T16	17 34 47	24°22'23	9 <sup>II</sup> 15	16°44	2°10	3° 4	19° 6	4°33	7°59	8°36	15°13	8° 3	9°26	28°20	3°34	T16
W17	17 38 44	25°19'41	22°17	18°12	2°34	3°44	19°11	4°33	8° 3	8°35	15°15	8° 0	9°22	28°27	3°34	W17
T18	17 42 40	26°16'59	5 <sup>III</sup> 46	19°36	2°57	4°24	19°17	4°33	8° 6	8°35	15°16	7°55	9°19	28°34	3°33	T18
F19	17 46 37	27°14'16	19°43	20°58	3°17	5° 4	19°23	4°32	8°10	8°35	15°17	7°50	9°16	28°40	3°32	F19
S20	17 50 34	28°11'33	4 <sup>II</sup> 6	22°17	3°36	5°44	19°29	4°32	8°13	8°D35	15°18	7°44	9°13	28°47	3°32	S20
S21	17 54 30	29° 8'48	18°51	23°33	3°53	6°23	19°35	4°31	8°16	8°35	15°19	7°38	9°10	28°54	3°31	S21
M22	17 58 27	0 <sup>III</sup> 6'03	3 <sup>III</sup> 50	24°46	4° 8	7° 3	19°41	4°31	8°20	8°35	15°20	7°34	9° 7	29° 0	3°30	M22
T23	18 2 23	1° 3'18	18°54	25°56	4°20	7°43	19°47	4°30	8°23	8°35	15°21	7°31	9° 3	29° 7	3°29	T23
W24	18 6 20	2° 0'32	3 <sup>III</sup> 55	27° 3	4°31	8°23	19°54	4°29	8°26	8°36	15°22	7°D30	9° 0	29°14	3°28	W24
T25	18 10 16	2°57'46	18°44	28° 7	4°40	9° 3	20° 0	4°28	8°30	8°36	15°23	7°30	8°57	29°20	3°27	T25
F26	18 14 13	3°55'00	3 <sup>II</sup> 15	29° 7	4°46	9°43	20° 7	4°27	8°33	8°36	15°24	7°31	8°54	29°27	3°26	F26
S27	18 18 9	4°52'14	17°27	0 <sup>II</sup> 5	4°50	10°22	20°14	4°26	8°36	8°36	15°25	7°33	8°51	29°33	3°25	S27
S28	18 22 6	5°49'27	1 <sup>VI</sup> 16	0°59	4°R52	11° 2	20°21	4°25	8°39	8°36	15°26	7°R34	8°48	29°40	3°24	S28
M29	18 26 3	6°46'41	14°44	1°49	4°52	11°42	20°28	4°24	8°43	8°37	15°27	7°33	8°44	29°47	3°23	M29
T30	18 29 59	7°54'54	27°VI53	2 <sup>II</sup> 36	4 <sup>II</sup> 49	12°52	20 <sup>II</sup> 35	4 <sup>II</sup> 22	8 <sup>II</sup> 46	8 <sup>II</sup> 37	15°28	7°D32	8°D41	29°53	3 <sup>II</sup> 21	T30

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
M 1	21n56	2s 4	4s12	24n35	1n34	24n12	2n50	23n59	0n45	5n57	1n19	11s12	1s24	21n23	0s 6	2s 3	1n30	1n21	15s36	17n58	17n40	19n37	4s30	6n 6	
T 2	22 4	2n35	4 45	24 50	1 40	24 0	2 46	24 1	0 45	5 55	1 19	11 12	1 25	21 24	0 6	2 3	1 30	1 21	15 36	18 0	17 41	19 37	4 29	6 6	
W 3	22 12	7 2	5 2	25 3	1 46	23 49	2 42	24 4	0 46	5 54	1 19	11 12	1 25	21 25	0 6	2 3	1 30	1 22	15 36	18 1	17 42	19 36	4 29	6 7	
T 4	22 20	11 5	5 4	25 12	1 51	23 37	2 38	24 6	0 46	5 52	1 19	11 12	1 25	21 25	0 6	2 3	1 30	1 22	15 36	18 4	17 43	19 36	4 28	6 7	
F 5	22 27	14 36	4 51	25 20	1 55	23 25	2 34	24 8	0 47	5 51	1 18	11 11	1 25	21 26	0 6	2 3	1 30	1 22	15 37	18 6	17 44	19 35	4 28	6 7	
S 6	22 33	17 24	4 24	25 24	1 59	23 13	2 29	24 9	0 47	5 49	1 18	11 11	1 25	21 26	0 6	2 3	1 30	1 22	15 37	18 9	17 44	19 35	4 28	6 8	
S 7	22 40	19 22	3 45	25 27	2 2	23 1	2 24	24 11	0 47	5 47	1 18	11 11	1 26	21 27	0 6	2 2	1 30	1 22	15 37	18 11	17 45	19 35	4 27	6 8	
M 8	22 46	20 26	2 57	25 26	2 4	22 49	2 19	24 12	0 48	5 45	1 18	11 11	1 26	21 27	0 6	2 2	1 30	1 23	15 37	18 13	17 46	19 34	4 27	6 8	
T 9	22 51	20 35	2 1	25 24	2 5	22 36	2 14	24 13	0 48	5 44	1 18	11 11	1 26	21 28	0 6	2 2	1 30	1 23	15 37	18 14	17 47	19 34	4 27	6 9	
W10	22 56	19 48	1 0	25 19	2 6	22 23	2 8	24 14	0 49	5 42	1 17	11 11	1 26	21 29	0 6	2 2	1 30	1 23	15 37	18 15	17 48	19 33	4 27	6 9	
T11	23 1	18 9	0n 3	25 13	2 5	22 10	2 2	24 14	0 49	5 40	1 17	11 11	1 27	21 29	0 6	2 2	1 30	1 23	15 37	18 15	17 49	19 33	4 26	6 9	
F12	23 5	15 44	1 7	25 5	2 4	21 57	1 56	24 15	0 49	5 38	1 17	11 11	1 27	21 30	0 6	2 2	1 30	1 23	15 38	18 15	17 50	19 32	4 26	6 9	
S13	23 9	12 38	2 8	24 54	2 3	21 44	1 49	24 15	0 50	5 36	1 17	11 11	1 27	21 30	0 6	2 2	1 30	1 23	15 38	18 15	17 50	19 32	4 26	6 10	
S14	23 13	9 0	3 4	24 42	2 0	21 31	1 42	24 15	0 50	5 33	1 17	11 11	1 27	21 31	0 6	2 2	1 30	1 24	15 38	18 14	17 51	19 31	4 26	6 10	
M15	23 16	4 54	3 53	24 29	1 57	21 18	1 35	24 15	0 50	5 31	1 16	11 12	1 27	21 31	0 6	2 2	1 30	1 24	15 38	18 14	17 52	19 31	4 26	6 10	
T16	23 18	0 31	4 32	24 14	1 53	21 4	1 27	24 14	0 51	5 29	1 16	11 12	1 28	21 32	0 6	2 2	1 30	1 24	15 38	18 15	17 53	19 30	4 25	6 11	
W17	23 20	4s 3	4 59	23 58	1 48	20 51	1 19	24 13	0 51	5 27	1 16	11 12	1 28	21 33	0 6	2 2	1 30	1 24	15 38	18 15	17 54	19 30	4 25	6 11	
T18	23 22	8 33	5 10	23 41	1 43	20 38	1 11	24 13	0 52	5 24	1 16	11 12	1 28	21 33	0 6	2 2	1 30	1 24	15 39	18 16	17 55	19 29	4 25	6 11	
F19	23 24	12 46	5 4	23 23	1 37	20 25	1 2	24 11	0 52	5 22	1 16	11 13	1 28	21 34	0 6	2 2	1 30	1 24	15 39	18 18	17 55	19 29	4 25	6 12	
S20	23 25	16 24	4 38	23 4	1 30	20 12	0 53	24 10	0 52	5 19	1 15	11 13	1 28	21 34	0 6	2 2	1 30	1 24	15 39	18 19	17 56	19 29	4 25	6 12	
S21	23 25	19 4	3 54	22 44	1 22	19 59	0 44	24 9	0 53	5 17	1 15	11 13	1 29	21 35	0 6	2 2	1 30	1 24	15 39	18 21	17 57	19 28	4 25	6 12	
M22	23 25	20 29	2 53	22 23	1 14	19 46	0 34	24 7	0 53	5 14	1 15	11 14	1 29	21 35	0 6	2 2	1 30	1 25	15 39	18 22	17 58	19 28	4 25	6 13	
T23	23 25	20 27	1 40	22 1	1 6	19 33	0 24	24 5	0 53	5 11	1 15	11 14	1 29	21 36	0 6	2 2	1 29	1 25	15 40	18 23	17 59	19 27	4 25	6 13	
W24	23 24	18 57	0 20	21 39	0 56	19 20	0 13	24 3	0 54	5 9	1 15	11 15	1 29	21 36	0 6	2 2	1 29	1 25	15 40	18 23	18 0	19 26	4 25	6 13	
T25	23 23	16 10	1s 1	21 17	0 46	19 8	0 3	24 1	0 54	5 6	1 15	11 15	1 30	21 37	0 6	2 2	1 29	1 25	15 40	18 23	18 0	19 26	4 25	6 14	
F26	23 22	12 25	2 16	20 54	0 36	18 55	0s 9	23 58	0 54	5 3	1 14	11 16	1 30	21 37	0 6	2 2	1 29	1 25	15 40	18 23	18 1	19 25	4 25	6 14	
S27	23 20	8 3	3 21	20 32	0 25	18 43	0 20	23 56	0 55	5 0	1 14	11 16	1 30	21 38	0 6	2 2	1 29	1 25	15 40	18 22	18 2	19 25	4 26	6 14	
S28	23 18	3 22	4 13	20 9	0 13	18 31	0 32	23 53	0 55	4 57	1 14	11 17	1 30	21 38	0 6	2 3	1 29	1 25	15 41	18 22	18 3	19 24	4 26	6 14	
M29	23 15	1n22	4 49	19 46	0 1	18 19	0 44	23 50	0 55	4 54	1 14	11 18	1 30	21 39	0 6	2 3	1 29	1 25	15 41	18 22	18 4	19 24	4 26	6 15	
T30	23n12	5n54	5s 9	19n23	0s11	18n 8	0s57	23n46	0n56	4n51	1n14	11s18	1s31	21n39	0s 6	2s 3	1n29	1n25	15s41	18n22	18n 5	19n23	4s26	6n15	



ASTRODIENST EPHEMERIS for the year 2111  
geocentric

JULY 2111

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	18 33 56	8°41'08	10°44	3°19	4°R44	13°51	20°43	4°R21	8°49	8°37	15°28	7°R29	8°38	0°0	3°R20	W 1
T 2	18 37 52	9°38'22	23°19	3°59	4°R37	13°41	20°50	4°R19	8°52	8°38	15°29	7°R25	8°35	0°7	3°R19	T 2
F 3	18 41 49	10°35'35	5°12	4°34	4°27	14°20	20°58	4°18	8°55	8°38	15°30	7°21	8°32	0°13	3°17	F 3
S 4	18 45 45	11°32'49	17°53	5°5	4°15	15°0	21°6	4°16	8°58	8°38	15°31	7°17	8°28	0°20	3°16	S 4
S 5	18 49 42	12°30'03	29°56	5°33	4°0	15°39	21°13	4°14	9°1	8°39	15°32	7°13	8°25	0°27	3°14	S 5
M 6	18 53 38	13°27'17	11°51	5°55	3°43	16°19	21°22	4°12	9°4	8°39	15°33	7°10	8°22	0°33	3°12	M 6
T 7	18 57 35	14°24'30	23°42	6°14	3°24	16°58	21°30	4°10	9°7	8°40	15°33	7°8	8°19	0°40	3°11	T 7
W 8	19 1 32	15°21'44	5°12	6°28	3°3	17°37	21°38	4°8	9°10	8°40	15°34	7°D 7	8°16	0°47	3°9	W 8
T 9	19 5 28	16°18'58	17°15	6°37	2°39	18°17	21°46	4°6	9°13	8°41	15°35	7°8	8°13	0°53	3°7	T 9
F 10	19 9 25	17°16'11	29°4	6°R42	2°13	18°56	21°55	4°3	9°16	8°42	15°36	7°9	8°9	1°0	3°5	F 10
S 11	19 13 21	18°13'24	10°59	6°42	1°46	19°35	22°3	4°1	9°19	8°42	15°36	7°10	8°6	1°7	3°4	S 11
S 12	19 17 18	19°10'37	23°4	6°37	1°16	20°15	22°12	3°58	9°22	8°43	15°37	7°12	8°3	1°13	3°2	S 12
M13	19 21 14	20°7'50	5°12	6°27	0°45	20°54	22°21	3°56	9°25	8°44	15°38	7°13	8°0	1°20	3°0	M13
T 14	19 25 11	21°5'03	17°58	6°13	0°12	21°33	22°30	3°53	9°28	8°44	15°38	7°R13	7°57	1°26	2°58	T 14
W15	19 29 7	22°2'16	0°15	5°55	29°38	22°12	22°39	3°51	9°31	8°45	15°39	7°13	7°54	1°33	2°56	W15
T 16	19 33 4	22°59'29	14°20	5°32	29°3	22°52	22°48	3°48	9°33	8°46	15°40	7°12	7°50	1°40	2°54	T 16
F 17	19 37 1	23°56'42	28°10	5°5	28°27	23°31	22°57	3°45	9°36	8°47	15°40	7°11	7°47	1°46	2°52	F 17
S 18	19 40 57	24°53'55	12°28	4°35	27°50	24°10	23°6	3°42	9°39	8°48	15°41	7°10	7°44	1°53	2°49	S 18
S 19	19 44 54	25°51'09	27°9	4°1	27°13	24°49	23°16	3°39	9°42	8°49	15°42	7°8	7°41	2°0	2°47	S 19
M20	19 48 50	26°48'22	12°3	3°25	26°35	25°28	23°25	3°36	9°44	8°50	15°42	7°7	7°38	2°6	2°45	M20
T 21	19 52 47	27°45'36	27°20	2°46	25°58	26°7	23°35	3°33	9°47	8°51	15°43	7°7	7°34	2°13	2°43	T 21
W22	19 56 43	28°42'50	12°32	2°6	25°20	26°46	23°44	3°29	9°50	8°52	15°43	7°D 7	7°31	2°20	2°40	W22
T 23	20 0 40	29°40'05	27°35	1°24	24°44	27°25	23°54	3°26	9°52	8°53	15°44	7°7	7°28	2°26	2°38	T 23
F 24	20 4 37	0°13'20	12°22	0°43	24°8	28°4	24°4	3°23	9°55	8°54	15°44	7°8	7°25	2°33	2°35	F 24
S 25	20 8 33	1°34'36	26°47	0°2	23°33	28°43	24°14	3°19	9°57	8°55	15°45	7°8	7°22	2°40	2°33	S 25
S 26	20 12 30	2°31'53	10°47	29°23	22°59	29°22	24°24	3°16	10°0	8°56	15°45	7°8	7°19	2°46	2°31	S 26
M27	20 16 26	3°29'10	24°21	28°45	22°26	0°1	24°34	3°12	10°2	8°57	15°45	7°9	7°15	2°53	2°28	M27
T 28	20 20 23	4°26'29	7°30	28°10	21°55	0°40	24°45	3°9	10°4	8°58	15°46	7°R 9	7°12	3°0	2°25	T 28
W29	20 24 19	5°23'49	20°17	27°38	21°26	1°19	24°55	3°5	10°7	8°59	15°46	7°9	7°9	3°6	2°23	W29
T 30	20 28 16	6°21'09	2°14	27°11	20°58	1°57	25°5	3°1	10°9	9°0	15°47	7°9	7°6	3°13	2°20	T 30
F 31	20 32 12	7°18'31	14°15	26°47	20°33	2°13	25°16	2°57	10°11	9°1	15°47	7°D 9	7°13	3°19	2°18	F 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
W 1	23n 8	10n 4	5s13	19n 0	0s24	17n57	1s 9	23n43	0n56	4n48	1n13	11s19	1s31	21n40	0s 6	2s 3
T 2	23 4	13 43	5 2	18 38	0 38	17 46	1 22	23 39	0 56	4 45	1 13	11 20	1 31	21 40	0 6	2 3
F 3	23 0	16 42	4 36	18 16	0 52	17 35	1 36	23 35	0 57	4 42	1 13	11 21	1 31	21 41	0 6	2 3
S 4	22 55	18 55	3 59	17 55	1 6	17 25	1 49	23 31	0 57	4 39	1 13	11 22	1 31	21 41	0 6	2 4
S 5	22 50	20 15	3 11	17 34	1 21	17 15	2 3	23 27	0 57	4 36	1 13	11 22	1 32	21 42	0 6	2 4
M 6	22 45	20 39	2 15	17 14	1 36	17 5	2 17	23 23	0 57	4 32	1 13	11 23	1 32	21 42	0 6	2 4
T 7	22 39	20 8	1 13	16 55	1 51	16 56	2 31	23 18	0 58	4 29	1 12	11 24	1 32	21 43	0 6	2 4
W 8	22 32	18 44	0 9	16 37	2 6	16 47	2 45	23 13	0 58	4 25	1 12	11 25	1 32	21 43	0 6	2 5
T 9	22 26	16 32	0n56	16 20	2 21	16 39	2 59	23 8	0 58	4 22	1 12	11 26	1 32	21 44	0 6	2 5
F 10	22 19	13 38	1 58	16 4	2 36	16 30	3 14	23 3	0 59	4 19	1 12	11 27	1 33	21 44	0 6	2 5
S 11	22 11	10 10	2 57	15 49	2 51	16 23	3 28	22 58	0 59	4 15	1 12	11 28	1 33	21 45	0 5	2 5
S 12	22 3	6 14	3 48	15 36	3 6	16 15	3 42	22 52	0 59	4 11	1 12	11 29	1 33	21 45	0 5	2 6
M13	21 55	2 0	4 29	15 24	3 21	16 8	3 56	22 47	1 0	4 8	1 12	11 30	1 33	21 45	0 5	2 6
T 14	21 46	2s26	4 59	15 14	3 35	16 2	4 9	22 41	1 0	4 4	1 11	11 32	1 33	21 46	0 5	2 6
W15	21 37	6 52	5 15	15 6	3 48	15 56	4 23	22 35	1 0	4 0	1 11	11 33	1 34	21 46	0 5	2 7
T 16	21 28	11 7	5 14	14 54	4 1	15 50	4 36	22 29	1 0	3 57	1 11	11 34	1 34	21 47	0 5	2 7
F 17	21 18	14 56	4 56	14 54	4 13	15 45	4 49	22 22	1 1	3 53	1 11	11 35	1 34	21 47	0 5	2 7
S 18	21 8	18 0	4 19	14 50	4 23	15 40	5 1	22 16	1 1	3 49	1 11	11 36	1 34	21 48	0 5	2 8
S 19	20 58	19 59	3 24	14 49	4 33	15 35	5 13	22 9	1 1	3 45	1 11	11 38	1 34	21 48	0 5	2 8
M20	20 47	20 38	2 14	14 49	4 41	15 31	5 24	22 2	1 1	3 41	1 10	11 39	1 34	21 48	0 5	2 9
T 21	20 36	19 48	0 54	14 51	4 48	15 28	5 34	21 55	1 2	3 37	1 10	11 40	1 35	21 49	0 5	2 9
W22	20 24	17 31	0s30	14 55	4 53	15 24	5 44	21 48	1 2	3 34	1 10	11 42	1 35	21 49	0 5	2 9
T 23	20 12	14 3	1 51	15 0	4 57	15 22	5 54	21 41	1 2	3 30	1 10	11 43	1 35	21 50	0 5	2 10
F 24	20 0	9 45	3 4	15 7	4 59	15 19	6 2	21 33	1 2	3 25	1 10	11 44	1 35	21 50	0 5	2 10
S 25	19 48	4 59	4 3	15 16	4 59	15 17	6 10	21 26	1 3	3 21	1 10	11 46	1 35	21 50	0 5	2 11
S 26	19 35	0 6	4 45	15 25	4 57	15 16	6 17	21 18	1 3	3 17	1 10	11 47	1 35	21 51	0 5	2 11
M27	19 22	4n37	5 10	15 36	4 54	15 14	6 24	21 10	1 3	3 13	1 10	11 49	1 36	21 51	0 5	2 12
T 28	19 8	8 59	5 18	15 48	4 49	15 14	6 30	21 2	1 3	3 9	1 9	11 50	1 36	21 51	0 5	2 12
W29	18 54	12 50	5 10	16 0	4 42	15 13	6 35	20 53	1 4	3 5	1 9	11 52	1 36	21 52	0 5	2 13
T 30	18 40	16 0	4 47	16 14	4 34	15 13	6 39	20 45	1 4	3 1	1 9	11 53	1 36	21 52	0 5	2 13
F 31	18n26	18n25	4s11	16n27	4s25	15n13	6s42	20n36	1n 4	2n56	1n 9	11s55	1s36	21n52	0s 5	2s14

Julian Day Number = 2492267.5, Delta T = 98.77 sec  
Ecliptic obliquity = 23°25'23, Nutation = - 0°00'13, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 26°17'53, Lahiri = 25°24'54



# ASTRODIENST EPHEMERIS for the year 2111

## geocentric

AUGUST 2111

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	20 36 9	8♌15°53	27♊1	26°R29	20°R10	3♌15	25♎26	2°R54	10♊13	9♎3	15♎47	7♎9	7♎0	3♌26	2°R15	S 1
S 2	20 40 5	9°13'17	8♌55	26♌16	19♌49	3°54	25°37	2♊50	10°16	9°4	15°48	7°9	6°56	3°33	2♊12	S 2
M 3	20 44 2	10°10'41	20°45	26°9	19°30	4°33	25°48	2°46	10°18	9°6	15°48	7°9	6°53	3°39	2°10	M 3
T 4	20 47 59	11°8'06	2♌32	26°D8	19°13	5°11	25°58	2°42	10°20	9°7	15°48	7°R9	6°50	3°46	2°7	T 4
W 5	20 51 55	12°5'32	14°19	26°13	18°59	5°50	26°9	2°38	10°22	9°8	15°48	7°9	6°47	3°53	2°4	W 5
T 6	20 55 52	13°3'00	26°9	26°25	18°47	6°29	26°20	2°33	10°24	9°10	15°49	7°9	6°44	3°59	2°1	T 6
F 7	20 59 48	14°0'27	8♎4	26°43	18°38	7°7	26°31	2°29	10°26	9°11	15°49	7°8	6°40	4°6	1°58	F 7
S 8	21 3 45	14°57'56	20°6	27°8	18°31	7°46	26°42	2°25	10°28	9°13	15°49	7°7	6°37	4°13	1°55	S 8
S 9	21 7 41	15°55'26	2♌18	27°39	18°26	8°25	26°53	2°21	10°30	9°14	15°49	7°6	6°34	4°19	1°53	S 9
M10	21 11 38	16°52'56	14°42	28°16	18°23	9°3	27°5	2°17	10°32	9°16	15°49	7°5	6°31	4°26	1°50	M10
T 11	21 15 34	17°50'27	27°21	29°1	18°D23	9°42	27°16	2°12	10°34	9°17	15°49	7°4	6°28	4°33	1°47	T 11
W12	21 19 31	18°47'59	10♎19	29°51	18°26	10°20	27°27	2°8	10°35	9°19	15°49	7°3	6°25	4°39	1°44	W12
T 13	21 23 28	19°45'32	23°37	0♌48	18°30	10°59	27°39	2°4	10°37	9°20	15°50	7°D3	6°21	4°46	1°41	T 13
F 14	21 27 24	20°43'06	7♊19	1°51	18°37	11°38	27°50	1°59	10°39	9°22	15°50	7°4	6°18	4°52	1°38	F 14
S 15	21 31 21	21°40'40	21°24	3°0	18°46	12°16	28°2	1°55	10°40	9°23	15°50	7°5	6°15	4°59	1°35	S 15
S 16	21 35 17	22°38'16	5♎52	4°15	18°57	12°54	28°13	1°50	10°42	9°25	15°R50	7°6	6°12	5°6	1°32	S 16
M17	21 39 14	23°35'52	20°39	5°35	19°10	13°33	28°25	1°46	10°44	9°27	15°50	7°7	6°9	5°12	1°29	M17
T 18	21 43 10	24°33'30	5♎41	7°1	19°25	14°11	28°37	1°41	10°45	9°28	15°50	7°R7	6°6	5°19	1°26	T 18
W19	21 47 7	25°31'08	20°48	8°31	19°42	14°50	28°48	1°37	10°47	9°30	15°50	7°7	6°2	5°26	1°23	W19
T 20	21 51 3	26°28'48	5♊53	10°6	20°1	15°28	29°0	1°32	10°48	9°32	15°49	7°5	5°59	5°32	1°20	T 20
F 21	21 55 0	27°26'29	20°47	11°45	20°21	16°7	29°12	1°28	10°49	9°34	15°49	7°3	5°56	5°39	1°17	F 21
S 22	21 58 57	28°24'12	5♎21	13°28	20°44	16°45	29°24	1°23	10°51	9°35	15°49	7°1	5°53	5°46	1°14	S 22
S 23	22 2 53	29°21'56	19°30	15°15	21°8	17°23	29°36	1°19	10°52	9°37	15°49	6°58	5°50	5°52	1°11	S 23
M24	22 6 50	0♎19'42	3♊11	17°4	21°34	18°2	29°48	1°14	10°53	9°39	15°49	6°55	5°46	5°59	1°8	M24
T 25	22 10 46	1°17'29	16°26	18°56	22°2	18°40	29°59	1°10	10°54	9°41	15°49	6°53	5°43	6°6	1°5	T 25
W26	22 14 43	2°15'18	29°15	20°50	22°31	19°18	0♌12	1°5	10°55	9°43	15°49	6°D52	5°40	6°12	1°2	W26
T 27	22 18 39	3°13'09	11♊42	22°46	23°1	19°57	0°24	1°1	10°57	9°44	15°48	6°53	5°37	6°19	0°59	T 27
F 28	22 22 36	4°11'02	23°53	24°43	23°33	20°35	0°36	0°56	10°58	9°46	15°48	6°54	5°34	6°25	0°56	F 28
S 29	22 26 32	5°8'56	5♎51	26°40	24°6	21°13	0°49	0°52	10°59	9°48	15°48	6°55	5°31	6°32	0°53	S 29
S 30	22 30 29	6°6'53	17°41	28°39	24°41	21°51	1°1	0°47	11°0	9°50	15°48	6°57	5°27	6°39	0°50	S 30
M31	22 34 26	7♎4'51	29♌28	0♎38	25♌17	22♌30	1♌13	0♊43	11♊0	9♎52	15♎47	6♌58	5♌24	6♌45	0♊47	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	18n11	19n58	3s25	16n41	4s14	15n14	6s45	20n28	1n4	2n52	1n9	11s56	1s36	21n53	0s5	2s14
S 2	17 56	20 37	2 31	16 55	4 2	15 15	6 47	20 19	1 5	2 48	1 9	11 58	1 37	21 53	0 5	2 15
M 3	17 41	20 20	1 30	17 9	3 49	15 16	6 49	20 10	1 5	2 43	1 9	11 59	1 37	21 53	0 5	2 15
T 4	17 25	19 10	0 26	17 23	3 35	15 17	6 50	20 0	1 5	2 39	1 9	12 1	1 37	21 54	0 5	2 16
W 5	17 9	17 9	0n40	17 37	3 20	15 19	6 50	19 51	1 5	2 35	1 9	12 2	1 37	21 54	0 5	2 17
T 6	16 53	14 25	1 44	17 50	3 5	15 21	6 50	19 42	1 5	2 30	1 8	12 4	1 37	21 54	0 5	2 17
F 7	16 37	11 4	2 43	18 2	2 49	15 23	6 49	19 32	1 6	2 26	1 8	12 6	1 37	21 55	0 5	2 18
S 8	16 20	7 14	3 37	18 13	2 33	15 25	6 47	19 22	1 6	2 21	1 8	12 7	1 37	21 55	0 5	2 18
S 9	16 3	3 5	4 21	18 23	2 17	15 27	6 46	19 13	1 6	2 17	1 8	12 9	1 38	21 55	0 5	2 19
M10	15 46	1s17	4 53	18 31	2 1	15 30	6 43	19 3	1 6	2 12	1 8	12 11	1 38	21 55	0 5	2 20
T 11	15 28	5 39	5 13	18 38	1 44	15 33	6 41	18 53	1 6	2 8	1 8	12 12	1 38	21 56	0 5	2 20
W12	15 11	9 53	5 17	18 44	1 28	15 35	6 38	18 42	1 7	2 3	1 8	12 14	1 38	21 56	0 5	2 21
T 13	14 53	13 45	5 4	18 48	1 12	15 38	6 34	18 32	1 7	1 58	1 8	12 16	1 38	21 56	0 5	2 21
F 14	14 35	17 0	4 34	18 49	0 56	15 41	6 30	18 22	1 7	1 54	1 8	12 17	1 38	21 56	0 5	2 22
S 15	14 16	19 22	3 47	18 49	0 41	15 44	6 26	18 11	1 7	1 49	1 8	12 19	1 38	21 57	0 5	2 23
S 16	13 58	20 33	2 45	18 46	0 26	15 47	6 22	18 0	1 7	1 44	1 7	12 21	1 38	21 57	0 5	2 23
M17	13 39	20 21	1 30	18 40	0 12	15 50	6 17	17 49	1 7	1 40	1 7	12 22	1 38	21 57	0 5	2 24
T 18	13 20	18 43	0 8	18 32	0n2	15 53	6 12	17 38	1 8	1 35	1 7	12 24	1 38	21 57	0 5	2 25
W19	13 0	15 44	1s15	18 22	0 15	15 55	6 7	17 27	1 8	1 30	1 7	12 26	1 39	21 58	0 5	2 25
T 20	12 41	11 42	2 32	18 8	0 27	15 58	6 2	17 16	1 8	1 25	1 7	12 27	1 39	21 58	0 5	2 26
F 21	12 21	7 0	3 38	17 52	0 39	16 0	5 56	17 5	1 8	1 21	1 7	12 29	1 39	21 58	0 5	2 27
S 22	12 1	1 59	4 29	17 33	0 49	16 3	5 51	16 54	1 8	1 16	1 7	12 31	1 39	21 58	0 5	2 28
S 23	11 41	2n59	5 1	17 12	0 59	16 5	5 45	16 42	1 9	1 11	1 7	12 32	1 39	21 58	0 5	2 28
M24	11 21	7 38	5 15	16 47	1 8	16 7	5 39	16 30	1 9	1 6	1 7	12 34	1 39	21 58	0 5	2 29
T 25	11 0	11 46	5 11	16 20	1 16	16 9	5 33	16 19	1 9	1 1	1 7	12 36	1 39	21 59	0 5	2 30
W26	10 40	15 14	4 52	15 51	1 23	16 11	5 26	16 7	1 9	0 56	1 7	12 38	1 39	21 59	0 5	2 31
T 27	10 19	17 54	4 19	15 19	1 29	16 12	5 20	15 55	1 9	0 52	1 7	12 39	1 39	21 59	0 5	2 31
F 28	9 58	19 42	3 35	14 45	1 34	16 13	5 14	15 43	1 9	0 47	1 7	12 41	1 39	21 59	0 5	2 32
S 29	9 37	20 35	2 43	14 9	1 38	16 14	5 7	15 31	1 9	0 42	1 7	12 43	1 39	21 59	0 5	2 33
S 30	9 16	20 32	1 44	13 31	1 41	16 15	5 1	15 19	1 10	0 37	1 6	12 44	1 39	21 59	0 5	2 34
M31	8n54	19n35	0s41	12n52	1n44	16n15	4s54	15n6	1n10	0n32	1n6	12s46	1s39	22n0	0s5	2s34

Julian Day Number = 2492298.5, Delta T = 98.81 sec  
 Ecliptic obliquity = 23°25'23, Nutation = -0°00'13, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 26°17'57, Lahiri = 25°24'58



ASTRODIENST EPHEMERIS for the year 2111  
geocentric

OCTOBER 2111

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	0 36 39	7♏15'44	13♐38	25♏4	21♏10	12♐8	7♏49	28°R41	11°R 3	10♏58	15°R29	5°R23	3♏46	10♏11	29°R24	T 1
F 2	0 40 35	8°14'41	25°55	26°34	22°10	12°46	8° 2	28°38	11°II 2	11° 0	15°28	5♏15	3°43	10°18	29°22	F 2
S 3	0 44 32	9°13'39	8♏26	28° 2	23°10	13°23	8°15	28°35	11° 1	11° 2	15°27	5° 5	3°39	10°25	29°20	S 3
S 4	0 48 28	10°12'40	21°10	29°30	24°11	14° 1	8°28	28°32	11° 0	11° 4	15°26	4°53	3°36	10°31	29°18	S 4
M 5	0 52 25	11°11'42	4♐7	0♐57	25°12	14°39	8°41	28°30	10°59	11° 7	15°25	4°41	3°33	10°38	29°15	M 5
T 6	0 56 21	12°10'47	17°18	2°22	26°13	15°17	8°54	28°27	10°59	11° 9	15°25	4°31	3°30	10°45	29°14	T 6
W 7	1 0 18	13° 9'54	0♐39	3°47	27°15	15°54	9° 7	28°25	10°58	11°11	15°24	4°22	3°27	10°51	29°12	W 7
T 8	1 4 15	14° 9'02	14°12	5°11	28°17	16°32	9°20	28°22	10°57	11°13	15°23	4°16	3°23	10°58	29°10	T 8
F 9	1 8 11	15° 8'12	27°54	6°33	29°20	17°10	9°33	28°20	10°55	11°16	15°22	4°13	3°20	11° 5	29° 8	F 9
S 10	1 12 8	16° 7'24	11♐46	7°55	0♐22	17°48	9°46	28°17	10°54	11°18	15°21	4°D12	3°17	11°11	29° 6	S 10
S 11	1 16 4	17° 6'38	25°49	9°15	1°26	18°25	9°59	28°15	10°53	11°20	15°20	4°12	3°14	11°18	29° 4	S 11
M12	1 20 1	18° 5'53	10♐0	10°35	2°29	19° 3	10°12	28°13	10°52	11°22	15°19	4°R12	3°11	11°24	29° 3	M12
T 13	1 23 57	19° 5'10	24°20	11°53	3°33	19°41	10°25	28°11	10°51	11°25	15°18	4°11	3° 8	11°31	29° 1	T 13
W14	1 27 54	20° 4'29	8♐45	13°10	4°37	20°18	10°38	28° 9	10°49	11°27	15°17	4° 7	3° 4	11°38	29° 0	W14
T 15	1 31 50	21° 3'49	23°12	14°25	5°41	20°56	10°51	28° 7	10°48	11°29	15°16	4° 0	3° 1	11°44	28°58	T 15
F 16	1 35 47	22° 3'12	7♐35	15°39	6°46	21°34	11° 3	28° 5	10°47	11°31	15°15	3°51	2°58	11°51	28°57	F 16
S 17	1 39 44	23° 2'36	21°48	16°52	7°51	22°11	11°16	28° 4	10°45	11°33	15°14	3°40	2°55	11°58	28°55	S 17
S 18	1 43 40	24° 2'02	5♐46	18° 2	8°56	22°49	11°29	28° 2	10°44	11°36	15°13	3°28	2°52	12° 4	28°54	S 18
M19	1 47 37	25° 1'31	19°23	19°11	10° 1	23°26	11°42	28° 1	10°42	11°38	15°12	3°16	2°48	12°11	28°53	M19
T 20	1 51 33	26° 1'02	2♐38	20°18	11° 7	24° 4	11°55	27°59	10°41	11°40	15°11	3° 5	2°45	12°18	28°51	T 20
W21	1 55 30	27° 0'35	15°29	21°23	12°13	24°41	12° 8	27°58	10°39	11°42	15°10	2°57	2°42	12°24	28°50	W21
T 22	1 59 26	28° 0'10	27°59	22°25	13°20	25°19	12°20	27°57	10°37	11°44	15° 9	2°52	2°39	12°31	28°49	T 22
F 23	2 3 23	28°59'47	10♐11	23°25	14°26	25°57	12°33	27°56	10°36	11°46	15° 8	2°49	2°36	12°38	28°48	F 23
S 24	2 7 19	29°59'27	22°10	24°21	15°33	26°34	12°46	27°55	10°34	11°49	15° 6	2°48	2°33	12°44	28°47	S 24
S 25	2 11 16	0♐59'09	4♏0	25°15	16°40	27°12	12°58	27°54	10°32	11°51	15° 5	2°48	2°29	12°51	28°46	S 25
M26	2 15 13	1°58'53	15°47	26° 5	17°47	27°49	13°11	27°53	10°31	11°53	15° 4	2°48	2°26	12°58	28°45	M26
T 27	2 19 9	2°58'39	27°38	26°51	18°54	28°27	13°24	27°53	10°29	11°55	15° 3	2°46	2°23	13° 4	28°44	T 27
W28	2 23 6	3°58'28	9♐36	27°33	20° 2	29° 4	13°36	27°52	10°27	11°57	15° 2	2°42	2°20	13°11	28°44	W28
T 29	2 27 2	4°58'19	21°47	28°10	21°10	29°42	13°49	27°52	10°25	11°59	15° 1	2°35	2°17	13°17	28°43	T 29
F 30	2 30 59	5°58'11	4♏14	28°42	22°18	0♐19	14° 1	27°51	10°23	12° 1	15° 0	2°26	2°14	13°24	28°42	F 30
S 31	2 34 55	6♐58'06	16♏58	29♐8	23♐26	0♐57	14♏14	27°51	10°21	12° 3	14°59	2♏14	2♏10	13♏31	28°42	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
T 1	2s53	9n20	3n 9	10s22	0s44	13n 5	1s26	8n 8	1n13	2s 6	1n 6	13s29	1s39	22n 0	0s 5	3s 0
F 2	3 16	5 13	3 55	11 2	0 51	12 51	1 20	7 53	1 13	2 11	1 6	13 30	1 39	22 0	0 5	3 1
S 3	3 39	0 49	4 31	11 41	0 58	12 38	1 14	7 39	1 13	2 16	1 6	13 31	1 39	22 0	0 5	3 2
S 4	4 2	3s42	4 54	12 19	1 6	12 23	1 8	7 24	1 13	2 21	1 6	13 32	1 39	22 0	0 5	3 3
M 5	4 26	8 8	5 3	12 56	1 13	12 9	1 2	7 10	1 13	2 26	1 6	13 32	1 39	22 0	0 5	3 4
T 6	4 49	12 15	4 55	13 32	1 20	11 53	0 56	6 55	1 13	2 31	1 6	13 33	1 39	21 59	0 5	3 5
W 7	5 12	15 50	4 32	14 8	1 27	11 38	0 50	6 41	1 13	2 36	1 6	13 34	1 39	21 59	0 5	3 5
T 8	5 35	18 38	3 53	14 43	1 34	11 22	0 44	6 26	1 13	2 41	1 6	13 35	1 39	21 59	0 5	3 6
F 9	5 57	20 24	3 0	15 17	1 41	11 6	0 39	6 11	1 13	2 46	1 6	13 36	1 39	21 59	0 5	3 7
S 10	6 20	20 58	1 56	15 50	1 48	10 49	0 33	5 57	1 13	2 51	1 6	13 36	1 39	21 59	0 5	3 8
S 11	6 43	20 15	0 44	16 23	1 54	10 32	0 28	5 42	1 13	2 57	1 6	13 37	1 39	21 59	0 5	3 9
M12	7 6	18 13	0s31	16 54	2 1	10 14	0 23	5 27	1 13	3 2	1 6	13 38	1 39	21 59	0 5	3 10
T 13	7 28	15 3	1 45	17 24	2 7	9 56	0 17	5 13	1 13	3 7	1 6	13 38	1 39	21 58	0 5	3 11
W14	7 51	10 57	2 52	17 54	2 13	9 38	0 12	4 58	1 13	3 12	1 6	13 39	1 39	21 58	0 5	3 12
T 15	8 13	6 12	3 49	18 22	2 19	9 19	0 7	4 43	1 13	3 17	1 6	13 40	1 39	21 58	0 5	3 12
F 16	8 35	1 8	4 30	18 49	2 25	9 0	0 2	4 28	1 13	3 22	1 6	13 40	1 39	21 58	0 5	3 13
S 17	8 57	3n56	4 55	19 16	2 30	8 40	0n 3	4 13	1 13	3 27	1 6	13 41	1 38	21 58	0 5	3 14
S 18	9 19	8 42	5 1	19 41	2 35	8 20	0 8	3 59	1 14	3 32	1 6	13 41	1 38	21 57	0 5	3 15
M19	9 41	12 55	4 49	20 5	2 40	8 0	0 13	3 44	1 14	3 37	1 6	13 42	1 38	21 57	0 5	3 16
T 20	10 3	16 23	4 22	20 27	2 45	7 40	0 17	3 29	1 14	3 41	1 6	13 42	1 38	21 57	0 5	3 17
W21	10 24	18 57	3 43	20 48	2 49	7 19	0 22	3 14	1 14	3 46	1 6	13 42	1 38	21 57	0 5	3 17
T 22	10 45	20 31	2 53	21 8	2 52	6 57	0 26	2 59	1 14	3 51	1 6	13 43	1 38	21 57	0 5	3 18
F 23	11 7	21 5	1 57	21 27	2 56	6 36	0 31	2 44	1 14	3 56	1 6	13 43	1 38	21 56	0 5	3 19
S 24	11 28	20 41	0 56	21 44	2 58	6 14	0 35	2 29	1 14	4 1	1 6	13 43	1 38	21 56	0 5	3 20
S 25	11 49	19 21	0n 6	21 59	3 0	5 52	0 39	2 14	1 14	4 6	1 6	13 43	1 38	21 56	0 5	3 21
M26	12 9	17 11	1 8	22 12	3 2	5 30	0 43	1 59	1 14	4 11	1 6	13 44	1 38	21 56	0 5	3 21
T 27	12 30	14 17	2 8	22 24	3 3	5 7	0 47	1 45	1 14	4 16	1 7	13 44	1 38	21 55	0 5	3 22
W28	12 50	10 46	3 2	22 34	3 3	4 44	0 51	1 30	1 14	4 21	1 7	13 44	1 37	21 55	0 5	3 23
T 29	13 10	6 45	3 48	22 42	3 2	4 21	0 55	1 15	1 14	4 25	1 7	13 44	1 37	21 55	0 5	3 24
F 30	13 30	2 23	4 25	22 47	3 1	3 57	0 59	1 0	1 14	4 30	1 7	13 44	1 37	21 55	0 5	3 25
S 31	13s50	2s12	4n50	22s51	2s58	3n34	1n 2	0n45	1n13	4s35	1n 7	13s44	1s37	21n54	0s 5	3s25

Julian Day Number = 2492359.5, Delta T = 98.90 sec  
Ecliptic obliquity = 23°25'25", Nutation = - 0°00'15", out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 26°18'06", Lahiri = 25°25'06"

# ASTRODIENST EPHEMERIS for the year 2111

## geocentric

NOVEMBER 2111

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	2 38 52	7♂58°03	0♂ 1	29♂27	24♂35	1♂34	14♂26	27°R51	10°R19	12♂ 5	14°R58	2°R 1	2♂ 7	13♂37	28°R41	S 1
M 2	2 42 48	8°58'02	13°21	29°40	25°43	2°12	14°39	27°D51	10♂17	12° 7	14♂57	1♂48	2° 4	13°44	28°41	M 2
T 3	2 46 45	9°58'03	26°56	29°R44	26°52	2°49	14°51	27°51	10°15	12°10	14°55	1°36	2° 1	13°51	28°40	T 3
W 4	2 50 41	10°58'06	10♂42	29°41	28° 1	3°27	15° 3	27°51	10°13	12°12	14°54	1°26	1°58	13°57	28°40	W 4
T 5	2 54 38	11°58'10	24°37	29°28	29°10	4° 4	15°16	27°51	10°11	12°14	14°53	1°19	1°54	14° 4	28°40	T 5
F 6	2 58 35	12°58'16	8♂37	29° 7	0♂19	4°41	15°28	27°52	10° 9	12°16	14°52	1°15	1°51	14°11	28°39	F 6
S 7	3 2 31	13°58'24	22°41	28°35	1°29	5°19	15°40	27°52	10° 6	12°18	14°51	1°13	1°48	14°17	28°39	S 7
S 8	3 6 28	14°58'33	6♂46	27°54	2°38	5°56	15°52	27°53	10° 4	12°19	14°50	1°D13	1°45	14°24	28°39	S 8
M 9	3 10 24	15°58'44	20°51	27° 4	3°48	6°33	16° 4	27°53	10° 2	12°21	14°49	1°R13	1°42	14°31	28°D39	M 9
T 10	3 14 21	16°58'56	4♂57	26° 5	4°58	7°11	16°17	27°54	10° 0	12°23	14°48	1°12	1°39	14°37	28°39	T 10
W11	3 18 17	17°59'09	19° 1	24°57	6° 8	7°48	16°29	27°55	9°57	12°25	14°46	1° 9	1°35	14°44	28°39	W11
T 12	3 22 14	18°59'24	3♂ 2	23°44	7°18	8°25	16°40	27°56	9°55	12°27	14°45	1° 3	1°32	14°51	28°40	T 12
F 13	3 26 10	19°59'40	16°58	22°26	8°29	9° 3	16°52	27°57	9°53	12°29	14°44	0°54	1°29	14°57	28°40	F 13
S 14	3 30 7	20°59'58	0♂45	21° 6	9°39	9°40	17° 4	27°58	9°50	12°31	14°43	0°43	1°26	15° 4	28°40	S 14
S 15	3 34 4	22° 0'18	14°20	19°47	10°50	10°17	17°16	28° 0	9°48	12°33	14°42	0°31	1°23	15°10	28°40	S 15
M16	3 38 0	23° 0'39	27°39	18°30	12° 0	10°54	17°28	28° 1	9°46	12°34	14°41	0°19	1°20	15°17	28°41	M16
T 17	3 41 57	24° 1'02	10♂40	17°19	13°11	11°32	17°39	28° 2	9°43	12°36	14°40	0° 9	1°16	15°24	28°41	T 17
W18	3 45 53	25° 1'27	23°23	16°16	14°22	12° 9	17°51	28° 4	9°41	12°38	14°39	0° 1	1°13	15°30	28°42	W18
T 19	3 49 50	26° 1'53	5♂49	15°23	15°33	12°46	18° 2	28° 6	9°38	12°40	14°38	29♂56	1°10	15°37	28°42	T 19
F 20	3 53 46	27° 2'22	17°59	14°40	16°45	13°23	18°14	28° 8	9°36	12°42	14°36	29°53	1° 7	15°44	28°43	F 20
S 21	3 57 43	28° 2'52	29°57	14° 9	17°56	14° 0	18°25	28°10	9°34	12°43	14°35	29°D52	1° 4	15°50	28°44	S 21
S 22	4 1 39	29° 3'23	11♂47	13°49	19° 8	14°38	18°37	28°12	9°31	12°45	14°34	29°52	1° 0	15°57	28°45	S 22
M23	4 5 36	0♂37	23°35	13°D41	20°19	15°15	18°48	28°14	9°29	12°47	14°33	29°53	0°57	16° 4	28°45	M23
T 24	4 9 33	1° 4'32	5♂25	13°44	21°31	15°52	18°59	28°16	9°26	12°48	14°32	29°R53	0°54	16°10	28°46	T 24
W25	4 13 29	2° 5'09	17°24	13°58	22°43	16°29	19°10	28°18	9°24	12°50	14°31	29°52	0°51	16°17	28°47	W25
T 26	4 17 26	3° 5'47	29°36	14°21	23°55	17° 6	19°21	28°21	9°21	12°51	14°30	29°48	0°48	16°24	28°48	T 26
F 27	4 21 22	4° 6'28	12♂ 6	14°53	25° 7	17°43	19°32	28°23	9°19	12°53	14°29	29°42	0°45	16°30	28°49	F 27
S 28	4 25 19	5° 7'09	24°57	15°33	26°19	18°20	19°43	28°26	9°16	12°55	14°28	29°35	0°41	16°37	28°51	S 28
S 29	4 29 15	6° 7'53	8♂11	16°19	27°31	18°57	19°54	28°28	9°14	12°56	14°27	29°25	0°38	16°44	28°52	S 29
M30	4 33 12	7♂ 8'38	21♂47	17♂13	28♂43	19♂34	20♂ 5	28°31	9♂11	12°58	14♂26	29♂16	0♂35	16♂50	28°53	M30

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	14s 9	6s47	5n 0	22s51	2s54	3n10	1n 6	0n30	1n13	4s40	1n 7	13s44	1s37	21n54	0s 5	3s26	1n27	0n49	16s10	19n42	19n40	17n43	6s14	6n 4	
M 2	14 29	11 9	4 54	22 49	2 49	2 46	1 9	0 15	1 13	4 44	1 7	13 44	1 37	21 54	0 5	3 27	1 27	0 49	16 10	19 45	19 41	17 41	6 14	6 3	
T 3	14 48	15 3	4 32	22 44	2 43	2 21	1 13	0 0	1 13	4 49	1 7	13 44	1 37	21 53	0 5	3 28	1 27	0 49	16 10	19 47	19 42	17 40	6 15	6 3	
W 4	15 6	18 11	3 54	22 36	2 35	1 57	1 16	0s15	1 13	4 54	1 7	13 44	1 37	21 53	0 5	3 29	1 27	0 48	16 10	19 50	19 43	17 39	6 15	6 3	
T 5	15 25	20 18	3 1	22 24	2 26	1 32	1 19	0 30	1 13	4 58	1 7	13 43	1 37	21 53	0 5	3 29	1 27	0 48	16 10	19 51	19 43	17 38	6 16	6 2	
F 6	15 43	21 12	1 57	22 9	2 15	1 7	1 22	0 44	1 13	5 3	1 7	13 43	1 37	21 53	0 5	3 30	1 27	0 48	16 10	19 52	19 44	17 37	6 16	6 2	
S 7	16 1	20 47	0 45	21 50	2 3	0 43	1 25	0 59	1 13	5 8	1 7	13 43	1 37	21 52	0 5	3 31	1 27	0 48	16 10	19 52	19 45	17 36	6 17	6 1	
S 8	16 19	19 3	0s29	21 27	1 49	0 17	1 28	1 14	1 13	5 12	1 7	13 43	1 36	21 52	0 5	3 32	1 27	0 47	16 10	19 52	19 45	17 35	6 17	6 1	
M 9	16 37	16 9	1 42	21 0	1 33	0s 8	1 30	1 29	1 13	5 17	1 7	13 42	1 36	21 52	0 5	3 32	1 27	0 47	16 10	19 52	19 46	17 34	6 18	6 0	
T 10	16 54	12 19	2 49	20 29	1 16	0 33	1 33	1 44	1 13	5 21	1 8	13 42	1 36	21 51	0 5	3 33	1 27	0 47	16 10	19 53	19 47	17 33	6 18	6 0	
W11	17 11	7 48	3 45	19 55	0 57	0 59	1 35	1 58	1 13	5 26	1 8	13 42	1 36	21 51	0 5	3 34	1 28	0 46	16 10	19 53	19 48	17 32	6 18	6 0	
T 12	17 27	2 53	4 27	19 18	0 37	1 24	1 38	2 13	1 13	5 30	1 8	13 41	1 36	21 51	0 5	3 34	1 28	0 46	16 10	19 55	19 48	17 30	6 19	5 59	
F 13	17 44	2n 8	4 53	18 38	0 17	1 50	1 40	2 28	1 13	5 35	1 8	13 41	1 36	21 50	0 5	3 35	1 28	0 46	16 10	19 57	19 49	17 29	6 19	5 59	
S 14	18 0	7 0	5 2	17 58	0n 4	2 16	1 42	2 43	1 13	5 39	1 8	13 40	1 36	21 50	0 5	3 36	1 28	0 46	16 10	19 59	19 50	17 28	6 19	5 58	
S 15	18 15	11 27	4 54	17 17	0 24	2 41	1 44	2 57	1 13	5 44	1 8	13 40	1 36	21 50	0 5	3 36	1 28	0 45	16 10	20 2	19 50	17 27	6 20	5 58	
M16	18 31	15 15	4 29	16 37	0 44	3 7	1 46	3 12	1 13	5 48	1 8	13 39	1 36	21 49	0 5	3 37	1 28	0 45	16 9	20 4	19 51	17 26	6 20	5 58	
T 17	18 46	18 13	3 51	15 59	1 3	3 33	1 48	3 26	1 13	5 52	1 8	13 38	1 35	21 49	0 5	3 38	1 28	0 45	16 9	20 6	19 52	17 25	6 20	5 57	
W18	19 1	20 14	3 2	15 25	1 20	3 59	1 49	3 41	1 13	5 57	1 8	13 38	1 35	21 49	0 5	3 38	1 28	0 45	16 9	20 8	19 52	17 24	6 20	5 57	
T 19	19 15	21 13	2 5	14 55	1 35	4 25	1 51	3 56	1 13	6 1	1 9	13 37	1 35	21 48	0 5	3 39	1 28	0 44	16 9	20 9	19 53	17 22	6 20	5 56	
F 20	19 29	21 10	1 3	14 29	1 49	4 51	1 52	4 10	1 12	6 5	1 9	13 36	1 35	21 48	0 5	3 40	1 28	0 44	16 9	20 10	19 54	17 21	6 21	5 56	
S 21	19 43	20 9	0n 0	14 9	2 0	5 17	1 54	4 25	1 12	6 9	1 9	13 36	1 35	21 47	0 5	3 40	1 28	0 44	16 9	20 10	19 55	17 20	6 21	5 55	
S 22	19 56	18 15	1 3	13 55	2 10	5 42	1 55	4 39	1 12	6 14	1 9	13 35	1 35	21 47	0 5	3 41	1 28	0 44	16 9	20 10	19 55	17 19	6 21	5 55	
M23	20 9	15 36	2 4	13 45	2 17	6 8	1 56	4 53	1 12	6 18	1 9	13 34	1 35	21 47	0 5	3 42	1 28	0 44	16 9	20 10	19 56	17 18	6 21	5 55	
T 24	20 22	12 17	2 59	13 41	2 23	6 34	1 57	5 8	1 12	6 22	1 9	13 33	1 35	21 46	0 5	3 42	1 28	0 43	16 9	20 10	19 57	17 17	6 21	5 54	
W25	20 34	8 27	3 47	13 41	2 27	7 0	1 58	5 22	1 12	6 26	1 9	13 32	1 35	21 46	0 5	3 43	1 28	0 43	16 9	20 10	19 57	17 15	6 21	5 54	
T 26	20 46	4 13	4 25	13 46	2 29	7 25	1 59	5 36	1 12	6 30	1 9	13 31	1 35	21 46	0 5	3 43	1 28	0 43	16 8	20 11	19 58	17 14	6 21	5 53	
F 27	20 57	0s18	4 52	13 54	2 30	7 51	2 0	5 51	1 12	6 34	1 9	13 30	1 34	21 45	0 5	3 44	1 28	0 43	16 8	20 12	19 59	17 13	6 21	5 53	
S 28	21 8	4 55	5 5	14 6	2 29	8 16	2 1	6 5	1 12	6 38	1 10	13 29	1 34	21 45	0 5	3 44	1 28	0 43	16 8	20 14	19 59	17 12	6 21	5 53	
S 29	21 19	9 27	5 3	14 21	2 28	8 42	2 1	6 19	1 12	6 42	1 10	13 28	1 34	21 45	0 5	3 45	1 28	0 43	16 8	20 15	20 0	17 11	6 21	5 52	
M30	21s29	13s38	4n43	14s38	2n25	9s 7	2n 2	6s33	1n12	6s46	1n10	13s27	1s34	21n44	0s 5	3s45	1n28	0n43	16s 8	20n17	20n 1	17n 9	6s21	5n52	

# ASTRODIENST EPHEMERIS for the year 2111

## geocentric

DECEMBER 2111

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	4 37 8	8♂ 9'24	5♂43	18♂11	29♂56	20♂11	20♂15	28♂34	9♂R 8	12♂59	14♂R25	29♂R 7	0♂Ω32	16♂Ω57	28♂54	T 1
W 2	4 41 5	9°10'12	19°55	19°14	1♂ 8	20°48	20°26	28°37	9♂II 6	13° 0	14♂R24	29♂R 0	0°29	17° 4	28°56	W 2
T 3	4 45 2	10°11'00	4♂18	20°21	2°21	21°25	20°36	28°40	9° 3	13° 2	14°23	28°55	0°26	17°10	28°57	T 3
F 4	4 48 58	11°11'50	18°45	21°32	3°33	22° 2	20°47	28°43	9° 1	13° 3	14°22	28°53	0°22	17°17	28°59	F 4
S 5	4 52 55	12°12'41	3♂11	22°46	4°46	22°39	20°57	28°47	8°58	13° 5	14°21	28°D52	0°19	17°23	29° 0	S 5
S 6	4 56 51	13°13'33	17°33	24° 2	5°59	23°16	21° 7	28°50	8°56	13° 6	14°20	28°53	0°16	17°30	29° 2	S 6
M 7	5 0 48	14°14'25	1♂47	25°21	7°12	23°53	21°17	28°53	8°53	13° 7	14°19	28°55	0°13	17°37	29° 4	M 7
T 8	5 4 44	15°15'19	15°52	26°42	8°24	24°30	21°27	28°57	8°51	13° 8	14°18	28°R55	0°10	17°43	29° 6	T 8
W 9	5 8 41	16°16'12	29°47	28° 4	9°37	25° 7	21°37	29° 1	8°48	13°10	14°17	28°54	0° 6	17°50	29° 7	W 9
T 10	5 12 38	17°17'07	13♂31	29°28	10°50	25°44	21°47	29° 4	8°46	13°11	14°16	28°51	0° 3	17°57	29° 9	T 10
F 11	5 16 34	18°18'02	27° 4	0♂52	12° 4	26°20	21°57	29° 8	8°43	13°12	14°15	28°47	0° 0	18° 3	29°11	F 11
S 12	5 20 31	19°18'58	10♂25	2°18	13°17	26°57	22° 6	29°12	8°41	13°13	14°14	28°40	29♂57	18°10	29°13	S 12
S 13	5 24 27	20°19'55	23°34	3°45	14°30	27°34	22°16	29°16	8°38	13°14	14°13	28°34	29°54	18°17	29°15	S 13
M14	5 28 24	21°20'53	6♂II29	5°13	15°43	28°11	22°25	29°20	8°36	13°15	14°12	28°27	29°51	18°23	29°17	M14
T 15	5 32 20	22°21'51	19°11	6°41	16°57	28°47	22°35	29°24	8°33	13°17	14°12	28°21	29°47	18°30	29°19	T 15
W16	5 36 17	23°22'50	1♂40	8°10	18°10	29°24	22°44	29°28	8°31	13°18	14°11	28°16	29°44	18°37	29°22	W16
T 17	5 40 13	24°23'50	13°55	9°39	19°23	0♂ 1	22°53	29°33	8°29	13°19	14°10	28°13	29°41	18°43	29°24	T 17
F 18	5 44 10	25°24'51	26° 0	11° 9	20°37	0°37	23° 2	29°37	8°26	13°20	14° 9	28°D12	29°38	18°50	29°26	F 18
S 19	5 48 7	26°25'53	7♂55	12°39	21°51	1°14	23°11	29°42	8°24	13°20	14° 8	28°13	29°35	18°57	29°28	S 19
S 20	5 52 3	27°26'55	19°44	14° 9	23° 4	1°51	23°20	29°46	8°21	13°21	14° 7	28°14	29°32	19° 3	29°31	S 20
M21	5 56 0	28°27'59	1♂31	15°40	24°18	2°27	23°28	29°51	8°19	13°22	14° 7	28°16	29°28	19°10	29°33	M21
T 22	5 59 56	29°29'03	13°21	17°11	25°32	3° 4	23°37	29°55	8°17	13°23	14° 6	28°18	29°25	19°17	29°36	T 22
W23	6 3 53	0♂30'08	25°19	18°43	26°45	3°40	23°45	0♂ 0	8°14	13°24	14° 5	28°R19	29°22	19°23	29°38	W23
T 24	6 7 49	1°31'13	7♂29	20°14	27°59	4°17	23°53	0° 5	8°12	13°25	14° 4	28°19	29°19	19°30	29°41	T 24
F 25	6 11 46	2°32'20	19°56	21°46	29°13	4°53	24° 1	0°10	8°10	13°25	14° 4	28°18	29°16	19°37	29°44	F 25
S 26	6 15 42	3°33'27	2♂45	23°18	0♂27	5°30	24° 9	0°15	8° 8	13°26	14° 3	28°15	29°12	19°43	29°46	S 26
S 27	6 19 39	4°34'35	15°58	24°51	1°41	6° 6	24°17	0°20	8° 6	13°27	14° 2	28°12	29° 9	19°50	29°49	S 27
M28	6 23 36	5°35'44	29°38	26°23	2°55	6°43	24°25	0°25	8° 3	13°27	14° 2	28° 8	29° 6	19°56	29°52	M28
T 29	6 27 32	6°36'53	13♂43	27°56	4° 9	7°19	24°33	0°30	8° 1	13°28	14° 1	28° 5	29° 3	20° 3	29°55	T 29
W30	6 31 29	7°38'02	28°10	29°29	5°23	7°55	24°40	0°36	7°59	13°29	14° 1	28° 3	29° 0	20°10	29°57	W30
T 31	6 35 25	8♂39'12	12♂54	1♂ 3	6♂37	8♂32	24♂47	0♂41	7♂II57	13♂29	14♂R 0	28♂ 1	28♂57	20♂16	0♂ 0	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
T 1	21s39	17s12	4n 7	14s57	2n22	9s32	2n 2	6s47	1n11	6s50	1n10	13s26	1s34	21n44	0s 5	3s46
W 2	21 49	19 49	3 14	15 19	2 18	9 57	2 2	7 1	1 11	6 54	1 10	13 25	1 34	21 43	0 5	3 47
T 3	21 58	21 13	2 9	15 41	2 13	10 22	2 2	7 15	1 11	6 57	1 10	13 24	1 34	21 43	0 5	3 47
F 4	22 6	21 13	0 54	16 4	2 8	10 46	2 3	7 29	1 11	7 1	1 10	13 23	1 34	21 43	0 5	3 48
S 5	22 15	19 49	0s23	16 29	2 2	11 11	2 3	7 43	1 11	7 5	1 11	13 21	1 34	21 42	0 5	3 48
S 6	22 22	17 8	1 39	16 54	1 56	11 35	2 2	7 56	1 11	7 9	1 11	13 20	1 34	21 42	0 5	3 48
M 7	22 30	13 27	2 49	17 19	1 50	11 59	2 2	8 10	1 11	7 12	1 11	13 19	1 34	21 42	0 5	3 49
T 8	22 37	9 3	3 47	17 44	1 43	12 22	2 2	8 24	1 10	7 16	1 11	13 18	1 33	21 41	0 5	3 49
W 9	22 43	4 14	4 31	18 9	1 36	12 46	2 2	8 37	1 10	7 19	1 11	13 16	1 33	21 41	0 5	3 50
T 10	22 49	0n44	4 59	18 34	1 29	13 9	2 1	8 51	1 10	7 23	1 11	13 15	1 33	21 40	0 5	3 50
F 11	22 55	5 36	5 10	18 59	1 22	13 32	2 1	9 4	1 10	7 26	1 11	13 13	1 33	21 40	0 5	3 51
S 12	23 0	10 8	5 4	19 24	1 14	13 54	2 0	9 18	1 10	7 30	1 12	13 12	1 33	21 40	0 5	3 51
S 13	23 4	14 6	4 41	19 47	1 7	14 17	1 59	9 31	1 10	7 33	1 12	13 10	1 33	21 39	0 5	3 51
M14	23 8	17 21	4 5	20 11	1 0	14 39	1 58	9 44	1 9	7 36	1 12	13 9	1 33	21 39	0 4	3 52
T 15	23 12	19 43	3 17	20 33	0 52	15 0	1 57	9 57	1 9	7 40	1 12	13 7	1 33	21 39	0 4	3 52
W16	23 15	21 5	2 20	20 55	0 44	15 22	1 56	10 11	1 9	7 43	1 12	13 6	1 33	21 38	0 4	3 53
T 17	23 18	21 25	1 17	21 16	0 37	15 43	1 55	10 24	1 9	7 46	1 12	13 4	1 33	21 38	0 4	3 53
F 18	23 21	20 44	0 12	21 37	0 30	16 3	1 54	10 37	1 9	7 49	1 13	13 3	1 33	21 37	0 4	3 53
S 19	23 23	19 8	0n53	21 56	0 22	16 24	1 53	10 49	1 9	7 52	1 13	13 1	1 33	21 37	0 4	3 54
S 20	23 24	16 43	1 55	22 14	0 15	16 43	1 52	11 2	1 8	7 55	1 13	12 59	1 32	21 37	0 4	3 54
M21	23 25	13 37	2 53	22 32	0 7	17 3	1 50	11 15	1 8	7 58	1 13	12 58	1 32	21 36	0 4	3 54
T 22	23 25	9 58	3 43	22 48	0 0	17 22	1 49	11 28	1 8	8 1	1 13	12 56	1 32	21 36	0 4	3 54
W23	23 25	5 54	4 24	23 3	0s 7	17 41	1 47	11 40	1 8	8 4	1 14	12 54	1 32	21 36	0 4	3 55
T 24	23 25	1 33	4 54	23 18	0 14	17 59	1 46	11 53	1 7	8 7	1 14	12 52	1 32	21 35	0 4	3 55
F 25	23 24	2s59	5 12	23 31	0 21	18 16	1 44	12 5	1 7	8 10	1 14	12 51	1 32	21 35	0 4	3 55
S 26	23 23	7 30	5 14	23 43	0 27	18 34	1 43	12 17	1 7	8 13	1 14	12 49	1 32	21 35	0 4	3 55
S 27	23 21	11 49	5 0	23 53	0 34	18 50	1 41	12 30	1 7	8 15	1 14	12 47	1 32	21 34	0 4	3 56
M28	23 18	15 41	4 29	24 3	0 40	19 7	1 39	12 42	1 7	8 18	1 15	12 45	1 32	21 34	0 4	3 56
T 29	23 15	18 47	3 41	24 11	0 47	19 22	1 37	12 54	1 6	8 21	1 15	12 43	1 32	21 34	0 4	3 56
W30	23 12	20 47	2 38	24 18	0 53	19 38	1 35	13 6	1 6	8 23	1 15	12 41	1 32	21 33	0 4	3 56
T 31	23s 8	21s26	1n23	24s24	0s59	19s52	1n33	13s18	1n 6	8s26	1n15	12s39	1s32	21n33	0s 4	3s56

Julian Day Number = 2492420.5, Delta T = 98.98 sec  
 Ecliptic obliquity = 23°25'24", Nutation = - 0°00'16", out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 26°18'14", Lahiri = 25°25'15"