



Astrodienst Ephemeris Tables for the year 2116

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 2116
geocentric

JANUARY 2116

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	6 39 29	9°34'52	18°38	25°R18	19°55	8°1	6°12	18°9	25°R51	22°8	17°R48	13°R 2	11°32	3°12	16°27	W 1
T 2	6 43 26	10°43'00	3°53	24°48	21° 7	8°43	6°25	18°10	25°48	22° 8	17°48	12°52	11°28	3°18	16°29	T 2
F 3	6 47 23	11°44'08	19° 0	24°27	22°19	9°25	6°39	18°12	25°46	22° 9	17°47	12°43	11°25	3°25	16°31	F 3
S 4	6 51 19	12°45'16	3°50	24°17	23°31	10° 7	6°53	18°13	25°44	22°10	17°46	12°36	11°22	3°32	16°33	S 4
S 5	6 55 16	13°46'24	18°15	24°D17	24°42	10°49	7° 6	18°15	25°41	22°10	17°46	12°31	11°19	3°38	16°35	S 5
M 6	6 59 12	14°47'33	2°15	24°25	25°54	11°31	7°20	18°16	25°39	22°11	17°45	12°28	11°16	3°45	16°37	M 6
T 7	7 3 9	15°48'42	15°47	24°42	27° 5	12°13	7°34	18°18	25°36	22°12	17°45	12°D27	11°12	3°52	16°40	T 7
W 8	7 7 5	16°49'51	28°56	25° 6	28°16	12°55	7°47	18°20	25°34	22°12	17°44	12°28	11° 9	3°59	16°42	W 8
T 9	7 11 2	17°51'01	11°44	25°36	29°28	13°37	8° 1	18°22	25°32	22°13	17°44	12°R28	11° 6	4° 5	16°44	T 9
F 10	7 14 58	18°52'10	24°15	26°13	0°39	14°19	8°15	18°24	25°29	22°13	17°43	12°27	11° 3	4°12	16°46	F 10
S 11	7 18 55	19°53'20	6°33	26°55	1°50	15° 1	8°29	18°26	25°27	22°14	17°43	12°25	11° 0	4°19	16°49	S 11
S 12	7 22 52	20°54'30	18°42	27°42	3° 1	15°43	8°43	18°28	25°25	22°14	17°42	12°19	10°57	4°25	16°51	S 12
M13	7 26 48	21°55'40	0°34	28°33	4°12	16°26	8°56	18°31	25°23	22°15	17°42	12°10	10°53	4°32	16°54	M13
T 14	7 30 45	22°56'50	12°42	29°29	5°22	17° 8	9°10	18°33	25°20	22°15	17°41	11°59	10°50	4°39	16°56	T 14
W15	7 34 41	23°57'59	24°36	0°27	6°33	17°50	9°24	18°36	25°18	22°15	17°41	11°46	10°47	4°46	16°59	W15
T 16	7 38 38	24°59'08	6°28	1°29	7°43	18°32	9°38	18°39	25°16	22°15	17°41	11°31	10°44	4°52	17° 1	T 16
F 17	7 42 34	26° 0'17	18°20	2°34	8°54	19°15	9°52	18°41	25°14	22°16	17°40	11°17	10°41	4°59	17° 4	F 17
S 18	7 46 31	27° 1'25	0°13	3°41	10° 4	19°57	10° 7	18°44	25°12	22°16	17°40	11° 4	10°38	5° 6	17° 7	S 18
S 19	7 50 27	28° 2'33	12° 9	4°50	11°14	20°40	10°21	18°47	25°10	22°16	17°40	10°53	10°34	5°13	17° 9	S 19
M20	7 54 24	29° 3'39	24°10	6° 1	12°24	21°22	10°35	18°50	25° 8	22°16	17°40	10°46	10°31	5°19	17°12	M20
T 21	7 58 21	0°45	6°20	7°15	13°34	22° 4	10°49	18°54	25° 6	22°16	17°39	10°41	10°28	5°26	17°15	T 21
W22	8 2 17	1° 5'50	18°43	8°30	14°43	22°47	11° 3	18°57	25° 4	22°16	17°39	10°39	10°25	5°33	17°18	W22
T 23	8 6 14	2° 6'55	1°24	9°46	15°53	23°29	11°17	19° 0	25° 2	22°17	17°39	10°D38	10°22	5°39	17°21	T 23
F 24	8 10 10	3° 7'58	14°28	11° 4	17° 2	24°12	11°31	19° 4	25° 0	22°R17	17°39	10°R38	10°18	5°46	17°24	F 24
S 25	8 14 7	4° 9'01	27°58	12°23	18°11	24°55	11°45	19° 7	24°58	22°17	17°38	10°37	10°15	5°53	17°27	S 25
S 26	8 18 3	5°10'02	11°57	13°44	19°20	25°37	12° 0	19°11	24°57	22°16	17°38	10°35	10°12	6° 0	17°30	S 26
M27	8 22 0	6°11'03	26°25	15° 5	20°29	26°20	12°14	19°15	24°55	22°16	17°38	10°29	10° 9	6° 6	17°33	M27
T 28	8 25 57	7°12'03	11°20	16°28	21°38	27° 3	12°28	19°19	24°53	22°16	17°38	10°21	10° 6	6°13	17°36	T 28
W29	8 29 53	8°13'02	26°34	17°51	22°46	27°45	12°42	19°23	24°51	22°16	17°38	10°11	10° 3	6°20	17°39	W29
T 30	8 33 50	9°13'59	11°57	19°16	23°55	28°28	12°57	19°27	24°50	22°16	17°38	9°59	9°59	6°27	17°42	T 30
F 31	8 37 46	10°14'56	27°17	20°34	25°3	29°11	13°11	19°31	24°48	22°16	17°38	9°47	9°56	6°33	17°45	F 31

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	23s 4	26n43	4n37	20s13	3n 8	16s36	1s52	21s36	0n 2	19s14	0s33	4n46	2s32	23n32	0n10	7s 7	1n37	2n 9	15s34	15n44	15n17	24s23	1s13	4n29					
T 2	23 0	24 8	5 1	20 12	3 8	16 12	1 51	21 43	0 2	19 11	0 33	4 47	2 32	23 32	0 10	7 7	1 37	2 9	15 34	15 42	15 16	24 21	1 12	4 29					
F 3	22 54	19 54	5 2	20 13	3 5	15 47	1 49	21 50	0 1	19 8	0 33	4 48	2 32	23 32	0 10	7 7	1 37	2 9	15 34	15 39	15 15	24 20	1 12	4 28					
S 4	22 49	14 30	4 44	20 17	3 2	15 22	1 47	21 57	0 0	19 4	0 33	4 48	2 31	23 32	0 10	7 8	1 37	2 9	15 33	15 37	15 14	24 18	1 11	4 28					
S 5	22 43	8 26	4 8	20 21	2 57	14 56	1 46	22 4	0s 0	19 1	0 33	4 49	2 31	23 32	0 10	7 8	1 37	2 9	15 33	15 35	15 13	24 17	1 11	4 28					
M 6	22 36	2 7	3 17	20 28	2 51	14 30	1 44	22 10	0 1	18 58	0 33	4 50	2 31	23 31	0 10	7 8	1 37	2 9	15 33	15 34	15 12	24 15	1 10	4 27					
T 7	22 29	4s 6	2 17	20 35	2 44	14 4	1 42	22 16	0 2	18 54	0 33	4 51	2 30	23 31	0 10	7 8	1 37	2 10	15 32	15 34	15 11	24 14	1 9	4 27					
W 8	22 22	9 58	1 12	20 43	2 37	13 38	1 40	22 22	0 2	18 51	0 33	4 52	2 30	23 31	0 10	7 8	1 37	2 10	15 32	15 34	15 10	24 12	1 9	4 27					
T 9	22 14	15 17	0 4	20 53	2 29	13 11	1 37	22 28	0 3	18 47	0 33	4 53	2 30	23 31	0 10	7 8	1 37	2 10	15 32	15 34	15 9	24 11	1 8	4 27					
F 10	22 6	19 50	1s 2	21 2	2 20	12 43	1 35	22 34	0 4	18 44	0 33	4 54	2 30	23 31	0 10	7 9	1 37	2 10	15 31	15 34	15 8	24 9	1 8	4 26					
S 11	21 57	23 26	2 4	21 12	2 11	12 16	1 33	22 39	0 4	18 40	0 33	4 55	2 29	23 31	0 10	7 9	1 37	2 10	15 31	15 33	15 7	24 8	1 7	4 26					
S 12	21 48	25 56	3 0	21 22	2 2	11 48	1 30	22 45	0 5	18 37	0 33	4 56	2 29	23 31	0 10	7 9	1 37	2 10	15 31	15 31	15 6	24 6	1 6	4 26					
M13	21 39	27 12	3 46	21 32	1 53	11 20	1 28	22 50	0 6	18 33	0 33	4 57	2 29	23 31	0 10	7 9	1 37	2 11	15 31	15 29	15 5	24 5	1 6	4 26					
T 14	21 29	27 11	4 23	21 42	1 44	10 51	1 25	22 55	0 6	18 29	0 33	4 59	2 29	23 31	0 10	7 9	1 37	2 11	15 30	15 25	15 4	24 3	1 5	4 25					
W15	21 18	25 54	4 47	21 51	1 34	10 23	1 22	22 59	0 7	18 26	0 34	5 0	2 28	23 31	0 10	7 9	1 38	2 11	15 30	15 21	15 3	24 2	1 4	4 25					
T 16	21 7	23 28	4 59	22 0	1 25	9 54	1 19	23 4	0 8	18 22	0 34	5 1	2 28	23 31	0 10	7 9	1 38	2 11	15 30	15 17	15 2	24 0	1 3	4 25					
F 17	20 56	20 2	4 58	22 8	1 16	9 25	1 16	23 8	0 9	18 18	0 34	5 2	2 28	23 31	0 10	7 9	1 38	2 11	15 29	15 12	15 1	23 58	1 2	4 25					
S 18	20 45	15 49	4 44	22 16	1 6	8 55	1 13	23 12	0 9	18 15	0 34	5 4	2 28	23 31	0 10	7 9	1 38	2 12	15 29	15 8	15 0	23 57	1 2	4 24					
S 19	20 33	10 58	4 17	22 23	0 57	8 26	1 10	23 16	0 10	18 11	0 34	5 5	2 27	23 31	0 10	7 9	1 38	2 12	15 29	15 5	14 59	23 55	1 1	4 24					
M20	20 20	5 40	3 39	22 30	0 48	7 56	1 7	23 19	0 11	18 7	0 34	5 7	2 27	23 30	0 10	7 9	1 38	2 12	15 28	15 3	14 58	23 54	1 0	4 24					
T 21	20 7	0 6	2 51	22 35	0 39	7 26	1 3	23 23	0 11	18 3	0 34	5 8	2 27	23 30	0 10	7 9	1 38	2 12	15 28	15 1	14 57	23 52	0 59	4 24					
W22	19 54	5n35	1 53	22 39	0 30	6 56	1 0	23 26	0 12	17 59	0 34	5 9	2 26	23 30	0 10	7 9	1 38	2 13	15 28	15 1	14 56	23 50	0 58	4 23					
T 23	19 41	11 12	0 49	22 43	0 21	6 26	0 56	23 29	0 13	17 56	0 34	5 11	2 26	23 30	0 10	7 9	1 38	2 13	15 27	15 0	14 55	23 49	0 57	4 23					
F 24	19 27	16 29	0n20	22 45	0 13	5 55	0 53	23 31	0 13	17 52	0 34	5 13	2 26	23 30	0 10	7 9	1 38	2 13	15 27	15 0	14 54	23 47	0 56	4 23					
S 25	19 13	21 10	1 30	22 47	0 4	5 25	0 49	23 34	0 14	17 48	0 34	5 14	2 26	23 30	0 10	7 9	1 38	2 13	15 27	15 0	14 53	23 46	0 56	4 23					
S 26	18 58	24 48	2 37	22 47	0s 4	4 54	0 45	23 36	0 15	17 44	0 34	5 16	2 25	23 30	0 10	7 9	1 38	2 14	15 26	14 59	14 52	23 44	0 55	4 22					
M27	18 43	26 59	3 36	22 46	0 12	4 24	0 41	23 38	0 16	17 40	0 34	5 17	2 25	23 30	0 10	7 9	1 38	2 14	15 26	14 58	14 51	23 42	0 54	4 22					
T 28	18 28	27 18	4 23	22 44	0 20	3 53	0 37	23 40	0 16	17 36	0 34	5 19	2 25	23 30	0 10	7 9	1 38	2 14	15 26	14 55	14 50	23 41	0 53	4 22					
W29	18 12	25 36	4 51	22 41	0 27	3 22	0 33	23 42	0 17	17 32	0 34	5 21	2 25	23 30	0 10	7 9	1 38	2 15	15 25	14 52	14 49	23 39	0 52	4 22					
T 30	17 56	21 59	5 0	22 37	0 35	2 51	0 29	23 43	0 18	17 28	0 35	5 23	2 24	23 30	0 10	7 8	1 38	2 15	15 25	14 48	14 48	23 37	0 51	4 22					
F 31	17s40	16n53	4n46	22s32	0s42	2s20	0s24	23s44	0s19	17s24	0s35	5n24	2s24	23n30	0n10	7s 8	1n38	2n15	15s25	14n44	14n47	23s36	0s50	4n21					

ASTRODIENST EPHEMERIS for the year 2116
geocentric

FEBRUARY 2116

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	8 41 43	11 ¹¹ 55'52	12 ¹¹ 22	22 ³ 8	26 ¹¹ 11	29 ¹¹ 54	13 ¹¹ 25	19 ¹¹ 35	24 ¹¹ R47	22 ¹¹ R15	17 ¹¹ D38	9 ¹¹ R37	9 ¹¹ 853	6 ¹¹ 40	17 ¹¹ 48	S 1
S 2	8 45 39	12 ¹¹ 16'47	27° 4	23°35	27°18	0 ¹¹ 36	13°39	19°39	24 ¹¹ II45	22 ¹¹ 15	17 ¹¹ 838	9 ¹¹ 830	9°50	6°47	17°51	S 2
M 3	8 49 36	13°17'42	11 ¹¹ 17	25° 3	28°26	1°19	13°54	19°44	24°44	22°15	17°38	9°25	9°47	6°53	17°55	M 3
T 4	8 53 32	14°18'35	25° 0	26°32	29°33	2° 2	14° 8	19°48	24°42	22°14	17°38	9°23	9°44	7° 0	17°58	T 4
W 5	8 57 29	15°19'28	8 ¹¹ 14	28° 2	0 ¹¹ 40	2°45	14°22	19°53	24°41	22°14	17°38	9°23	9°40	7° 7	18° 1	W 5
T 6	9 1 25	16°20'20	21° 4	29°32	1°47	3°28	14°36	19°58	24°39	22°14	17°38	9°23	9°37	7°14	18° 4	T 6
F 7	9 5 22	17°21'12	3 ¹¹ 33	1 ¹¹ 3	2°54	4°11	14°51	20° 2	24°38	22°13	17°38	9°22	9°34	7°20	18° 8	F 7
S 8	9 9 19	18°22'02	15°46	2°36	4° 0	4°54	15° 5	20° 7	24°37	22°13	17°38	9°19	9°31	7°27	18°11	S 8
S 9	9 13 15	19°22'52	27°49	4° 8	5° 6	5°37	15°19	20°12	24°36	22°12	17°39	9°14	9°28	7°34	18°15	S 9
M10	9 17 12	20°23'41	9 ¹¹ 34	5°42	6°12	6°20	15°33	20°17	24°35	22°12	17°39	9° 5	9°24	7°40	18°18	M10
T 11	9 21 8	21°24'28	21°37	7°16	7°18	7° 4	15°48	20°22	24°34	22°11	17°39	8°54	9°21	7°47	18°21	T 11
W12	9 25 5	22°25'15	3 ¹¹ 28	8°51	8°23	7°47	16° 2	20°27	24°33	22°10	17°39	8°40	9°18	7°54	18°25	W12
T 13	9 29 1	23°26'00	15°20	10°27	9°28	8°30	16°16	20°32	24°32	22°10	17°40	8°26	9°15	8° 1	18°28	T 13
F 14	9 32 58	24°26'44	27°15	12° 4	10°33	9°13	16°30	20°38	24°31	22° 9	17°40	8°12	9°12	8° 7	18°32	F 14
S 15	9 36 55	25°27'26	9 ¹¹ 12	13°42	11°38	9°56	16°45	20°43	24°30	22° 8	17°40	7°59	9° 9	8°14	18°35	S 15
S 16	9 40 51	26°28'07	21°15	15°20	12°42	10°40	16°59	20°48	24°29	22° 8	17°40	7°48	9° 5	8°21	18°39	S 16
M17	9 44 48	27°28'47	3 ¹¹ 24	16°59	13°46	11°23	17°13	20°54	24°28	22° 7	17°41	7°40	9° 2	8°28	18°42	M17
T 18	9 48 44	28°29'25	15°41	18°39	14°49	12° 6	17°27	21° 0	24°27	22° 6	17°41	7°35	8°59	8°34	18°46	T 18
W19	9 52 41	29°30'01	28°10	20°20	15°53	12°50	17°41	21° 5	24°27	22° 5	17°41	7°33	8°56	8°41	18°50	W19
T 20	9 56 37	0 ¹¹ 30'35	10 ¹¹ 853	22° 2	16°56	13°33	17°55	21°11	24°26	22° 4	17°42	7°D32	8°53	8°48	18°53	T 20
F 21	10 0 34	1°31'08	23°54	23°45	17°58	14°17	18°10	21°17	24°25	22° 4	17°42	7°33	8°50	8°54	18°57	F 21
S 22	10 4 30	2°31'39	7 ¹¹ 17	25°29	19° 0	15° 0	18°24	21°22	24°25	22° 3	17°43	7°R33	8°46	9° 1	19° 1	S 22
S 23	10 8 27	3°32'08	21° 5	27°13	20° 2	15°44	18°38	21°28	24°24	22° 2	17°43	7°32	8°43	9° 8	19° 4	S 23
M24	10 12 24	4°32'36	5 ¹¹ 18	28°59	21° 4	16°27	18°52	21°34	24°24	22° 1	17°44	7°28	8°40	9°15	19° 8	M24
T 25	10 16 20	5°33'01	19°56	0 ¹¹ 45	22° 5	17°11	19° 6	21°40	24°24	22° 0	17°44	7°22	8°37	9°21	19°12	T 25
W26	10 20 17	6°33'25	4 ¹¹ 53	2°33	23° 5	17°54	19°20	21°46	24°23	21°59	17°45	7°14	8°34	9°28	19°15	W26
T 27	10 24 13	7°33'47	20° 3	4°21	24° 6	18°38	19°34	21°53	24°23	21°58	17°45	7° 5	8°30	9°35	19°19	T 27
F 28	10 28 10	8°34'06	5 ¹¹ 15	6°10	25° 5	19°21	19°48	21°59	24°23	21°57	17°46	6°55	8°27	9°42	19°23	F 28
S 29	10 32 6	9 ¹¹ 34'25	20 ¹¹ 19	8 ¹¹ 0	26°19	20 ¹¹ 5	20 ¹¹ 1	22°19	24 ¹¹ II23	21 ¹¹ 156	17 ¹¹ 846	6 ¹¹ 847	8 ¹¹ 824	9 ¹¹ 448	19 ¹¹ 426	S 29

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	17s23	10n48	4n13	22s25	0s49	1s49	0s20	23s45	0s19	17s20	0s35	5n26	2s24	23n30	0n10	7s 8	1n39	2n16	15s24	14n41	14n46	23s34	0s49	4n21			
S 2	17 6	4 16	3 23	22 17	0 56	1 18	0 15	23 46	0 20	17 16	0 35	5 28	2 24	23 30	0 10	7 8	1 39	2 16	15 24	14 39	14 45	23 32	0 47	4 21			
M 3	16 49	2s17	2 22	22 8	1 2	0 47	0 11	23 46	0 21	17 12	0 35	5 30	2 24	23 30	0 10	7 8	1 39	2 16	15 24	14 37	14 44	23 30	0 46	4 21			
T 4	16 32	8 30	1 15	21 57	1 8	0 16	0 6	23 46	0 22	17 8	0 35	5 32	2 23	23 30	0 10	7 8	1 39	2 17	15 23	14 37	14 43	23 29	0 45	4 21			
W 5	16 14	14 9	0 6	21 45	1 14	0n15	0 1	23 46	0 22	17 4	0 35	5 34	2 23	23 29	0 10	7 7	1 39	2 17	15 23	14 37	14 42	23 27	0 44	4 20			
T 6	15 56	19 0	1s 1	21 32	1 20	0 46	0n 4	23 46	0 23	17 0	0 35	5 36	2 23	23 29	0 10	7 7	1 39	2 17	15 23	14 37	14 41	23 25	0 43	4 20			
F 7	15 38	22 53	2 4	21 18	1 25	1 17	0 8	23 46	0 24	16 56	0 35	5 38	2 23	23 29	0 10	7 7	1 39	2 18	15 22	14 36	14 40	23 24	0 42	4 20			
S 8	15 19	25 38	2 59	21 2	1 30	1 48	0 13	23 45	0 25	16 52	0 35	5 40	2 22	23 29	0 10	7 7	1 39	2 18	15 22	14 35	14 39	23 22	0 41	4 20			
S 9	15 0	27 10	3 46	20 45	1 35	2 19	0 19	23 44	0 26	16 48	0 35	5 42	2 22	23 29	0 10	7 7	1 39	2 18	15 22	14 34	14 38	23 20	0 40	4 20			
M10	14 41	27 26	4 22	20 27	1 39	2 49	0 24	23 43	0 26	16 44	0 35	5 44	2 22	23 29	0 10	7 6	1 39	2 19	15 21	14 31	14 37	23 18	0 39	4 19			
T 11	14 22	26 24	4 47	20 7	1 44	3 20	0 29	23 41	0 27	16 40	0 36	5 46	2 22	23 29	0 10	7 6	1 39	2 19	15 21	14 27	14 36	23 17	0 37	4 19			
W12	14 2	24 12	4 59	19 46	1 47	3 51	0 34	23 40	0 28	16 35	0 36	5 48	2 22	23 29	0 10	7 6	1 39	2 20	15 21	14 23	14 35	23 15	0 36	4 19			
T 13	13 42	20 58	4 58	19 23	1 51	4 21	0 40	23 38	0 29	16 31	0 36	5 50	2 21	23 29	0 10	7 5	1 39	2 20	15 20	14 18	14 34	23 13	0 35	4 19			
F 14	13 22	16 52	4 44	19 0	1 54	4 52	0 45	23 36	0 29	16 27	0 36	5 52	2 21	23 29	0 10	7 5	1 39	2 20	15 20	14 14	14 33	23 11	0 34	4 19			
S 15	13 2	12 5	4 17	18 34	1 57	5 22	0 51	23 33	0 30	16 23	0 36	5 54	2 21	23 29	0 10	7 5	1 39	2 21	15 20	14 10	14 32	23 10	0 32	4 19			
S 16	12 41	6 49	3 39	18 8	2 0	5 52	0 56	23 31	0 31	16 19	0 36	5 57	2 21	23 29	0 10	7 5	1 39	2 21	15 19	14 6	14 31	23 8	0 31	4 19			
M17	12 20	1 15	2 50	17 40	2 2	6 23	1 2	23 28	0 32	16 14	0 36	5 59	2 21	23 29	0 10	7 4	1 39	2 22	15 19	14 4	14 30	23 6	0 30	4 18			
T 18	12 0	4n26	1 53	17 11	2 4	6 52	1 7	23 25	0 33	16 10	0 36	6 1	2 20	23 29	0 10	7 4	1 39	2 22	15 19	14 2	14 29	23 4	0 29	4 18			
W19	11 38	10 3	0 50	16 40	2 5	7 22	1 13	23 22	0 33	16 6	0 36	6 3	2 20	23 29	0 10	7 3	1 40	2 22	15 18	14 1	14 28	23 2	0 27	4 18			
T 20	11 17	15 22	0n18	16 9	2 6	7 52	1 19	23 18	0 34	16 2	0 36	6 6	2 20	23 29	0 10	7 3	1 40	2 23	15 18	14 1	14 27	23 1	0 26	4 18			
F 21	10 56	20 8	1 26	15 35	2 7	8 21	1 25	23 15	0 35	15 58	0 37	6 8	2 20	23 29	0 10	7 3	1 40	2 23	15 18	14 1	14 26	22 59	0 25	4 18			
S 22	10 34	24 0	2 31	15 1	2 7	8 50	1 31	23 11	0 36	15 53	0 37	6 10	2 20	23 29	0 10	7 2	1 40	2 24	15 17	14 1	14 25	22 57	0 24	4 18			
S 23	10 12	26 37	3 30	14 25	2 7	9 19	1 37	23 7	0 37	15 49	0 37	6 13	2 19	23 29	0 10	7 2	1 40	2 24	15 17	14 1	14 24	22 55	0 22	4 18			
M24	9 50	27 37	4 18	13 47	2 6	9 48	1 43	23 2	0 38	15 45	0 37	6 15	2 19	23 29	0 10	7 2	1 40	2 25	15 17	14 0	14 23	22 53	0 21	4 17			
T 25	9 28	26 44	4 50	13 9	2 5	10 17	1 49	22 57	0 38	15 41	0 37	6 17	2 19	23 29	0 10	7 1	1 40	2 25	15 16	13 58	14 22	22 52	0 20	4 17			
W26	9 6	23 56	5 3	12 29	2 3	10 45	1 55	22 53	0 39	15 36	0 37	6 20	2 19	23 29	0 10	7 1	1 40	2 25	15 16	13 55	14 21	22 50	0 18	4 17			
T 27	8 44	19 28	4 56	11 47	2 1	11 13	2 1	22 48	0 40	15 32	0 37	6 22	2 19	23 29	0 10	7 0	1 40	2 26	15 16	13 52	14 20	22 48	0 17	4 17			
F 28	8 21	13 44	4 28	11 5	1 59	11 41	2 7	22 42	0 41	15 28	0 37	6 25	2 19	23 29	0 10	7 0	1 40	2 26	15 15	13 49	14 19	22 46	0 16	4 17			
S 29	7s59	7n13	3n41	10s21	1s56	12n 8	2n14	22s37	0s42	15s23	0s37	6n27	2s18	23n29	0n10	6s59	1n40	2n27	15s15	13n46	14n18	22s44	0s14	4n17			

ASTRODIENST EPHEMERIS for the year 2116

geocentric

MARCH 2116

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Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	10 36 3	10 ^h 34'41	5 ^h 4 4	9 ^h 52	27 ^h 3 3	20 ^h 349	20 ^h 15	22 ^h 11	24 ^h R22	21 ^h R54	17 ^h 847	6 ^h R41	8 ^h 21	9 ^h 55	19 ^h 30	S 1
M 2	10 39 59	11 ^h 34'56	19 ^h 25	11 ^h 44	28 ^h 2	21 ^h 32	20 ^h 29	22 ^h 18	24 ^h I22	21 ^h 53	17 ^h 48	6 ^h 38	8 ^h 18	10 ^h 2	19 ^h 34	M 2
T 3	10 43 56	12 ^h 35'09	3 ^h 16	13 ^h 37	28 ^h 59	22 ^h 16	20 ^h 43	22 ^h 24	24 ^h D22	21 ^h 52	17 ^h 48	6 ^h D36	8 ^h 15	10 ^h 8	19 ^h 38	T 3
W 4	10 47 52	13 ^h 35'21	16 ^h 40	15 ^h 30	29 ^h 57	23 ^h 0	20 ^h 57	22 ^h 31	24 ^h 22	21 ^h 51	17 ^h 49	6 ^h 37	8 ^h 11	10 ^h 15	19 ^h 41	W 4
T 5	10 51 49	14 ^h 35'31	29 ^h 37	17 ^h 25	0 ^h 53	23 ^h 44	21 ^h 10	22 ^h 37	24 ^h 23	21 ^h 50	17 ^h 50	6 ^h 38	8 ^h 8	10 ^h 22	19 ^h 45	T 5
F 6	10 55 46	15 ^h 35'40	12 ^h 11	19 ^h 20	1 ^h 50	24 ^h 27	21 ^h 24	22 ^h 44	24 ^h 23	21 ^h 48	17 ^h 50	6 ^h R38	8 ^h 5	10 ^h 29	19 ^h 49	F 6
S 7	10 59 42	16 ^h 35'47	24 ^h 27	21 ^h 16	2 ^h 45	25 ^h 11	21 ^h 38	22 ^h 50	24 ^h 23	21 ^h 47	17 ^h 51	6 ^h 38	8 ^h 2	10 ^h 35	19 ^h 53	S 7
S 8	11 3 39	17 ^h 35'53	6 ^h 30	23 ^h 12	3 ^h 40	25 ^h 55	21 ^h 51	22 ^h 57	24 ^h 23	21 ^h 46	17 ^h 52	6 ^h 36	7 ^h 59	10 ^h 42	19 ^h 56	S 8
M 9	11 7 35	18 ^h 35'57	18 ^h 25	25 ^h 9	4 ^h 35	26 ^h 39	22 ^h 5	23 ^h 4	24 ^h 23	21 ^h 45	17 ^h 53	6 ^h 32	7 ^h 56	10 ^h 49	20 ^h 0	M 9
T 10	11 11 32	19 ^h 36'00	0 ^h 17	27 ^h 6	5 ^h 28	27 ^h 23	22 ^h 18	23 ^h 10	24 ^h 24	21 ^h 43	17 ^h 53	6 ^h 26	7 ^h 52	10 ^h 55	20 ^h 4	T 10
W 11	11 15 28	20 ^h 36'01	12 ^h 7	29 ^h 2	6 ^h 21	28 ^h 7	22 ^h 32	23 ^h 17	24 ^h 24	21 ^h 42	17 ^h 54	6 ^h 18	7 ^h 49	11 ^h 2	20 ^h 8	W 11
T 12	11 19 25	21 ^h 35'59	24 ^h 1	0 ^h 59	7 ^h 14	28 ^h 51	22 ^h 45	23 ^h 24	24 ^h 25	21 ^h 41	17 ^h 55	6 ^h 9	7 ^h 46	11 ^h 9	20 ^h 11	T 12
F 13	11 23 21	22 ^h 35'57	6 ^h 0	2 ^h 54	8 ^h 5	29 ^h 35	22 ^h 59	23 ^h 31	24 ^h 25	21 ^h 39	17 ^h 56	6 ^h 0	7 ^h 43	11 ^h 16	20 ^h 15	F 13
S 14	11 27 18	23 ^h 35'52	18 ^h 5	4 ^h 49	8 ^h 56	0 ^h 19	23 ^h 12	23 ^h 38	24 ^h 26	21 ^h 38	17 ^h 57	5 ^h 52	7 ^h 40	11 ^h 22	20 ^h 19	S 14
S 15	11 31 15	24 ^h 35'45	0 ^h 19	6 ^h 42	9 ^h 47	1 ^h 3	23 ^h 25	23 ^h 45	24 ^h 27	21 ^h 36	17 ^h 57	5 ^h 46	7 ^h 36	11 ^h 29	20 ^h 23	S 15
M 16	11 35 11	25 ^h 35'37	12 ^h 41	8 ^h 34	10 ^h 36	1 ^h 47	23 ^h 38	23 ^h 52	24 ^h 27	21 ^h 35	17 ^h 58	5 ^h 41	7 ^h 33	11 ^h 36	20 ^h 26	M 16
T 17	11 39 8	26 ^h 35'26	25 ^h 14	10 ^h 24	11 ^h 25	2 ^h 31	23 ^h 51	23 ^h 59	24 ^h 28	21 ^h 34	17 ^h 59	5 ^h 39	7 ^h 30	11 ^h 43	20 ^h 30	T 17
W 18	11 43 4	27 ^h 35'13	7 ^h 57	12 ^h 11	12 ^h 12	3 ^h 15	24 ^h 5	24 ^h 6	24 ^h 29	21 ^h 32	18 ^h 0	5 ^h D38	7 ^h 27	11 ^h 49	20 ^h 34	W 18
T 19	11 47 1	28 ^h 34'58	20 ^h 54	13 ^h 56	12 ^h 59	3 ^h 59	24 ^h 18	24 ^h 13	24 ^h 30	21 ^h 31	18 ^h 1	5 ^h 39	7 ^h 24	11 ^h 56	20 ^h 38	T 19
F 20	11 50 57	29 ^h 34'41	4 ^h 11	15 ^h 36	13 ^h 45	4 ^h 43	24 ^h 31	24 ^h 20	24 ^h 31	21 ^h 29	18 ^h 2	5 ^h 41	7 ^h 21	12 ^h 3	20 ^h 41	F 20
S 21	11 54 54	0 ^h 34'22	17 ^h 32	17 ^h 13	14 ^h 30	5 ^h 27	24 ^h 43	24 ^h 27	24 ^h 31	21 ^h 28	18 ^h 3	5 ^h 42	7 ^h 17	12 ^h 9	20 ^h 45	S 21
S 22	11 58 50	1 ^h 34'01	1 ^h 56	18 ^h 45	15 ^h 14	6 ^h 12	24 ^h 56	24 ^h 35	24 ^h 32	21 ^h 26	18 ^h 4	5 ^h R43	7 ^h 14	12 ^h 16	20 ^h 49	S 22
M 23	12 2 47	2 ^h 33'37	15 ^h 19	20 ^h 13	15 ^h 57	6 ^h 56	25 ^h 9	24 ^h 42	24 ^h 34	21 ^h 25	18 ^h 5	5 ^h 42	7 ^h 11	12 ^h 23	20 ^h 53	M 23
T 24	12 6 44	3 ^h 33'11	29 ^h 40	21 ^h 35	16 ^h 39	7 ^h 40	25 ^h 22	24 ^h 49	24 ^h 35	21 ^h 23	18 ^h 6	5 ^h 40	7 ^h 8	12 ^h 30	20 ^h 56	T 24
W 25	12 10 40	4 ^h 32'42	14 ^h 15	22 ^h 52	17 ^h 19	8 ^h 24	25 ^h 35	24 ^h 57	24 ^h 36	21 ^h 21	18 ^h 7	5 ^h 36	7 ^h 5	12 ^h 36	21 ^h 0	W 25
T 26	12 14 37	5 ^h 32'11	29 ^h 0	24 ^h 2	17 ^h 59	9 ^h 8	25 ^h 47	25 ^h 4	24 ^h 37	21 ^h 20	18 ^h 8	5 ^h 32	7 ^h 1	12 ^h 43	21 ^h 4	T 26
F 27	12 18 33	6 ^h 31'38	13 ^h 48	25 ^h 6	18 ^h 37	9 ^h 53	26 ^h 0	25 ^h 11	24 ^h 38	21 ^h 18	18 ^h 9	5 ^h 28	6 ^h 58	12 ^h 50	21 ^h 7	F 27
S 28	12 22 30	7 ^h 31'03	28 ^h 32	26 ^h 3	19 ^h 14	10 ^h 37	26 ^h 12	25 ^h 19	24 ^h 40	21 ^h 17	18 ^h 10	5 ^h 24	6 ^h 55	12 ^h 56	21 ^h 11	S 28
S 29	12 26 26	8 ^h 30'25	13 ^h 13	26 ^h 54	19 ^h 50	11 ^h 21	26 ^h 25	25 ^h 26	24 ^h 41	21 ^h 15	18 ^h 11	5 ^h 21	6 ^h 52	13 ^h 3	21 ^h 14	S 29
M 30	12 30 23	9 ^h 29'46	27 ^h 36	27 ^h 37	20 ^h 24	12 ^h 5	26 ^h 37	25 ^h 33	24 ^h 42	21 ^h 14	18 ^h 12	5 ^h 20	6 ^h 49	13 ^h 10	21 ^h 18	M 30
T 31	12 34 19	10 ^h 29'05	11 ^h 16	28 ^h 13	20 ^h 57	12 ^h 50	26 ^h 49	25 ^h 41	24 ^h 44	21 ^h 12	18 ^h 13	5 ^h D20	6 ^h 46	13 ^h 17	21 ^h 22	T 31

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	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	7s36	0n26	2n40	9s36	1s52	12n35	2n20	22s31	0s43	15s19	0s38	6n30	2s18	23n29	0n10	6s59	1n40	2n27	15s15	13n44	14n17	22s42	0s13	4n17							
M 2	7 13	6s11	1 31	8 49	1 48	13 2	2 26	22 25	0 43	15 15	0 38	6 32	2 18	23 29	0 10	6 58	1 40	2 28	15 14	13 43	14 16	22 40	0 12	4 17							
T 3	6 50	12 19	0 18	8 2	1 43	13 29	2 32	22 19	0 44	15 11	0 38	6 35	2 18	23 29	0 10	6 58	1 40	2 28	15 14	13 43	14 15	22 38	0 10	4 17							
W 4	6 27	17 40	0s54	7 13	1 38	13 55	2 39	22 12	0 45	15 6	0 38	6 37	2 18	23 29	0 10	6 58	1 40	2 29	15 14	13 43	14 14	22 37	0 9	4 17							
T 5	6 4	22 1	2 0	6 23	1 32	14 21	2 45	22 6	0 46	15 2	0 38	6 40	2 18	23 29	0 10	6 57	1 40	2 29	15 13	13 43	14 13	22 35	0 7	4 17							
F 6	5 41	25 12	2 59	5 32	1 26	14 47	2 51	21 59	0 47	14 58	0 38	6 42	2 17	23 29	0 10	6 57	1 40	2 30	15 13	13 44	14 12	22 33	0 6	4 16							
S 7	5 17	27 7	3 48	4 40	1 19	15 12	2 58	21 52	0 48	14 54	0 38	6 45	2 17	23 29	0 10	6 56	1 40	2 30	15 13	13 43	14 11	22 31	0 5	4 16							
S 8	4 54	27 42	4 26	3 47	1 11	15 37	3 4	21 45	0 48	14 49	0 38	6 48	2 17	23 29	0 10	6 56	1 40	2 31	15 12	13 43	14 10	22 29	0 3	4 16							
M 9	4 30	26 59	4 52	2 54	1 3	16 2	3 11	21 37	0 49	14 45	0 38	6 50	2 17	23 29	0 10	6 55	1 40	2 31	15 12	13 41	14 9	22 27	0 2	4 16							
T 10	4 7	25 3	5 5	1 59	0 55	16 26	3 17	21 30	0 50	14 41	0 39	6 53	2 17	23 29	0 10	6 54	1 40	2 32	15 12	13 39	14 8	22 25	0 0	4 16							
W 11	3 43	22 2	5 6	1 5	0 45	16 50	3 23	21 22	0 51	14 36	0 39	6 55	2 17	23 29	0 10	6 54	1 40	2 32	15 12	13 37	14 7	22 23	0n 1	4 16							
T 12	3 20	18 6	4 53	0 9	0 36	17 13	3 30	21 14	0 52	14 32	0 39	6 58	2 17	23 29	0 10	6 53	1 40	2 33	15 11	13 34	14 6	22 21	0 2	4 16							
F 13	2 56	13 26	4 27	0n46	0 25	17 36	3 36	21 5	0 53	14 28	0 39	7 1	2 17	23 29	0 10	6 53	1 41	2 33	15 11	13 31	14 5	22 19	0 4	4 16							
S 14	2 32	8 13	3 49	1 42	0 14	17 59	3 43	20 57	0 54	14 24	0 39	7 3	2 16	23 29	0 10	6 52	1 41	2 33	15 11	13 28	14 3	22 17	0 5	4 16							
S 15	2 9	2 37	2 59	2 37	0 3	18 21	3 49	20 48	0 54	14 19	0 39	7 6	2 16	23 29	0 10	6 52	1 41	2 34	15 10	13 26	14 2	22 15	0 7	4 16							
M 16	1 45	3n 9	2 1	3 32	0n 9	18 43	3 55	20 39	0 55	14 15	0 39	7 9	2 16	23 29	0 10	6 51	1 41	2 34	15 10	13 25	14 1	22 13	0 8	4 16							
T 17	1 21	8 53	0 56	4 26	0 21	19 4	4 2	20 30	0 56	14 11	0 40	7 11	2 16	23 29	0 10	6 51	1 41	2 35	15 10	13 24	14 0	22 11	0 10	4 16							
W 18	0 58	14 21	0n13	5 19	0 33	19 25	4 8	20 21	0 57	14 7	0 40	7 14	2 16	23 29	0 10	6 50	1 41	2 35	15 10	13 24	13 59	22 9	0 11	4 16							
T 19	0 34	19 17	1 22	6 11	0 46	19 46	4 14	20 11	0 58	14 3	0 40	7 17	2 16	23 29	0 10	6 49	1 41	2 36	15 9	13 24	13 58	22 7	0 12	4 16							
F 20	0 10	23 23	2 29	7 2	0 58	20 6	4 20	20 1	0 59	13 58	0 40	7 19	2 16	23 29	0 10	6 49	1 41	2 36	15 9	13 24	13 57	22 5	0 14	4 16							
S 21	0n14	26 18	3 28	7 51	1 11	20 25	4 27	19 52	1 0	13 54	0 40	7 22	2 16	23 29	0 10	6 48	1 41	2 37	15 9	13 25	13 56	22 3	0 15	4 16							
S 22	0 37	27 43	4 18	8 38	1 24	20 44	4 33	19 41	1 0	13 50	0 40	7 25	2 16	23 29	0 10	6 48	1 41	2 37	15 9	13 25	13 55	22 1	0 17	4 16							
M 23	1 1	27 23	4 53	9 23	1 36	21 3	4 39	19 31	1 1	13 46	0 40	7 28	2 15	23 29	0 10	6 47	1 41	2 38	15 8	13 25	13 54	21 59	0 18	4 16							
T 24	1 25	25 16	5 10	10 5	1 48	21 21	4 45	19 21	1 2	13 42	0 41	7 30	2 15	23 29	0 10	6 47	1 41	2 38	15 8	13 24	13 53	21 57	0 20	4 16							
W 25	1 48	21 28	5 8	10 45	2 0	21 38	4 51	19 10	1 3	13 38	0 41	7 33	2 15	23 29	0 10	6 46	1 41	2 39	15 8	13 23	13 52	21 55	0 21	4 16							
T 26	2 12	16 17	4 46	11 21	2 12	21 55	4 57	18 59	1 4	13 34	0 41	7 36	2 15	23 29	0 10	6 45	1 41	2 39	15 8	13 22	13 51	21 53	0 23	4 16							
F 27	2 35	10 8	4 5	11 55	2 22	22 12	5 2	18 48	1 5	13 29	0 41	7 39	2 15	23 29	0 10	6 45	1 41	2 40	15 7	13 20	13 50	21 51	0 24	4 16							
S 28	2 59	3 28	3 8	12 26	2 33	22 27	5 8	18 37	1 6	13 25	0 41	7 41	2 15	23 29	0 10	6 44	1 41	2 40	15 7	13 19	13 49	21 49	0 25	4 16							
S 29	3 22	3s19	1 59	12 53	2 42	22 43	5 14	18 26	1 7	13 21	0 41	7 44	2 15	23 30	0 10	6 44	1 41	2 41	15 7	13 18	13 48	21 47	0 27	4 16							
M 30	3 46	9 48	0 44	13 16	2 50	22 57	5 19	18 14	1 7	13 17	0 41	7 47	2 15	23 30	0 10	6 43	1 41	2 41	15 7	13 18	13 47	21 45	0 28	4 16							
T 31	4n 9	15s39	0s32	13n36	2n58	23n11	5n24	18s 3	1s 8	13s13	0s42	7n50	2s15	23n30	0n10	6s42	1n41	2n42	15s 7	13n18	13n46	21s43	0n30	4n16							

ASTRODIENST EPHEMERIS for the year 2116

geocentric

APRIL 2116

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Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	12 38 16	11°28'22"	24°32'	28°42'	21°29'	13°34'	27°34'	25°48'	24°45'	21°10'	18°14'	5°21'	6°42'	13°23'	21°25'	W 1
T 2	12 42 13	12°27'37"	7°33'	29° 3'	21°59'	14°18'	27°13'	25°56'	24°47'	21°9'	18°16'	5°22'	6°39'	13°30'	21°29'	T 2
F 3	12 46 9	13°26'50"	20°13'	29°17'	22°27'	15° 3'	27°25'	26° 3'	24°48'	21° 7'	18°17'	5°24'	6°36'	13°37'	21°32'	F 3
S 4	12 50 6	14°26'01"	2°34'	29°R23	22°54'	15°47'	27°37'	26°11'	24°50'	21° 5'	18°18'	5°25'	6°33'	13°44'	21°36'	S 4
S 5	12 54 2	15°25'11"	14°41'	29°23'	23°19'	16°32'	27°49'	26°18'	24°52'	21° 4'	18°19'	5°R26	6°30'	13°50'	21°39'	S 5
M 6	12 57 59	16°24'19"	26°39'	29°16'	23°42'	17°16'	28° 1'	26°26'	24°54'	21° 2'	18°20'	5°25'	6°27'	13°57'	21°43'	M 6
T 7	13 1 55	17°23'25"	8°31'	29° 2'	24° 3'	18° 0'	28°13'	26°33'	24°55'	21° 1'	18°21'	5°24'	6°23'	14° 4'	21°46'	T 7
W 8	13 5 52	18°22'29"	20°24'	28°41'	24°23'	18°45'	28°24'	26°41'	24°57'	20°59'	18°23'	5°22'	6°20'	14°10'	21°50'	W 8
T 9	13 9 48	19°21'32"	2°19'	28°16'	24°41'	19°29'	28°36'	26°49'	24°59'	20°57'	18°24'	5°20'	6°17'	14°17'	21°53'	T 9
F 10	13 13 45	20°20'32"	14°23'	27°45'	24°56'	20°14'	28°47'	26°56'	25° 1'	20°56'	18°25'	5°17'	6°14'	14°24'	21°57'	F 10
S 11	13 17 42	21°19'31"	26°35'	27°10'	25°10'	20°58'	28°59'	27° 4'	25° 3'	20°54'	18°26'	5°15'	6°11'	14°31'	22° 0'	S 11
S 12	13 21 38	22°18'28"	9°0'	26°31'	25°22'	21°43'	29°10'	27°11'	25° 5'	20°52'	18°27'	5°13'	6° 7'	14°37'	22° 3'	S 12
M13	13 25 35	23°17'23"	21°38'	25°49'	25°31'	22°27'	29°21'	27°19'	25° 7'	20°51'	18°29'	5°12'	6° 4'	14°44'	22° 7'	M13
T 14	13 29 31	24°16'15"	4°30'	25° 6'	25°38'	23°12'	29°32'	27°27'	25° 9'	20°49'	18°30'	5°D12	6° 1'	14°51'	22°10'	T 14
W15	13 33 28	25°15'06"	17°35'	24°21'	25°43'	23°56'	29°43'	27°34'	25°11'	20°47'	18°31'	5°12'	5°58'	14°57'	22°13'	W15
T 16	13 37 24	26°13'55"	0°15'	23°36'	25°46'	24°40'	29°54'	27°42'	25°13'	20°46'	18°32'	5°13'	5°55'	15° 4'	22°17'	T 16
F 17	13 41 21	27°12'42"	14°26'	22°52'	25°R46	25°25'	0°15'	27°50'	25°16'	20°44'	18°34'	5°14'	5°52'	15°11'	22°20'	F 17
S 18	13 45 17	28°11'26"	28°10'	22° 9'	25°44'	26° 9'	0°15'	27°57'	25°18'	20°42'	18°35'	5°14'	5°48'	15°18'	22°23'	S 18
S 19	13 49 14	29°10'09"	12°5'	21°28'	25°39'	26°54'	0°26'	28° 5'	25°20'	20°41'	18°36'	5°15'	5°45'	15°24'	22°26'	S 19
M20	13 53 11	0°8'49"	26° 9'	20°50'	25°32'	27°38'	0°36'	28°12'	25°23'	20°39'	18°38'	5°R15	5°42'	15°31'	22°29'	M20
T 21	13 57 7	1° 7'27"	10°22'	20°15'	25°22'	28°23'	0°47'	28°20'	25°25'	20°38'	18°39'	5°15'	5°39'	15°38'	22°33'	T 21
W22	14 1 4	2° 6'02"	24°40'	19°44'	25°10'	29° 7'	0°57'	28°28'	25°27'	20°36'	18°40'	5°15'	5°36'	15°45'	22°36'	W22
T 23	14 5 0	3° 4'35"	9°11'	19°17'	24°55'	29°52'	1° 7'	28°35'	25°30'	20°34'	18°41'	5°15'	5°33'	15°51'	22°39'	T 23
F 24	14 8 57	4° 3'06"	23°21'	18°55'	24°38'	0°11'	1°17'	28°43'	25°32'	20°33'	18°43'	5°14'	5°29'	15°58'	22°42'	F 24
S 25	14 12 53	5° 1'35"	7°35'	18°37'	24°19'	1°21'	1°27'	28°50'	25°35'	20°31'	18°44'	5°D14	5°26'	16° 5'	22°45'	S 25
S 26	14 16 50	6° 0'02"	21°41'	18°24'	23°57'	2° 5'	1°37'	28°58'	25°37'	20°30'	18°45'	5°14'	5°23'	16°11'	22°48'	S 26
M27	14 20 46	6°58'27"	5°33'	18°17'	23°33'	2°50'	1°47'	29° 6'	25°40'	20°28'	18°47'	5°R14	5°20'	16°18'	22°51'	M27
T 28	14 24 43	7°56'50"	19° 8'	18°D14	23° 7'	3°34'	1°56'	29°13'	25°43'	20°26'	18°48'	5°14'	5°17'	16°25'	22°54'	T 28
W29	14 28 40	8°55'12"	2°25'	18°16'	22°39'	4°19'	2° 6'	29°21'	25°45'	20°25'	18°49'	5°14'	5°13'	16°32'	22°56'	W29
T 30	14 32 36	9°53'31"	15°23'	18°Y23	22° 9'	5°15'	2°15'	29°Y28	25°11'	20°23'	18°51'	5°14'	5°10'	16°38'	22°59'	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
W 1	4n32	20s34	1s44	13n52	3n 4	23n25	5n29	17s51	1s 9	13s 9	0s42	7n52	2s15	23n30	0n10	6s42	1n41	2n42	15s 6	13n18	13n45	21s41	0n31	4n16	
T 2	4 55	24 19	2 48	14 4	3 9	23 38	5 34	17 39	1 10	13 5	0 42	7 55	2 15	23 30	0 10	6 41	1 41	2 43	15 6	13 18	13 44	21 39	0 33	4 16	
F 3	5 18	26 46	3 42	14 13	3 13	23 50	5 39	17 27	1 11	13 1	0 42	7 58	2 15	23 30	0 10	6 40	1 41	2 43	15 6	13 19	13 43	21 37	0 34	4 16	
S 4	5 41	27 49	4 25	14 18	3 15	24 1	5 44	17 14	1 12	12 57	0 42	8 1	2 15	23 30	0 10	6 40	1 41	2 44	15 6	13 19	13 42	21 35	0 35	4 16	
S 5	6 4	27 30	4 55	14 18	3 16	24 12	5 48	17 2	1 13	12 53	0 42	8 3	2 15	23 30	0 10	6 39	1 41	2 44	15 6	13 19	13 41	21 33	0 37	4 16	
M 6	6 27	25 54	5 11	14 15	3 16	24 22	5 53	16 49	1 14	12 49	0 43	8 6	2 15	23 30	0 10	6 39	1 41	2 45	15 5	13 19	13 40	21 31	0 38	4 16	
T 7	6 49	23 11	5 15	14 8	3 13	24 32	5 57	16 36	1 14	12 46	0 43	8 9	2 14	23 30	0 10	6 38	1 41	2 45	15 5	13 19	13 39	21 29	0 40	4 16	
W 8	7 12	19 29	5 4	13 57	3 10	24 41	6 1	16 23	1 15	12 42	0 43	8 12	2 14	23 30	0 10	6 37	1 41	2 46	15 5	13 18	13 38	21 26	0 41	4 16	
T 9	7 34	15 0	4 41	13 43	3 4	24 48	6 4	16 10	1 16	12 38	0 43	8 14	2 14	23 30	0 10	6 37	1 41	2 46	15 5	13 17	13 36	21 24	0 42	4 16	
F 10	7 57	9 55	4 5	13 26	2 57	24 56	6 7	15 57	1 17	12 34	0 43	8 17	2 14	23 30	0 10	6 36	1 41	2 47	15 5	13 17	13 35	21 22	0 44	4 16	
S 11	8 19	4 22	3 17	13 5	2 49	25 2	6 10	15 44	1 18	12 30	0 44	8 20	2 14	23 30	0 10	6 35	1 41	2 47	15 4	13 16	13 34	21 20	0 45	4 16	
S 12	8 41	1n25	2 20	12 42	2 39	25 7	6 13	15 30	1 19	12 26	0 44	8 23	2 14	23 30	0 10	6 35	1 41	2 48	15 4	13 15	13 33	21 18	0 47	4 16	
M13	9 3	7 17	1 14	12 16	2 28	25 12	6 15	15 17	1 20	12 23	0 44	8 25	2 14	23 31	0 10	6 34	1 41	2 48	15 4	13 15	13 32	21 16	0 48	4 16	
T 14	9 24	12 57	0 4	11 48	2 15	25 16	6 17	15 3	1 20	12 19	0 44	8 28	2 14	23 31	0 10	6 34	1 41	2 48	15 4	13 15	13 31	21 14	0 49	4 16	
W15	9 46	18 9	1n 8	11 19	2 1	25 18	6 19	14 49	1 21	12 15	0 44	8 31	2 14	23 31	0 10	6 33	1 41	2 49	15 4	13 15	13 30	21 12	0 51	4 16	
T 16	10 7	22 34	2 18	10 49	1 47	25 20	6 20	14 35	1 22	12 12	0 44	8 34	2 14	23 31	0 10	6 32	1 41	2 49	15 4	13 15	13 29	21 9	0 52	4 16	
F 17	10 28	25 50	3 20	10 18	1 31	25 21	6 21	14 21	1 23	12 8	0 45	8 36	2 14	23 31	0 10	6 32	1 41	2 50	15 4	13 15	13 28	21 7	0 53	4 16	
S 18	10 50	27 38	4 13	9 47	1 15	25 21	6 21	14 6	1 24	12 4	0 45	8 39	2 14	23 31	0 10	6 31	1 41	2 50	15 3	13 16	13 27	21 5	0 55	4 17	
S 19	11 10	27 43	4 51	9 16	0 58	25 19	6 21	13 52	1 25	12 1	0 45	8 42	2 14	23 31	0 10	6 31	1 41	2 51	15 3	13 16	13 26	21 3	0 56	4 17	
M20	11 31	26 1	5 13	8 46	0 42	25 17	6 20	13 37	1 26	11 57	0 45	8 44	2 14	23 31	0 10	6 30	1 41	2 51	15 3	13 16	13 25	21 1	0 57	4 17	
T 21	11 52	22 41	5 15	8 17	0 25	25 13	6 19	13 23	1 26	11 54	0 45	8 47	2 14	23 31	0 10	6 29	1 41	2 52	15 3	13 16	13 24	20 59	0 59	4 17	
W22	12 12	17 59	4 59	7 50	0 8	25 8	6 17	13 8	1 27	11 50	0 46	8 50	2 14	23 31	0 10	6 29	1 41	2 52	15 3	13 16	13 23	20 56	1 0	4 17	
T 23	12 32	12 15	4 24	7 25	0s 9	25 2	6 15	12 53	1 28	11 47	0 46	8 52	2 14	23 31	0 10	6 28	1 41	2 53	15 3	13 16	13 22	20 54	1 1	4 17	
F 24	12 52	5 53	3 32	7 1	0 25	24 55	6 12	12 38	1 29	11 44	0 46	8 55	2 14	23 31	0 10	6 28	1 41	2 53	15 3	13 16	13 21	20 52	1 2	4 17	
S 25	13 11	0s45	2 27	6 40	0 40	24 47	6 8	12 23	1 30	11 40	0 46	8 58	2 14	23 32	0 10	6 27	1 41	2 53	15 3	13 16	13 20	20 50	1 4	4 17	
S 26	13 31	7 18	1 14	6 21	0 55	24 37	6 3	12 8	1 31	11 37	0 46	9 1	2 14	23 32	0 10	6 26	1 41	2 54	15 3	13 16	13 19	20 48	1 5	4 17	
M27	13 50	13 23	0s 2	6 5	1 10	24 26	5 58	11 53	1 31	11 34	0 47	9 3	2 14	23 32	0 10	6 26	1 41	2 54	15 2	13 16	13 17	20 45	1 6	4 17	
T 28	14 9	18 43	1 16	5 51	1 24	24 13	5 53	11 37	1 32	11 31	0 47	9 6	2 14	23 32	0 10	6 25	1 41	2 55	15 2	13 16	13 16	20 43	1 7	4 17	
W29	14 28	23 0	2 25	5 40	1 37	24 0	5 46	11 22	1 33	11 27	0 47	9 8	2 14	23 32	0 10	6 25	1 41	2 55	15 2	13 16	13 15	20 41	1 9	4 17	
T 30	14n46	26s 1	3s24	5n32	1s49	23n45	5n39	11s 6	1s34	11s24	0s47	9n11	2s14	23n32	0n10	6s24	1n41	2n56	15s 2	13n15	13n14	20s39	1n10	4n18	

ASTRODIENST EPHEMERIS for the year 2116
geocentric

MAY 2116

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	14 36 33	10♌51'49	28♌ 2	18°35'	21°R38	5♌48	2♌24	29°36	25°51	20°R22	18♌52	5°R13	5♌ 7	16♌45	23♌ 2	F 1
S 2	14 40 29	11°50'06	10♌25	18°52	21♌ 4	6°32	2°33	29°43	25°53	20♌20	18°53	5♌12	5° 4	16°52	23° 5	S 2
S 3	14 44 26	12°48'21	22°34	19°13	20°30	7°16	2°42	29°51	25°56	20°19	18°55	5°12	5° 1	16°58	23° 7	S 3
M 4	14 48 22	13°46'34	4♌34	19°39	19°54	8° 1	2°51	29°58	25°59	20°17	18°56	5°11	4°58	17° 5	23°10	M 4
T 5	14 52 19	14°44'46	16°28	20° 9	19°18	8°45	3° 0	0♌ 6	26° 2	20°16	18°57	5°D11	4°54	17°12	23°13	T 5
W 6	14 56 15	15°42'57	28°21	20°42	18°41	9°30	3° 8	0°13	26° 5	20°14	18°59	5°11	4°51	17°19	23°15	W 6
T 7	15 0 12	16°41'06	10♌18	21°20	18° 3	10°14	3°17	0°21	26° 8	20°13	19° 0	5°12	4°48	17°25	23°18	T 7
F 8	15 4 9	17°39'13	22°23	22° 2	17°25	10°59	3°25	0°28	26°11	20°12	19° 2	5°13	4°45	17°32	23°20	F 8
S 9	15 8 5	18°37'19	4♌41	22°47	16°48	11°43	3°33	0°36	26°14	20°10	19° 3	5°14	4°42	17°39	23°23	S 9
S 10	15 12 2	19°35'24	17°14	23°36	16°10	12°27	3°41	0°43	26°17	20° 9	19° 4	5°15	4°38	17°46	23°25	S 10
M 11	15 15 58	20°33'27	0♌ 4	24°28	15°33	13°12	3°49	0°50	26°20	20° 7	19° 6	5°R16	4°35	17°52	23°28	M 11
T 12	15 19 55	21°31'28	13°14	25°24	14°57	13°56	3°57	0°58	26°23	20° 6	19° 7	5°16	4°32	17°59	23°30	T 12
W 13	15 23 51	22°29'28	26°42	26°22	14°22	14°40	4° 5	1° 5	26°26	20° 5	19° 8	5°15	4°29	18° 6	23°32	W 13
T 14	15 27 48	23°27'27	10♌27	27°24	13°49	15°25	4°12	1°12	26°29	20° 3	19°10	5°13	4°26	18°12	23°35	T 14
F 15	15 31 44	24°25'24	24°26	28°28	13°16	16° 9	4°19	1°20	26°32	20° 2	19°11	5°11	4°23	18°19	23°37	F 15
S 16	15 35 41	25°23'19	8♌36	29°35	12°45	16°53	4°27	1°27	26°35	20° 1	19°12	5° 8	4°19	18°26	23°39	S 16
S 17	15 39 38	26°21'13	22°52	0♌45	12°16	17°37	4°34	1°34	26°39	20° 0	19°14	5° 5	4°16	18°33	23°41	S 17
M 18	15 43 34	27°19'05	7♌10	1°58	11°49	18°21	4°41	1°41	26°42	19°58	19°15	5° 4	4°13	18°39	23°43	M 18
T 19	15 47 31	28°16'55	21°26	3°13	11°24	19° 6	4°47	1°48	26°45	19°57	19°16	5° 2	4°10	18°46	23°45	T 19
W 20	15 51 27	29°14'43	5♌38	4°31	11° 1	19°50	4°54	1°55	26°48	19°56	19°18	5°D 2	4° 7	18°53	23°47	W 20
T 21	15 55 24	0♌12'30	19°44	5°51	10°40	20°34	5° 0	2° 2	26°51	19°55	19°19	5° 3	4° 4	18°59	23°49	T 21
F 22	15 59 20	1°10'14	3♌42	7°14	10°22	21°18	5° 7	2° 9	26°55	19°54	19°20	5° 5	4° 0	19° 6	23°51	F 22
S 23	16 3 17	2° 7'57	17°30	8°39	10° 5	22° 2	5°13	2°16	26°58	19°52	19°22	5° 6	3°57	19°13	23°53	S 23
S 24	16 7 13	3° 5'39	1♌ 8	10° 7	9°52	22°46	5°19	2°23	27° 1	19°51	19°23	5°R 7	3°54	19°20	23°55	S 24
M 25	16 11 10	4° 3'19	14°34	11°37	9°40	23°30	5°24	2°30	27° 5	19°50	19°24	5° 7	3°51	19°26	23°57	M 25
T 26	16 15 7	5° 0'58	27°47	13° 9	9°31	24°14	5°30	2°37	27° 8	19°49	19°26	5° 5	3°48	19°33	23°58	T 26
W 27	16 19 3	5°58'36	10♌47	14°44	9°25	24°58	5°36	2°44	27°12	19°48	19°27	5° 2	3°44	19°40	24° 0	W 27
T 28	16 23 0	6°56'12	23°33	16°21	9°21	25°41	5°41	2°51	27°15	19°47	19°28	4°57	3°41	19°46	24° 2	T 28
F 29	16 26 56	7°53'48	6♌ 5	18° 0	9°D19	26°25	5°46	2°57	27°18	19°46	19°30	4°52	3°38	19°53	24° 3	F 29
S 30	16 30 53	8°51'22	18°24	19°42	9°19	27° 9	5°51	3° 4	27°22	19°45	19°31	4°46	3°35	20° 0	24° 5	S 30
S 31	16 34 49	9♌48'55	0♌31	21♌26	9♌22	27♌53	5♌56	3♌11	27♌25	19♌44	19♌32	4♌41	3♌32	20♌ 7	24♌ 6	S 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
F 1	15n 5	27s37	4s12	5n26	2s 0	23n29	5n31	10s51	1s35	11s21	0s47	9n14	2s14	23n32	0n10	6s24
S 2	15 23	27 48	4 47	5 22	2 11	23 12	5 23	10 35	1 35	11 18	0 48	9 16	2 14	23 32	0 10	6 23
S 3	15 40	26 37	5 9	5 21	2 20	22 54	5 13	10 19	1 36	11 15	0 48	9 19	2 14	23 32	0 10	6 22
M 4	15 58	24 14	5 16	5 23	2 29	22 34	5 3	10 4	1 37	11 12	0 48	9 21	2 14	23 32	0 10	6 22
T 5	16 15	20 49	5 10	5 27	2 37	22 14	4 53	9 48	1 38	11 9	0 48	9 24	2 15	23 32	0 10	6 21
W 6	16 32	16 35	4 51	5 33	2 44	21 53	4 42	9 32	1 39	11 6	0 49	9 27	2 15	23 33	0 10	6 21
T 7	16 49	11 42	4 19	5 41	2 50	21 31	4 30	9 16	1 39	11 3	0 49	9 29	2 15	23 33	0 10	6 20
F 8	17 5	6 19	3 35	5 51	2 56	21 8	4 18	8 59	1 40	11 1	0 49	9 32	2 15	23 33	0 10	6 20
S 9	17 21	0 36	2 41	6 4	3 1	20 45	4 5	8 43	1 41	10 58	0 49	9 34	2 15	23 33	0 10	6 19
S 10	17 37	5n15	1 38	6 18	3 5	20 22	3 52	8 27	1 42	10 55	0 49	9 37	2 15	23 33	0 10	6 19
M 11	17 53	11 3	0 29	6 34	3 8	19 58	3 38	8 11	1 42	10 52	0 50	9 39	2 15	23 33	0 10	6 18
T 12	18 8	16 30	0n44	6 52	3 10	19 34	3 25	7 54	1 43	10 50	0 50	9 42	2 15	23 33	0 10	6 18
W 13	18 23	21 17	1 56	7 11	3 12	19 10	3 11	7 38	1 44	10 47	0 50	9 44	2 15	23 33	0 10	6 17
T 14	18 38	25 0	3 2	7 32	3 13	18 47	2 56	7 21	1 45	10 45	0 50	9 46	2 15	23 33	0 10	6 17
F 15	18 52	27 17	3 59	7 55	3 13	18 23	2 42	7 5	1 45	10 42	0 51	9 49	2 15	23 33	0 10	6 16
S 16	19 6	27 50	4 41	8 19	3 13	18 0	2 28	6 48	1 46	10 40	0 51	9 51	2 15	23 33	0 10	6 16
S 17	19 20	26 32	5 7	8 44	3 12	17 37	2 13	6 32	1 47	10 38	0 51	9 54	2 15	23 33	0 10	6 15
M 18	19 33	23 32	5 14	9 10	3 10	17 15	1 59	6 15	1 48	10 35	0 51	9 56	2 15	23 34	0 10	6 15
T 19	19 46	19 6	5 2	9 38	3 8	16 54	1 44	5 59	1 48	10 33	0 52	9 58	2 15	23 34	0 10	6 15
W 20	19 59	13 38	4 31	10 7	3 5	16 33	1 30	5 42	1 49	10 31	0 52	10 1	2 16	23 34	0 10	6 14
T 21	20 11	7 30	3 44	10 37	3 1	16 13	1 16	5 25	1 50	10 29	0 52	10 3	2 16	23 34	0 10	6 14
F 22	20 23	1 2	2 44	11 8	2 57	15 54	1 2	5 8	1 50	10 27	0 52	10 5	2 16	23 34	0 10	6 13
S 23	20 35	5s24	1 35	11 39	2 53	15 36	0 49	4 52	1 51	10 25	0 53	10 8	2 16	23 34	0 10	6 13
S 24	20 46	11 31	0 22	12 12	2 47	15 20	0 36	4 35	1 52	10 23	0 53	10 10	2 16	23 34	0 10	6 13
M 25	20 57	17 1	0s52	12 45	2 41	15 4	0 23	4 18	1 53	10 21	0 53	10 12	2 16	23 34	0 10	6 12
T 26	21 7	21 37	2 1	13 19	2 35	14 49	0 10	4 1	1 53	10 19	0 53	10 15	2 16	23 34	0 10	6 12
W 27	21 18	25 4	3 3	13 53	2 28	14 35	0s 2	3 45	1 54	10 17	0 54	10 17	2 16	23 34	0 11	6 12
T 28	21 27	27 10	3 54	14 28	2 21	14 22	0 14	3 28	1 54	10 15	0 54	10 19	2 16	23 34	0 11	6 11
F 29	21 37	27 50	4 33	15 3	2 13	14 11	0 26	3 11	1 55	10 14	0 54	10 21	2 16	23 34	0 11	6 11
S 30	21 46	27 5	4 58	15 39	2 5	14 1	0 37	2 54	1 56	10 12	0 54	10 23	2 17	23 35	0 11	6 11
S 31	21n55	25s 4	5s10	16n14	1s56	13n51	0s48	2s37	1s56	10s11	0s55	10n25	2s17	23n35	0n11	6s10

Julian Day Number = 2494033.5, Delta T = 101.29 sec
Ecliptic obliquity = 23°25'34, Nutation = - 0°00'11, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 26°21'56, Lahiri = 25°28'57

ASTRODIENST EPHEMERIS for the year 2116

geocentric

JUNE 2116

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	16 38 46	10II46'28	12≈30	23812	9828	28K36	6H 0	3817	27II29	19R43	19834	4R36	3829	20≈13	24K 8	M 1
T 2	16 42 42	11°43'59	24°24	25° 1	9°35	29°20	6° 5	3°24	27°32	19D42	19°35	4833	3°25	20°20	24° 9	T 2
W 3	16 46 39	12°41'30	6H16	26°52	9°45	0Y 4	6° 9	3°30	27°36	19°42	19°36	4°31	3°22	20°27	24°10	W 3
T 4	16 50 36	13°39'00	18°12	28°45	9°56	0°47	6°13	3°37	27°39	19°41	19°37	4°D31	3°19	20°33	24°12	T 4
F 5	16 54 32	14°36'29	0Y17	0II40	10°10	1°31	6°17	3°43	27°43	19°40	19°39	4°32	3°16	20°40	24°13	F 5
S 6	16 58 29	15°33'57	12°35	2°38	10°26	2°14	6°21	3°50	27°46	19°39	19°40	4°34	3°13	20°47	24°14	S 6
S 7	17 2 25	16°31'24	25°11	4°38	10°44	2°58	6°25	3°56	27°50	19°38	19°41	4°35	3°10	20°54	24°15	S 7
M 8	17 6 22	17°28'51	88 8	6°39	11° 3	3°41	6°28	4° 2	27°53	19°38	19°42	4°R35	3° 6	21° 0	24°16	M 8
T 9	17 10 18	18°26'18	21°29	8°43	11°24	4°24	6°31	4° 9	27°57	19°37	19°44	4°34	3° 3	21° 7	24°17	T 9
W10	17 14 15	19°23'43	5II19	10°48	11°47	5° 7	6°34	4°15	28° 0	19°36	19°45	4°31	3° 0	21°14	24°18	W10
T 11	17 18 11	20°21'08	19°22	12°55	12°12	5°51	6°37	4°21	28° 4	19°36	19°46	4°26	2°57	21°21	24°19	T 11
F 12	17 22 8	21°18'32	3847	15° 4	12°39	6°34	6°40	4°27	28° 7	19°35	19°47	4°19	2°54	21°27	24°20	F 12
S 13	17 26 5	22°15'56	18°24	17°14	13° 6	7°17	6°42	4°33	28°11	19°35	19°48	4°12	2°50	21°34	24°21	S 13
S 14	17 30 1	23°13'18	38 6	19°24	13°36	8° 0	6°45	4°39	28°14	19°34	19°50	4° 5	2°47	21°41	24°21	S 14
M15	17 33 58	24°10'39	17°45	21°36	14° 7	8°43	6°47	4°45	28°18	19°34	19°51	3°59	2°44	21°47	24°22	M15
T 16	17 37 54	25° 8'00	2H16	23°47	14°39	9°25	6°49	4°50	28°22	19°33	19°52	3°55	2°41	21°54	24°23	T 16
W17	17 41 51	26° 5'19	16°33	25°59	15°12	10° 8	6°50	4°56	28°25	19°33	19°53	3°53	2°38	22° 1	24°23	W17
T 18	17 45 47	27° 2'38	0D35	28°11	15°47	10°51	6°52	5° 2	28°29	19°32	19°54	3°D52	2°35	22° 8	24°24	T 18
F 19	17 49 44	27°59'55	14°21	0823	16°23	11°33	6°53	5° 8	28°32	19°32	19°55	3°53	2°31	22°14	24°24	F 19
S 20	17 53 40	28°57'12	27°51	2°34	17° 0	12°16	6°55	5°13	28°36	19°32	19°56	3°R54	2°28	22°21	24°25	S 20
S 21	17 57 37	29°54'28	11M 8	4°44	17°39	12°58	6°55	5°19	28°39	19°31	19°57	3°54	2°25	22°28	24°25	S 21
M22	18 1 34	0851'43	24°12	6°53	18°18	13°41	6°56	5°24	28°43	19°31	19°58	3°52	2°22	22°34	24°25	M22
T 23	18 5 30	1°48'58	7K 4	9° 0	18°59	14°23	6°57	5°29	28°47	19°31	20° 0	3°48	2°19	22°41	24°26	T 23
W24	18 9 27	2°46'12	9°45	11° 7	19°40	15° 5	6°57	5°35	28°50	19°30	20° 1	3°41	2°16	22°48	24°26	W24
T 25	18 13 23	3°43'26	2815	13°11	20°23	15°47	6°57	5°40	28°54	19°30	20° 2	3°32	2°12	22°55	24°26	T 25
F 26	18 17 20	4°40'39	14°35	15°14	21° 6	16°29	6°R57	5°45	28°57	19°30	20° 3	3°21	2° 9	23° 1	24°26	F 26
S 27	18 21 16	5°37'52	26°46	17°15	21°50	17°11	6°57	5°50	29° 1	19°30	20° 4	3°10	2° 6	23° 8	24°R26	S 27
S 28	18 25 13	6°35'05	8≈48	19°14	22°36	17°53	6°57	5°55	29° 5	19°30	20° 5	2°59	2° 3	23°15	24°26	S 28
M29	18 29 10	7°32'17	20°44	21°11	23°22	18°35	6°56	6° 0	29° 8	19°30	20° 6	2°50	2° 0	23°21	24°26	M29
T 30	18 33 6	8≈29'30	2K36	23≈6	248 9	19Y17	6H56	68 5	29II12	19D30	208 7	2842	1856	23≈28	24K26	T 30

Day	☉	☾	♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉		
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	lat	
M 1	22n 3	21s58	5s 8	16n50	1s47	13n43	0s58	2s21	1s57	10s 9	0s55	10n28	2s17	23n35	0n11	6s10	1n40	3n 6	15s 2	13n 3	12n40	19s24	1n41	4n22
T 2	22 11	17 59	4 52	17 26	1 38	13 36	1 8	2 4	1 58	10 8	0 55	10 30	2 17	23 35	0 11	6 10	1 40	3 6	15 3	13 2	12 39	19 22	1 42	4 23
W 3	22 18	13 18	4 25	18 1	1 28	13 30	1 18	1 47	1 58	10 6	0 55	10 32	2 17	23 35	0 11	6 9	1 40	3 7	15 3	13 1	12 38	19 20	1 43	4 23
T 4	22 26	8 7	3 45	18 36	1 18	13 25	1 27	1 30	1 59	10 5	0 56	10 34	2 17	23 35	0 11	6 9	1 40	3 7	15 3	13 1	12 37	19 17	1 43	4 23
F 5	22 32	2 34	2 55	19 11	1 7	13 21	1 36	1 14	1 59	10 4	0 56	10 36	2 17	23 35	0 11	6 9	1 40	3 7	15 3	13 2	12 36	19 15	1 44	4 23
S 6	22 39	3n11	1 57	19 45	0 57	13 18	1 44	0 57	2 0	10 3	0 56	10 38	2 18	23 35	0 11	6 9	1 40	3 7	15 3	13 2	12 35	19 12	1 45	4 23
S 7	22 45	8 57	0 51	20 18	0 46	13 16	1 52	0 40	2 1	10 2	0 57	10 40	2 18	23 35	0 11	6 8	1 40	3 7	15 3	13 3	12 34	19 10	1 45	4 24
M 8	22 50	14 31	0n19	20 50	0 35	13 14	2 0	0 23	2 1	10 1	0 57	10 42	2 18	23 35	0 11	6 8	1 40	3 8	15 3	13 3	12 32	19 7	1 46	4 24
T 9	22 55	19 34	1 30	21 21	0 24	13 14	2 7	0 7	2 2	10 0	0 57	10 44	2 18	23 35	0 11	6 8	1 40	3 8	15 3	13 2	12 31	19 5	1 46	4 24
W10	23 0	23 45	2 38	21 50	0 13	13 14	2 14	0n10	2 2	9 59	0 57	10 46	2 18	23 35	0 11	6 8	1 40	3 8	15 3	13 1	12 30	19 2	1 47	4 24
T 11	23 5	26 37	3 38	22 18	0 2	13 16	2 21	0 26	2 3	9 58	0 58	10 47	2 18	23 35	0 11	6 7	1 40	3 8	15 4	12 59	12 29	19 0	1 47	4 24
F 12	23 8	27 47	4 25	22 44	0n 8	13 17	2 27	0 43	2 3	9 57	0 58	10 49	2 18	23 35	0 11	6 7	1 40	3 8	15 4	12 57	12 28	18 58	1 48	4 24
S 13	23 12	27 2	4 55	23 7	0 19	13 20	2 33	1 0	2 4	9 57	0 58	10 51	2 19	23 35	0 11	6 7	1 40	3 8	15 4	12 55	12 27	18 55	1 48	4 25
S 14	23 15	24 25	5 7	23 29	0 29	13 24	2 38	1 16	2 4	9 56	0 58	10 53	2 19	23 35	0 11	6 7	1 40	3 9	15 4	12 52	12 26	18 53	1 49	4 25
M15	23 18	20 14	4 58	23 48	0 39	13 28	2 44	1 32	2 5	9 56	0 59	10 55	2 19	23 36	0 11	6 7	1 40	3 9	15 4	12 50	12 25	18 50	1 49	4 25
T 16	23 20	14 52	4 30	24 5	0 49	13 32	2 49	1 49	2 5	9 55	0 59	10 57	2 19	23 36	0 11	6 7	1 39	3 9	15 4	12 49	12 24	18 48	1 50	4 25
W17	23 22	8 47	3 46	24 19	0 58	13 37	2 53	2 5	2 6	9 55	0 59	10 58	2 19	23 36	0 11	6 7	1 39	3 9	15 4	12 48	12 23	18 45	1 50	4 25
T 18	23 24	2 21	2 49	24 31	1 6	13 43	2 58	2 21	2 6	9 54	1 0	11 0	2 19	23 36	0 11	6 6	1 39	3 9	15 5	12 48	12 22	18 43	1 50	4 26
F 19	23 25	4s 4	1 43	24 40	1 14	13 49	3 2	2 38	2 7	9 54	1 0	11 2	2 20	23 36	0 11	6 6	1 39	3 9	15 5	12 48	12 21	18 40	1 51	4 26
S 20	23 25	10 12	0 32	24 45	1 21	13 56	3 6	2 54	2 7	9 54	1 0	11 3	2 20	23 36	0 11	6 6	1 39	3 9	15 5	12 49	12 19	18 38	1 51	4 26
S 21	23 26	15 46	0s39	24 48	1 28	14 3	3 9	3 10	2 7	9 54	1 0	11 5	2 20	23 36	0 11	6 6	1 39	3 9	15 5	12 49	12 18	18 35	1 51	4 26
M22	23 25	20 32	1 46	24 49	1 34	14 11	3 12	3 26	2 8	9 54	1 1	11 7	2 20	23 36	0 11	6 6	1 39	3 10	15 5	12 48	12 17	18 33	1 52	4 26
T 23	23 25	24 14	2 48	24 46	1 39	14 19	3 15	3 42	2 8	9 54	1 1	11 8	2 20	23 36	0 11	6 6	1 39	3 10	15 5	12 47	12 16	18 30	1 52	4 27
W24	23 24	26 40	3 39	24 41	1 44	14 28	3 18	3 58	2 9	9 54	1 1	11 10	2 20	23 36	0 11	6 6	1 39	3 10	15 6	12 44	12 15	18 28	1 52	4 27
T 25	23 22	27 44	4 20	24 33	1 47	14 36	3 21	4 14	2 9	9 54	1 2	11 11	2 21	23 36	0 11	6 6	1 39	3 10	15 6	12 41	12 14	18 25	1 53	4 27
F 26	23 21	27 23	4 47	24 23	1 50	14 45	3 23	4 29	2 9	9 55	1 2	11 13	2 21	23 36	0 11	6 6	1 39	3 10	15 6	12 38	12 13	18 23	1 53	4 27
S 27	23 18	25 43	5 1	24 11	1 53	14 55	3 25	4 45	2 10	9 55	1 2	11 14	2 21	23 36	0 11	6 6	1 39	3 10	15 6	12 34	12 12	18 20	1 53	4 27
S 28	23 16	22 53	5 1	23 56	1 54	15 4	3 27	5 1	2 10	9 55	1 2	11 16	2 21	23 36	0 11	6 6	1 39	3 10	15 6	12 30	12 11	18 17	1 53	4 27
M29	23 13	19 8	4 48	23 39	1 55	15 14	3 29	5 16	2 10	9 56	1 3	11 17	2 21	23 36	0 11	6 6	1 39	3 10	15 7	12 27	12 10	18 15	1 53	4 28
T 30	23n 9	14s38	4s23	23n20	1n55	15n24	3s30	5n32	2s11	9s56	1s 3	11n19	2s22	23n36	0n11	6s 6	1n39	3n10	15s 7	12n24	12n 9	18s12	1n53	4n28

ASTRODIENST EPHEMERIS for the year 2116

geocentric

JULY 2116

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Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	18 37 3	9 ⁵⁶ 26'42	14 ¹⁸ 27	24 ⁵⁹ 59	24 ⁸ 56	19 ⁵⁸ 58	6 ⁵⁵ 55	6 ⁸ 10	29 ¹¹ 15	19 ³⁰ D30	20 ⁸ 8	2 ³⁰ R37	1 ⁸ 53	23 ³³ 35	24 ²⁰ R26	W 1
T 2	18 40 59	10 ²³ 55	26 ²¹ 24	26 ⁵⁰ 24	25 ⁴⁵ 24	20 ⁴⁰ 40	6 ⁵⁴ 54	6 ¹⁴ 14	29 ¹⁹ 19	19 ³⁰ D30	20 ⁸ 8	2 ³⁰ R34	1 ⁵⁰ 50	23 ⁴² 42	24 ²⁴ R25	T 2
F 3	18 44 56	11 ²¹ 07	8 ⁵² 24	28 ³⁹ 24	26 ³⁴ 24	21 ²¹ 21	6 ⁵² 52	6 ¹⁹ 19	29 ²² 22	19 ³⁰ D30	20 ⁹ 9	2 ³⁰ D33	1 ⁴⁷ 47	23 ⁴⁸ 48	24 ²⁵ 25	F 3
S 4	18 48 52	12 ¹⁸ 20	20 ³⁹ 29	0 ²⁶ 26	27 ²⁴ 24	22 ² 2	6 ⁵¹ 51	6 ²⁴ 24	29 ²⁶ 26	19 ³⁰ D30	20 ¹⁰ 10	2 ³⁰ 33	1 ⁴⁴ 44	23 ⁵⁵ 55	24 ²⁵ 25	S 4
S 5	18 52 49	13 ¹⁵ 33	3 ⁸ 14	2 ¹¹ 11	28 ¹⁴ 14	22 ⁴⁴ 44	6 ⁴⁹ 49	6 ²⁸ 28	29 ²⁹ 29	19 ³⁰ D30	20 ¹¹ 11	2 ³⁰ R33	1 ⁴¹ 41	24 ² 2	24 ²⁴ 24	S 5
M 6	18 56 45	14 ¹² 46	16 ¹¹ 11	3 ⁵³ 53	29 ⁶ 6	23 ²⁵ 25	6 ⁴⁷ 47	6 ³² 32	29 ³³ 33	19 ³⁰ D30	20 ¹² 12	2 ³⁰ 32	1 ³⁷ 37	24 ⁸ 8	24 ²⁴ 24	M 6
T 7	19 0 42	15 ⁹ 59	29 ³⁵ 35	5 ³⁴ 34	29 ⁵⁷ 57	24 ⁶ 6	6 ⁴⁵ 45	6 ³⁷ 37	29 ³⁶ 36	19 ³⁰ D30	20 ¹³ 13	2 ³⁰ 30	1 ³⁴ 34	24 ¹⁵ 15	24 ²³ 23	T 7
W 8	19 4 39	16 ⁷ 13	13 ¹¹ 27	7 ¹² 12	0 ¹¹ 50	24 ⁴⁶ 46	6 ⁴³ 43	6 ⁴¹ 41	29 ⁴⁰ 40	19 ³¹ D31	20 ¹⁴ 14	2 ³⁰ 25	1 ³¹ 31	24 ²² 22	24 ²³ 23	W 8
T 9	19 8 35	17 ⁴ 27	27 ⁴⁶ 46	8 ⁴⁸ 48	1 ⁴³ 43	25 ²⁷ 27	6 ⁴⁰ 40	6 ⁴⁵ 45	29 ⁴³ 43	19 ³¹ D31	20 ¹⁵ 15	2 ³⁰ 17	1 ²⁸ 28	24 ²⁹ 29	24 ²² 22	T 9
F 10	19 12 32	18 ¹ 41	12 ²⁹ 29	10 ²² 22	2 ³⁶ 36	26 ⁸ 8	6 ³⁸ 38	6 ⁴⁹ 49	29 ⁴⁷ 47	19 ³¹ D31	20 ¹⁵ 15	2 ³⁰ 8	1 ²⁵ 25	24 ³⁵ 35	24 ²² 22	F 10
S 11	19 16 28	18 ⁵⁸ 56	27 ²⁷ 27	11 ⁵⁴ 54	3 ³⁰ 30	26 ⁴⁸ 48	6 ³⁵ 35	6 ⁵³ 53	29 ⁵⁰ 50	19 ³¹ D31	20 ¹⁶ 16	1 ⁵⁷ 57	1 ²² 22	24 ⁴² 42	24 ²¹ 21	S 11
S 12	19 20 25	19 ⁵⁶ 10	12 ³² 32	13 ²⁴ 24	4 ²⁵ 25	27 ²⁹ 29	6 ³² 32	6 ⁵⁷ 57	29 ⁵³ 53	19 ³² D32	20 ¹⁷ 17	1 ⁴⁷ 47	1 ¹⁸ 18	24 ⁴⁹ 49	24 ²⁰ 20	S 12
M13	19 24 21	20 ⁵³ 25	27 ³³ 33	14 ⁵¹ 51	5 ²⁰ 20	28 ⁹ 9	6 ²⁸ 28	7 ¹ 1	29 ⁵⁷ 57	19 ³² D32	20 ¹⁸ 18	1 ³⁸ 38	1 ¹⁵ 15	24 ⁵⁵ 55	24 ¹⁹ 19	M13
T 14	19 28 18	21 ⁵⁰ 39	12 ³² 32	16 ¹⁷ 17	6 ¹⁶ 16	28 ⁴⁹ 49	6 ²⁵ 25	7 ⁵ 5	0 ⁰ 0	19 ³³ D33	20 ¹⁹ 19	1 ³¹ 31	1 ¹² 12	25 ² 2	24 ¹⁸ 18	T 14
W15	19 32 14	22 ⁴⁷ 53	26 ⁵² 52	17 ⁴⁰ 40	7 ¹² 12	29 ²⁹ 29	6 ²¹ 21	7 ⁸ 8	0 ⁴ 4	19 ³³ D33	20 ¹⁹ 19	1 ²⁷ 27	1 ⁹ 9	25 ⁹ 9	24 ¹⁷ 17	W15
T 16	19 36 11	23 ⁴⁵ 07	10 ⁵⁹ 59	19 ¹ 1	8 ⁸ 8	0 ⁸ 8	6 ¹⁸ 18	7 ¹² 12	0 ⁷ 7	19 ³⁴ D34	20 ²⁰ 20	1 ²⁵ 25	1 ⁶ 6	25 ¹⁶ 16	24 ¹⁶ 16	T 16
F 17	19 40 8	24 ⁴² 21	24 ⁴⁵ 45	20 ¹⁹ 19	9 ⁵ 5	0 ⁴⁸ 48	6 ¹⁴ 14	7 ¹⁵ 15	0 ¹⁰ 10	19 ³⁴ D34	20 ²¹ 21	1 ²⁵ 25	1 ² 2	25 ²² 22	24 ¹⁵ 15	F 17
S 18	19 44 4	25 ³⁹ 36	8 ¹¹ 9	21 ³⁶ 36	10 ³ 3	1 ²⁸ 28	6 ¹⁰ 10	7 ¹⁹ 19	0 ¹⁴ 14	19 ³⁵ D35	20 ²¹ 21	1 ²⁵ 25	0 ⁵⁹ 59	25 ²⁹ 29	24 ¹⁴ 14	S 18
S 19	19 48 1	26 ³⁶ 50	21 ¹⁴ 14	22 ⁴⁹ 49	11 ⁰ 0	2 ⁷ 7	6 ⁵ 5	7 ²² 22	0 ¹⁷ 17	19 ³⁵ D35	20 ²² 22	1 ²⁴ 24	0 ⁵⁶ 56	25 ³⁶ 36	24 ¹³ 13	S 19
M20	19 51 57	27 ³⁴ 05	4 ¹ 3	24 ¹ 1	11 ⁵⁸ 58	2 ⁴⁶ 46	6 ¹ 1	7 ²⁵ 25	0 ²⁰ 20	19 ³⁶ D36	20 ²³ 23	1 ²¹ 21	0 ⁵³ 53	25 ⁴² 42	24 ¹² 12	M20
T 21	19 55 54	28 ³¹ 20	16 ³⁹ 39	25 ⁹ 9	12 ⁵⁷ 57	3 ²⁵ 25	5 ⁵⁶ 56	7 ²⁸ 28	0 ²⁴ 24	19 ³⁶ D36	20 ²³ 23	1 ¹⁵ 15	0 ⁵⁰ 50	25 ⁴⁹ 49	24 ¹¹ 11	T 21
W22	19 59 50	29 ²⁸ 35	29 ⁵ 5	26 ¹⁶ 16	13 ⁵⁶ 56	4 ⁴ 4	5 ⁵² 52	7 ³¹ 31	0 ²⁷ 27	19 ³⁷ D37	20 ²⁴ 24	1 ⁷ 7	0 ⁴⁷ 47	25 ⁵⁶ 56	24 ⁹ 9	W22
T 23	20 3 47	0 ²⁵ 50	11 ³ 21	27 ¹⁹ 19	14 ⁵⁵ 55	4 ⁴³ 43	5 ⁴⁷ 47	7 ³⁴ 34	0 ³⁰ 30	19 ³⁸ D38	20 ²⁴ 24	0 ⁵⁶ 56	0 ⁴³ 43	26 ² 2	24 ⁸ 8	T 23
F 24	20 7 43	1 ²³ 06	23 ²⁹ 29	28 ²⁰ 20	15 ⁵⁵ 55	5 ²¹ 21	5 ⁴¹ 41	7 ³⁷ 37	0 ³³ 33	19 ³⁸ D38	20 ²⁵ 25	0 ⁴³ 43	0 ⁴⁰ 40	26 ⁹ 9	24 ⁷ 7	F 24
S 25	20 11 40	2 ²⁰ 23	5 ³¹ 31	29 ¹⁷ 17	16 ⁵⁵ 55	6 ⁰ 0	5 ³⁶ 36	7 ⁴⁰ 40	0 ³⁶ 36	19 ³⁹ D39	20 ²⁵ 25	0 ²⁹ 29	0 ³⁷ 37	26 ¹⁶ 16	24 ⁵ 5	S 25
S 26	20 15 37	3 ¹⁷ 39	17 ²⁸ 28	0 ¹² 12	17 ⁵⁵ 55	6 ³⁸ 38	5 ³¹ 31	7 ⁴² 42	0 ⁴⁰ 40	19 ⁴⁰ D40	20 ²⁶ 26	0 ¹⁶ 16	0 ³⁴ 34	26 ²³ 23	24 ⁴ 4	S 26
M27	20 19 33	4 ¹⁴ 57	29 ²⁰ 20	1 ³ 3	18 ⁵⁶ 56	7 ¹⁶ 16	5 ²⁵ 25	7 ⁴⁵ 45	0 ⁴³ 43	19 ⁴¹ D41	20 ²⁶ 26	0 ⁴ 4	0 ³¹ 31	26 ²⁹ 29	24 ² 2	M27
T 28	20 23 30	5 ¹² 15	11 ¹ 11	1 ⁵² 52	19 ⁵⁷ 57	7 ⁵⁴ 54	5 ²⁰ 20	7 ⁴⁷ 47	0 ⁴⁶ 46	19 ⁴² D42	20 ²⁷ 27	29 ⁵⁴ 54	0 ²⁸ 28	26 ³⁶ 36	24 ¹ 1	T 28
W29	20 27 26	6 ⁹ 34	23 ¹ 1	2 ³⁶ 36	20 ⁵⁸ 58	8 ³² 32	5 ¹⁴ 14	7 ⁴⁹ 49	0 ⁴⁹ 49	19 ⁴³ D43	20 ²⁷ 27	29 ⁴⁷ 47	0 ²⁴ 24	26 ⁴³ 43	23 ⁵⁹ 59	W29
T 30	20 31 23	7 ⁶ 54	4 ⁵⁶ 56	3 ¹⁸ 18	22 ⁰ 0	9 ⁹ 9	5 ⁸ 8	7 ⁵² 52	0 ⁵² 52	19 ⁴⁴ D44	20 ²⁸ 28	29 ⁴³ 43	0 ²¹ 21	26 ⁴⁹ 49	23 ⁵⁸ 58	T 30
F 31	20 35 19	8 ¹ 15	16 ⁵⁸ 58	3 ¹¹ 11	23 ¹¹ 11	9 ⁴⁷ 47	5 ¹¹ 11	7 ⁵⁴ 54	0 ⁵⁵ 55	19 ⁴⁴ D44	20 ²⁸ 28	29 ⁴¹ 41	0 ¹⁸ 18	26 ⁵⁶ 56	23 ⁵⁶ 56	F 31

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	23n 5	9s36	3s47	23n 0	1n54	15n34	3s31	5n47	2s11	9s57	1s 3	11n20	2s22	23n36	0n11	6s 6	1n39	3n10	15s 7	12n22	12n 7	18s10	1n53	4n28			
T 2	23 1	4 12	3 0	22 38	1 53	15 45	3 32	6 2	2 11	9 58	1 4	11 21	2 22	23 36	0 11	6 6	1 39	3 10	15 7	12 21	12 6	18 7	1 54	4 28			
F 3	22 56	1n25	2 5	22 14	1 51	15 55	3 33	6 17	2 12	9 58	1 4	11 23	2 22	23 36	0 11	6 6	1 39	3 10	15 7	12 21	12 5	18 5	1 54	4 28			
S 4	22 51	7 6	1 3	21 49	1 48	16 6	3 34	6 32	2 12	9 59	1 4	11 24	2 22	23 36	0 11	6 6	1 39	3 10	15 8	12 21	12 4	18 2	1 54	4 29			
S 5	22 46	12 38	0n 4	21 22	1 45	16 17	3 34	6 47	2 12	10 0	1 4	11 25	2 23	23 36	0 11	6 6	1 39	3 10	15 8	12 21	12 3	17 59	1 54	4 29			
M 6	22 40	17 49	1 12	20 55	1 41	16 27	3 34	7 2	2 12	10 1	1 5	11 27	2 23	23 36	0 11	6 6	1 38	3 10	15 8	12 21	12 2	17 57	1 54	4 29			
T 7	22 34	22 18	2 18	20 26	1 37	16 38	3 34	7 17	2 13	10 2	1 5	11 28	2 23	23 36	0 11	6 7	1 38	3 10	15 8	12 20	12 1	17 54	1 54	4 29			
W 8	22 27	25 41	3 19	19 57	1 32	16 49	3 34	7 32	2 13	10 3	1 5	11 29	2 23	23 36	0 11	6 7	1 38	3 10	15 8	12 18	12 0	17 52	1 53	4 29			
T 9	22 20	27 33	4 9	19 26	1 26	17 0	3 34	7 46	2 13	10 4	1 5	11 30	2 24	23 36	0 11	6 7	1 38	3 10	15 9	12 16	11 59	17 49	1 53	4 30			
F 10	22 13	27 33	4 44	18 55	1 20	17 10	3 34	8 1	2 13	10 6	1 6	11 31	2 24	23 36	0 11	6 7	1 38	3 10	15 9	12 12	11 58	17 47	1 53	4 30			
S 11	22 5	25 33	5 0	18 23	1 14	17 21	3 33	8 15	2 13	10 7	1 6	11 32	2 24	23 36	0 11	6 7	1 38	3 10	15 9	12 9	11 56	17 44	1 53	4 30			
S 12	21 57	21 46	4 56	17 51	1 7	17 32	3 33	8 30	2 13	10 8	1 6	11 33	2 24	23 36	0 11	6 7	1 38	3 10	15 9	12 5	11 55	17 41	1 53	4 30			
M13	21 48	16 33	4 31	17 18	0 59	17 42	3 32	8 44	2 14	10 10	1 7	11 34	2 24	23 36	0 11	6 8	1 38	3 10	15 10	12 2	11 54	17 39	1 53	4 30			
T 14	21 39	10 26	3 48	16 45	0 51	17 53	3 31	8 58	2 14	10 11	1 7	11 35	2 25	23 37	0 11	6 8	1 38	3 10	15 10	12 0	11 53	17 36	1 53	4 30			
W15	21 30	3 52	2 52	16 12	0 42	18 3	3 30	9 12	2 14	10 13	1 7	11 36	2 25	23 37	0 11	6 8	1 38	3 10	15 10	11 58	11 52	17 33	1 52	4 31			
T 16	21 20	2s44	1 46	15 39	0 34	18 13	3 28	9 25	2 14	10 14	1 7	11 37	2 25	23 37	0 11	6 8	1 38	3 10	15 10	11 58	11 51	17 31	1 52	4 31			
F 17	21 10	9 2	0 35	15 5	0 24	18 23	3 27	9 39	2 14	10 16	1 8	11 38	2 25	23 37	0 11	6 8	1 38	3 10	15 11	11 58	11 50	17 28	1 52	4 31			
S 18	21 0	14 47	0s36	14 32	0 15	18 33	3 25	9 53	2 14	10 18	1 8	11 39	2 26	23 37	0 11	6 9	1 38	3 10	15 11	11 58	11 49	17 26	1 52	4 31			
S 19	20 49	19 43	1 43	13 58	0 5	18 43	3 24	10 6	2 14	10 20	1 8	11 40	2 26	23 37	0 11	6 9	1 38	3 10	15 11	11 57	11 48	17 23	1 51	4 31			
M20	20 38	23 37	2 43	13 25	0s 6	18 52	3 22	10 19	2 14	10 22	1 8	11 41	2 26	23 37	0 11	6 9	1 38	3 9	15 11	11 56	11 46	17 20	1 51	4 31			
T 21	20 27	26 19	3 34	12 52	0 16	19 2	3 20	10 33	2 14	10 24	1 9	11 41	2 26	23 37	0 11	6 9	1 38	3 9	15 12	11 54	11 45	17 18	1 51	4 32			
W22	20 15	27 40	4 15	12 20	0 27	19 11	3 18	10 46	2 14	10 26	1 9	11 42	2 27	23 37	0 11	6 10	1 38	3 9	15 12	11 51	11 44	17 15	1 50	4 32			
T 23	20 3	27 38	4 42	11 47	0 39	19 19	3 16	10 59	2 14	10 28	1 9	11 43	2 27	23 37	0 11	6 10	1 38	3 9	15 12	11 48	11 43	17 12	1 50	4 32			
F 24	19 50	26 16	4 57	11 16	0 50	19 28	3 14	11 11	2 14	10 30	1 9	11 43	2 27	23 37	0 11	6 10	1 38	3 9	15 13	11 43	11 42	17 10	1 50	4 32			
S 25	19 38	23 42	4 58	10 45	1 2	19 36	3 12	11 24	2 14	10 32	1 10	11 44	2 27	23 37	0 11	6 11	1 38	3 9	15 13	11 38	11 41	17 7	1 49	4 32			
S 26	19 25	20 8	4 46	10 14	1 14	19 44	3 9	11 37	2 14	10 34	1 10	11 45	2 28	23 37	0 11	6 11	1 37	3 9	15 13	11 34	11 40	17 4	1 49	4 32			
M27	19 11	15 47	4 22	9 45	1 26	19 52	3 7	11 49	2 14	10 36	1 10	11 45	2 28	23 37	0 11	6 11	1 37	3 9	15 13	11 29	11 39	17 2	1 48	4 32			
T 28	18 57	10 51	3 46	9 16	1 39	19 59	3 4	12 1	2 14	10 39	1 10	11 46	2 28	23 37	0 11	6 12	1 37	3 8	15 14	11 26	11 38	16 59	1 48	4 33			
W29	18 43	5 32	3 1	8 49	1 51	20 6	3 2	12 13	2 14	10 41	1 11	11 46	2 28	23 37	0 11	6 12	1 37	3 8	15 14	11 23	11 37	16 56	1 47	4 33			
T 30	18 29	0n 1	2 7	8 22	2 4	20 13	2 59	12 25	2 14	10 43	1 11	11 47	2 29	23 37	0 11	6 13	1 37	3 8	15 14	11 22	11 35	16 54	1 47	4 33			
F 31	18n14	5n38	1s 7	7n57	2s17	20n19	2s56	12n37	2s14	10s46	1s11	11n47	2s29	23n37	0n11	6s13	1n37	3n 8	15s14	11n21	11n34	16s51	1n46	4n33			

ASTRODIENST EPHEMERIS for the year 2116

geocentric

AUGUST 2116

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	20 39 16	9♌ 1'37	29♍12	4♎28	24♏4	10♐24	4♑R56	7♒56	0♓58	19♈45	20♉29	29♊D40	0♋15	27♌3	23♍R54	S 1
S 2	20 43 12	9°59'00	11♌44	4°58	25° 6	11° 1	4♎49	7°58	1° 1	19°46	20°29	29♊R40	0°12	27°10	23♋52	S 2
M 3	20 47 9	10°56'25	24°37	5°23	26° 9	11°38	4°43	8° 0	1° 4	19°47	20°29	29♍40	0° 8	27°16	23°50	M 3
T 4	20 51 6	11°53'50	7♏158	5°43	27°12	12°14	4°36	8° 1	1° 7	19°49	20°30	29°37	0° 5	27°23	23°49	T 4
W 5	20 55 2	12°51'17	21°47	5°59	28°15	12°50	4°29	8° 3	1°10	19°50	20°30	29°33	0° 2	27°30	23°47	W 5
T 6	20 58 59	13°48'44	6♌6	6°11	29°19	13°27	4°23	8° 5	1°13	19°51	20°30	29°26	29♍59	27°36	23°45	T 6
F 7	21 2 55	14°46'13	20°51	6°17	0♓23	14° 3	4°16	8° 6	1°15	19°52	20°31	29°17	29°56	27°43	23°43	F 7
S 8	21 6 52	15°43'43	5♌57	6°R18	1°27	14°38	4° 9	8° 7	1°18	19°53	20°31	29° 7	29°53	27°50	23°41	S 8
S 9	21 10 48	16°41'15	21°13	6°13	2°31	15°14	4° 2	8° 9	1°21	19°54	20°31	28°57	29°49	27°57	23°39	S 9
M10	21 14 45	17°38'46	6♎28	6° 4	3°35	15°49	3°54	8°10	1°24	19°55	20°31	28°48	29°46	28° 3	23°37	M10
T 11	21 18 42	18°36'19	21°32	5°49	4°40	16°24	3°47	8°11	1°26	19°57	20°32	28°41	29°43	28°10	23°34	T 11
W12	21 22 38	19°33'53	6♌16	5°29	5°45	16°59	3°40	8°12	1°29	19°58	20°32	28°37	29°40	28°17	23°32	W12
T 13	21 26 35	20°31'28	20°36	5° 3	6°50	17°33	3°32	8°12	1°32	19°59	20°32	28°35	29°37	28°23	23°30	T 13
F 14	21 30 31	21°29'03	4♎28	4°32	7°55	18° 7	3°25	8°13	1°34	20° 1	20°32	28°D35	29°34	28°30	23°28	F 14
S 15	21 34 28	22°26'40	17°55	3°57	9° 1	18°41	3°17	8°14	1°37	20° 2	20°32	28°R36	29°30	28°37	23°25	S 15
S 16	21 38 24	23°24'17	0♓59	3°17	10° 6	19°15	3° 9	8°14	1°39	20° 3	20°32	28°35	29°27	28°43	23°23	S 16
M17	21 42 21	24°21'55	13°42	2°34	11°12	19°48	3° 2	8°14	1°42	20° 5	20°32	28°34	29°24	28°50	23°21	M17
T 18	21 46 17	25°19'35	26°11	1°47	12°18	20°22	2°54	8°15	1°44	20° 6	20°32	28°30	29°21	28°57	23°18	T 18
W19	21 50 14	26°17'15	8♌26	0°57	13°25	20°55	2°46	8°15	1°47	20° 8	20°32	28°23	29°18	29° 4	23°16	W19
T 20	21 54 11	27°14'56	20°33	0° 6	14°31	21°27	2°39	8°R15	1°49	20° 9	20°R33	28°14	29°14	29°10	23°14	T 20
F 21	21 58 7	28°12'39	2♌33	29♌15	15°38	21°59	2°31	8°15	1°52	20°11	20°33	28° 4	29°11	29°17	23°11	F 21
S 22	22 2 4	29°10'23	14°28	28°23	16°44	22°31	2°23	8°15	1°54	20°12	20°32	27°53	29° 8	29°24	23° 9	S 22
S 23	22 6 0	0♎8'08	26°21	27°33	17°51	23° 3	2°15	8°15	1°56	20°14	20°32	27°42	29° 5	29°30	23° 6	S 23
M24	22 9 57	1° 5'54	8♋12	26°45	18°58	23°35	2° 7	8°14	1°58	20°15	20°32	27°32	29° 2	29°37	23° 4	M24
T 25	22 13 53	2° 3'42	20° 3	26° 1	20° 6	24° 6	1°59	8°14	2° 0	20°17	20°32	27°24	28°59	29°44	23° 1	T 25
W26	22 17 50	3° 1'31	1♍57	25°21	21°13	24°37	1°51	8°13	2° 3	20°19	20°32	27°19	28°55	29°51	22°59	W26
T 27	22 21 46	3°59'22	13°56	24°46	22°21	25° 7	1°43	8°12	2° 5	20°20	20°32	27°16	28°52	29°57	22°56	T 27
F 28	22 25 43	4°57'15	26° 2	24°17	23°29	25°37	1°36	8°12	2° 7	20°22	20°32	27°D15	28°49	0♋4	22°53	F 28
S 29	22 29 39	5°55'09	8♌20	23°55	24°36	26° 7	1°28	8°11	2° 9	20°24	20°32	27°15	28°46	0°11	22°51	S 29
S 30	22 33 36	6°53'05	20°53	23°40	25°45	26°36	1°20	8°10	2°11	20°25	20°31	27°16	28°43	0°17	22°48	S 30
M31	22 37 33	7♎51'03	3♏45	23°D34	26♌53	27♌5	1♋12	8♌9	2♌13	20♌27	20♋31	27°R17	28♍40	0♋24	22♋45	M31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	17n59	11n 9	0s 2	7n33	2s29	20n25	2s53	12n49	2s14	10s48	1s11	11n48	2s29	23n37	0n11	6s13
S 2	17 44	16 21	1n 3	7 10	2 42	20 30	2 50	13 0	2 13	10 51	1 11	11 48	2 29	23 37	0 11	6 14
M 3	17 19	20 59	2 8	6 50	2 54	20 35	2 47	13 12	2 13	10 53	1 12	11 48	2 30	23 37	0 11	6 14
T 4	17 13	24 43	3 8	6 31	3 7	20 40	2 44	13 23	2 13	10 56	1 12	11 49	2 30	23 37	0 11	6 15
W 5	16 57	27 9	3 59	6 14	3 19	20 44	2 41	13 34	2 13	10 59	1 12	11 49	2 30	23 37	0 11	6 15
T 6	16 40	27 54	4 37	5 59	3 31	20 48	2 38	13 45	2 13	11 1	1 12	11 49	2 30	23 36	0 11	6 16
F 7	16 24	26 43	4 58	5 46	3 42	20 51	2 34	13 56	2 12	11 4	1 12	11 49	2 31	23 36	0 11	6 16
S 8	16 7	23 36	4 59	5 35	3 53	20 54	2 31	14 7	2 12	11 7	1 13	11 50	2 31	23 36	0 11	6 17
S 9	15 50	18 50	4 39	5 27	4 3	20 57	2 28	14 17	2 12	11 9	1 13	11 50	2 31	23 36	0 11	6 17
M10	15 32	12 50	3 59	5 22	4 13	20 59	2 24	14 28	2 12	11 12	1 13	11 50	2 31	23 36	0 11	6 18
T 11	15 15	6 10	3 3	5 19	4 22	21 0	2 21	14 38	2 11	11 15	1 13	11 50	2 32	23 36	0 11	6 18
W12	14 57	0s43	1 56	5 19	4 29	21 1	2 17	14 48	2 11	11 18	1 13	11 50	2 32	23 36	0 11	6 19
T 13	14 38	7 23	0 42	5 22	4 36	21 2	2 13	14 58	2 11	11 21	1 13	11 50	2 32	23 36	0 11	6 19
F 14	14 20	13 30	0s31	5 28	4 41	21 2	2 10	15 8	2 10	11 24	1 13	11 50	2 32	23 36	0 11	6 20
S 15	14 1	18 47	1 41	5 37	4 45	21 1	2 6	15 18	2 10	11 27	1 14	11 50	2 33	23 36	0 11	6 20
S 16	13 43	23 0	2 43	5 49	4 48	21 0	2 2	15 27	2 9	11 29	1 14	11 50	2 33	23 36	0 11	6 21
M17	13 24	26 0	3 36	6 4	4 48	20 59	1 59	15 37	2 9	11 32	1 14	11 50	2 33	23 36	0 11	6 21
T 18	13 4	27 39	4 17	6 21	4 47	20 57	1 55	15 46	2 8	11 35	1 14	11 50	2 33	23 36	0 11	6 22
W19	12 45	27 54	4 46	6 41	4 45	20 55	1 51	15 55	2 8	11 38	1 14	11 49	2 34	23 36	0 11	6 22
T 20	12 25	26 49	5 1	7 4	4 40	20 52	1 47	16 4	2 8	11 41	1 14	11 49	2 34	23 36	0 11	6 23
F 21	12 5	24 29	5 3	7 28	4 33	20 48	1 43	16 13	2 7	11 44	1 15	11 49	2 34	23 36	0 11	6 24
S 22	11 45	21 7	4 51	7 53	4 25	20 44	1 40	16 21	2 6	11 47	1 15	11 49	2 34	23 36	0 12	6 24
S 23	11 25	16 55	4 27	8 20	4 14	20 39	1 36	16 30	2 6	11 50	1 15	11 48	2 35	23 36	0 12	6 25
M24	11 5	12 4	3 51	8 47	4 2	20 34	1 32	16 38	2 5	11 53	1 15	11 48	2 35	23 36	0 12	6 26
T 25	10 44	6 47	3 6	9 15	3 49	20 29	1 28	16 46	2 5	11 56	1 15	11 48	2 35	23 36	0 12	6 26
W26	10 23	1 14	2 11	9 42	3 34	20 22	1 24	16 54	2 4	11 59	1 15	11 47	2 35	23 36	0 12	6 27
T 27	10 2	4n24	1 11	10 9	3 18	20 16	1 20	17 2	2 3	12 2	1 15	11 47	2 36	23 36	0 12	6 27
F 28	9 41	9 57	0 6	10 35	3 1	20 8	1 16	17 10	2 3	12 4	1 15	11 46	2 36	23 36	0 12	6 28
S 29	9 20	15 13	0n59	10 59	2 43	20 0	1 12	17 18	2 2	12 7	1 15	11 46	2 36	23 36	0 12	6 29
S 30	8 59	19 57	2 4	11 21	2 25	19 52	1 8	17 25	2 1	12 10	1 15	11 45	2 36	23 36	0 12	6 29
M31	8n37	23n54	3n 4	11n40	2s 6	19n43	1s 4	17n32	2s 1	12s13	1s15	11n45	2s37	23n36	0n12	6s30

Julian Day Number = 2494125.5, Delta T = 101.42 sec
 Ecliptic obliquity = 23°25'35, Nutation = - 0°00'08, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 26°22'09, Lahiri = 25°29'10

ASTRODIENST EPHEMERIS for the year 2116
geocentric

SEPTEMBER 2116

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	22 41 29	8 ^h 49'03	17 ^h 00	23 ^h 035	28 ^h 01	27 ^h 34	1 ^h R 4	8 ^h R 8	2 ^h 015	20 ^h 029	20 ^h R31	27 ^h R17	28 ^h Y36	0 ^h X31	22 ^h R43	T 1
W 2	22 45 26	9 ^h 47'05	0 ^h 042	23 ^h 44	29 ^h 10	28 ^h 02	0 ^h X57	8 ^h 06	2 ^h 16	20 ^h 31	20 ^h 031	27 ^h Y15	28 ^h 33	0 ^h 37	22 ^h X40	W 2
T 3	22 49 22	10 ^h 45'09	14 ^h 52	24 ^h 02	0 ^h 018	28 ^h 30	0 ^h 49	8 ^h 05	2 ^h 18	20 ^h 32	20 ^h 31	27 ^h 11	28 ^h 30	0 ^h 44	22 ^h 37	T 3
F 4	22 53 19	11 ^h 43'15	29 ^h 27	24 ^h 29	1 ^h 27	28 ^h 58	0 ^h 41	8 ^h 03	2 ^h 20	20 ^h 34	20 ^h 30	27 ^h 06	28 ^h 27	0 ^h 51	22 ^h 34	F 4
S 5	22 57 15	12 ^h 41'22	14 ^h 024	25 ^h 03	2 ^h 36	29 ^h 25	0 ^h 34	8 ^h 02	2 ^h 22	20 ^h 36	20 ^h 30	26 ^h 59	28 ^h 24	0 ^h 58	22 ^h 32	S 5
S 6	23 1 12	13 ^h 39'31	29 ^h 35	25 ^h 46	3 ^h 45	29 ^h 52	0 ^h 26	8 ^h 00	2 ^h 23	20 ^h 38	20 ^h 30	26 ^h 53	28 ^h 20	1 ^h 04	22 ^h 29	S 6
M 7	23 5 8	14 ^h 37'42	14 ^h 050	26 ^h 36	4 ^h 55	0 ^h 018	0 ^h 19	7 ^h 58	2 ^h 25	20 ^h 40	20 ^h 29	26 ^h 47	28 ^h 17	1 ^h 11	22 ^h 26	M 7
T 8	23 9 5	15 ^h 35'55	29 ^h 58	27 ^h 34	6 ^h 04	0 ^h 44	0 ^h 11	7 ^h 56	2 ^h 27	20 ^h 42	20 ^h 29	26 ^h 43	28 ^h 14	1 ^h 18	22 ^h 23	T 8
W 9	23 13 2	16 ^h 34'09	14 ^h 049	28 ^h 39	7 ^h 13	1 ^h 09	0 ^h 04	7 ^h 54	2 ^h 28	20 ^h 44	20 ^h 28	26 ^h 40	28 ^h 11	1 ^h 24	22 ^h 21	W 9
T 10	23 16 58	17 ^h 32'25	29 ^h 18	29 ^h 51	8 ^h 23	1 ^h 34	29 ^h 057	7 ^h 52	2 ^h 30	20 ^h 46	20 ^h 28	26 ^h D40	28 ^h 08	1 ^h 31	22 ^h 18	T 10
F 11	23 20 55	18 ^h 30'43	13 ^h 020	1 ^h 09	9 ^h 33	1 ^h 59	29 ^h 50	7 ^h 50	2 ^h 31	20 ^h 48	20 ^h 28	26 ^h 41	28 ^h 05	1 ^h 38	22 ^h 15	F 11
S 12	23 24 51	19 ^h 29'02	26 ^h 54	2 ^h 32	10 ^h 43	2 ^h 23	29 ^h 43	7 ^h 48	2 ^h 32	20 ^h 49	20 ^h 27	26 ^h 42	28 ^h 01	1 ^h 44	22 ^h 12	S 12
S 13	23 28 48	20 ^h 27'22	10 ^h 03	4 ^h 01	11 ^h 53	2 ^h 46	29 ^h 36	7 ^h 45	2 ^h 34	20 ^h 51	20 ^h 27	26 ^h 44	27 ^h 58	1 ^h 51	22 ^h 09	S 13
M14	23 32 44	21 ^h 25'45	22 ^h 49	5 ^h 34	13 ^h 03	3 ^h 09	29 ^h 29	7 ^h 43	2 ^h 35	20 ^h 53	20 ^h 26	26 ^h R44	27 ^h 55	1 ^h 58	22 ^h 07	M14
T 15	23 36 41	22 ^h 24'08	5 ^h 016	7 ^h 10	14 ^h 13	3 ^h 32	29 ^h 22	7 ^h 40	2 ^h 36	20 ^h 55	20 ^h 26	26 ^h 43	27 ^h 52	2 ^h 05	22 ^h 04	T 15
W16	23 40 37	23 ^h 22'34	17 ^h 29	8 ^h 51	15 ^h 23	3 ^h 54	29 ^h 16	7 ^h 38	2 ^h 37	20 ^h 57	20 ^h 25	26 ^h 41	27 ^h 49	2 ^h 11	22 ^h 01	W16
T 17	23 44 34	24 ^h 21'00	29 ^h 31	10 ^h 34	16 ^h 34	4 ^h 15	29 ^h 09	7 ^h 35	2 ^h 39	20 ^h 59	20 ^h 25	26 ^h 37	27 ^h 46	2 ^h 18	21 ^h 58	T 17
F 18	23 48 31	25 ^h 19'29	11 ^h 00	12 ^h 19	17 ^h 44	4 ^h 36	29 ^h 03	7 ^h 32	2 ^h 40	21 ^h 02	20 ^h 24	26 ^h 32	27 ^h 42	2 ^h 25	21 ^h 55	F 18
S 19	23 52 27	26 ^h 17'59	23 ^h 18	14 ^h 06	18 ^h 55	4 ^h 56	28 ^h 57	7 ^h 29	2 ^h 41	21 ^h 04	20 ^h 23	26 ^h 27	27 ^h 39	2 ^h 31	21 ^h 53	S 19
S 20	23 56 24	27 ^h 16'31	5 ^h 09	15 ^h 55	20 ^h 05	5 ^h 16	28 ^h 51	7 ^h 26	2 ^h 42	21 ^h 06	20 ^h 23	26 ^h 21	27 ^h 36	2 ^h 38	21 ^h 50	S 20
M21	0 0 20	28 ^h 15'05	17 ^h 02	17 ^h 45	21 ^h 16	5 ^h 36	28 ^h 45	7 ^h 23	2 ^h 43	21 ^h 08	20 ^h 22	26 ^h 17	27 ^h 33	2 ^h 45	21 ^h 47	M21
T 22	0 4 17	29 ^h 13'40	28 ^h 58	19 ^h 35	22 ^h 27	5 ^h 54	28 ^h 39	7 ^h 20	2 ^h 44	21 ^h 10	20 ^h 22	26 ^h 13	27 ^h 30	2 ^h 51	21 ^h 44	T 22
W23	0 8 13	0 ^h 02'18	11 ^h 00	21 ^h 26	23 ^h 38	6 ^h 12	28 ^h 34	7 ^h 17	2 ^h 44	21 ^h 12	20 ^h 21	26 ^h 11	27 ^h 26	2 ^h 58	21 ^h 41	W23
T 24	0 12 10	1 ^h 10'57	23 ^h 08	23 ^h 18	24 ^h 50	6 ^h 30	28 ^h 28	7 ^h 13	2 ^h 45	21 ^h 14	20 ^h 20	26 ^h D10	27 ^h 23	3 ^h 05	21 ^h 39	T 24
F 25	0 16 06	2 ^h 09'39	5 ^h 026	25 ^h 09	26 ^h 01	6 ^h 47	28 ^h 23	7 ^h 10	2 ^h 46	21 ^h 16	20 ^h 20	26 ^h 10	27 ^h 20	3 ^h 11	21 ^h 36	F 25
S 26	0 20 03	3 ^h 08'22	17 ^h 54	27 ^h 00	27 ^h 12	7 ^h 03	28 ^h 18	7 ^h 07	2 ^h 47	21 ^h 18	20 ^h 19	26 ^h 11	27 ^h 17	3 ^h 18	21 ^h 33	S 26
S 27	0 24 00	4 ^h 07'08	0 ^h 036	28 ^h 51	28 ^h 24	7 ^h 19	28 ^h 13	7 ^h 03	2 ^h 47	21 ^h 20	20 ^h 18	26 ^h 13	27 ^h 14	3 ^h 25	21 ^h 30	S 27
M28	0 27 56	5 ^h 05'56	13 ^h 35	0 ^h 041	29 ^h 35	7 ^h 34	28 ^h 08	6 ^h 59	2 ^h 48	21 ^h 23	20 ^h 17	26 ^h 14	27 ^h 11	3 ^h 32	21 ^h 28	M28
T 29	0 31 53	6 ^h 04'47	26 ^h 51	2 ^h 31	0 ^h 047	7 ^h 48	28 ^h 03	6 ^h 56	2 ^h 48	21 ^h 25	20 ^h 17	26 ^h 15	27 ^h 07	3 ^h 38	21 ^h 25	T 29
W30	0 35 49	7 ^h 03'39	10 ^h 029	4 ^h 020	1 ^h 059	8 ^h 02	27 ^h 058	6 ^h 052	2 ^h 49	21 ^h 27	20 ^h 16	26 ^h R15	27 ^h Y4	3 ^h 045	21 ^h X22	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	decl	lat
T 1	8n16	26n42	3n56	11n58	1s47	19n34	1s0	17n40	2s0	12s16	1s16	11n44	2s37	23n36	0n12	6s31	1n36	3n0	15s24	10n30	10n58	15s22	1n19	4n35			
W 2	7 54	28 2	4 36	12 12	1 29	19 24	0 56	17 47	1 59	12 19	1 16	11 43	2 37	23 36	0 12	6 32	1 36	2 59	15 24	10 29	10 57	15 19	1 18	4 35			
T 3	7 32	27 35	5 1	12 23	1 11	19 13	0 52	17 54	1 58	12 21	1 16	11 43	2 37	23 36	0 12	6 32	1 36	2 59	15 24	10 28	10 56	15 17	1 17	4 35			
F 4	7 10	25 16	5 8	12 32	0 53	19 2	0 49	18 0	1 57	12 24	1 16	11 42	2 38	23 36	0 12	6 33	1 36	2 59	15 24	10 26	10 55	15 14	1 16	4 35			
S 5	6 48	21 11	4 54	12 36	0 35	18 51	0 45	18 7	1 57	12 27	1 16	11 41	2 38	23 36	0 12	6 34	1 36	2 58	15 25	10 24	10 54	15 11	1 15	4 35			
S 6	6 25	15 40	4 20	12 38	0 19	18 38	0 41	18 13	1 56	12 30	1 16	11 41	2 38	23 36	0 12	6 34	1 36	2 58	15 25	10 21	10 53	15 8	1 14	4 35			
M 7	6 3	9 9	3 27	12 36	0 3	18 26	0 37	18 20	1 55	12 32	1 16	11 40	2 38	23 36	0 12	6 35	1 36	2 58	15 25	10 19	10 52	15 5	1 13	4 35			
T 8	5 40	2 9	2 20	12 30	0n12	18 13	0 33	18 26	1 54	12 35	1 16	11 39	2 38	23 36	0 12	6 36	1 36	2 57	15 26	10 18	10 50	15 2	1 12	4 35			
W 9	5 18	4s51	1 4	12 20	0 26	17 59	0 29	18 32	1 53	12 37	1 16	11 38	2 39	23 36	0 12	6 37	1 36	2 57	15 26	10 17	10 49	14 59	1 10	4 35			
T 10	4 55	11 27	0s14	12 7	0 39	17 45	0 26	18 38	1 52	12 40	1 16	11 37	2 39	23 36	0 12	6 37	1 36	2 57	15 26	10 17	10 48	14 57	1 9	4 35			
F 11	4 32	17 15	1 29	11 51	0 51	17 30	0 22	18 44	1 51	12 42	1 16	11 36	2 39	23 36	0 12	6 38	1 36	2 56	15 26	10 17	10 47	14 54	1 8	4 35			
S 12	4 10	22 0	2 37	11 31	1 1	17 15	0 18	18 50	1 50	12 45	1 16	11 35	2 39	23 36	0 12	6 39	1 36	2 56	15 27	10 18	10 46	14 51	1 7	4 35			
S 13	3 47	25 29	3 34	11 8	1 11	16 59	0 14	18 55	1 49	12 47	1 16	11 34	2 40	23 36	0 12	6 40	1 36	2 56	15 27	10 18	10 45	14 48	1 6	4 35			
M14	3 24	27 33	4 19	10 42	1 19	16 43	0 11	19 1	1 48	12 50	1 16	11 33	2 40	23 36	0 12	6 40	1 36	2 55	15 27	10 18	10 44	14 45	1 5	4 35			
T 15	3 1	28 9	4 50	10 13	1 27	16 27	0 7	19 6	1 47	12 52	1 16	11 32	2 40	23 36	0 12	6 41	1 36	2 55	15 27	10 18	10 43	14 42	1 4	4 35			
W16	2 38	27 22	5 8	9 41	1 33	16 10	0 3	19 11	1 45	12 54	1 16	11 31	2 40	23 36	0 12	6 42	1 36	2 54	15 28	10 17	10 41	14 39	1 2	4 35			
T 17	2 15	25 19	5 11	9 7	1 38	15 52	0n0	19 17	1 44	12 57	1 16	11 30	2 40	23 36	0 12	6 43	1 36	2 54	15 28	10 16	10 40	14 36	1 1	4 34			
F 18	1 51	22 10	5 1	8 31	1 43	15 34	0 4	19 22	1 43	12 59	1 16	11 29	2 41	23 36	0 12	6 43	1 36	2 54	15 28	10 14	10 39	14 34	1 0	4 34			
S 19	1 28	18 7	4 39	7 53	1 46	15 16	0 7	19 26	1 42	13 1	1 16	11 28	2 41	23 36	0 12	6 44	1 36	2 53	15 28	10 12	10 38	14 31	0 59	4 34			
S 20	1 5	13 24	4 4	7 13	1 48	14 57	0 11	19 31	1 40	13 3	1 16	11 27	2 41	23 36	0 12	6 45	1 36	2 53	15 29	10 10	10 37	14 28	0 58	4 34			
M21	0 42	8 10	3 18	6 31	1 50	14 37	0 14	19 36	1 39	13 5	1 15	11 26	2 41	23 36	0 12	6 46	1 36	2 53	15 29	10 8	10 36	14 25	0 57	4 34			
T 22	0 18	2 36	2 24	5 49	1 50	14 18	0 17	19 41	1 38	13 7	1 15	11 25	2 41	23 36	0 12	6 47	1 35	2 52	15 29	10 7	10 35	14 22	0 55	4 34			
W23	0s5	3n5	1 22	5 5	1 50	13 57	0 21	19 45	1 36	13 9	1 15	11 23	2 41	23 36	0 12	6 47	1 35	2 52	15 29	10 6	10 33	14 19	0 54	4 34			
T 24	0 28	8 44	0 17	4 20	1 49	13 37	0 24	19 49	1 35	13 11	1 15	11 22	2 42	23 36	0 12	6 48	1 35	2 51	15 30	10 6	10 32	14 16	0 53	4 34			
F 25	0 52	14 7	0n51	3 35	1 48	13 16	0 27	19 54	1 33	13 12	1 15	11 21	2 42	23 36	0 12	6 49	1 35	2 51	15 30	10 6	10 31	14 13	0 52	4 34			
S 26	1 15	19 2	1 57	2 49	1 46	12 54	0 30	19 58	1 32	13 14	1 15	11 20	2 42	23 36	0 12	6 50	1 35	2 51	15 30	10 6	10 30	14 10	0 51	4 34			
S 27	1 38	23 11	2 59	2 2	1 43	12 33	0 33	20 2	1 30	13 16	1 15	11 18	2 42	23 36	0 12	6 51	1 35	2 50	15 30	10 7	10 29	14 7	0 49	4 33			
M28	2 1	26 16	3 52	1 15	1 40	12 11	0 36	20 6	1 29	13 17	1 15	11 17	2 42	23 36	0 12	6 51	1 35	2 50	15 30	10 7	10 28	14 4	0 48	4 33			
T 29	2 25	27 58	4 35	0 29	1 36	11 48	0 39	20 10	1 27	13 19	1 15	11 16	2 42	23 36	0 12	6 52	1 35	2 50	15 31	10 8	10 27	14 1	0 47	4 33			
W30	2s48	28n 4	5n 4	0s18	1n32	11n25	0n42	20n14	1s26	13s20	1s15	11n14	2s43	23n36	0n12	6s53	1n35	2n49	15s31	10n 8	10n25	13s58	0n46	4n33			

ASTRODIENST EPHEMERIS for the year 2116
geocentric

OCTOBER 2116

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	0 39 46	8♂ 2'34	24♂28	6♂ 8	3♂11	8♂15	27°R54	6°R48	2♂49	21♂29	20°R15	26°R15	27°Y 1	3♂52	21°R20	T 1
F 2	0 43 42	9° 1'32	8♂47	7°56	4°23	8°27	27♂50	6♂44	2°50	21°31	20♂14	26°Y13	26°58	3°58	21♂17	F 2
S 3	0 47 39	10° 0'31	23°26	9°43	5°35	8°38	27°46	6°40	2°50	21°34	20°14	26°11	26°55	4° 5	21°15	S 3
S 4	0 51 35	10°59'33	8♂17	11°29	6°47	8°49	27°42	6°36	2°50	21°36	20°13	26° 9	26°51	4°12	21°12	S 4
M 5	0 55 32	11°58'37	23°15	13°14	7°59	8°59	27°38	6°32	2°50	21°38	20°12	26° 8	26°48	4°18	21° 9	M 5
T 6	0 59 29	12°57'43	8♂10	14°59	9°11	9° 8	27°35	6°28	2°51	21°40	20°11	26° 7	26°45	4°25	21° 7	T 6
W 7	1 3 25	13°56'51	22°55	16°42	10°24	9°17	27°32	6°24	2°51	21°42	20°10	26°D 6	26°42	4°32	21° 4	W 7
T 8	1 7 22	14°56'01	7♂23	18°25	11°36	9°24	27°29	6°19	2°R51	21°45	20° 9	26° 6	26°39	4°39	21° 2	T 8
F 9	1 11 18	15°55'13	21°28	20° 7	12°49	9°31	27°26	6°15	2°51	21°47	20° 8	26° 7	26°36	4°45	20°59	F 9
S 10	1 15 15	16°54'27	5♂ 9	21°48	14° 1	9°37	27°23	6°11	2°51	21°49	20° 8	26° 8	26°32	4°52	20°57	S 10
S 11	1 19 11	17°53'43	18°23	23°29	15°14	9°42	27°20	6° 6	2°50	21°51	20° 7	26° 9	26°29	4°59	20°54	S 11
M12	1 23 8	18°53'00	1♂15	25° 9	16°27	9°46	27°18	6° 2	2°50	21°54	20° 6	26° 9	26°26	5° 5	20°52	M12
T 13	1 27 4	19°52'20	13°45	26°47	17°40	9°50	27°16	5°57	2°50	21°56	20° 5	26°10	26°23	5°12	20°50	T 13
W14	1 31 1	20°51'41	25°59	28°26	18°53	9°53	27°14	5°53	2°50	21°58	20° 4	26°R10	26°20	5°19	20°47	W14
T 15	1 34 58	21°51'04	8♂ 1	0♂ 3	20° 6	9°54	27°12	5°48	2°50	22° 0	20° 3	26° 9	26°17	5°25	20°45	T 15
F 16	1 38 54	22°50'28	19°55	1°40	21°19	9°55	27°11	5°44	2°49	22° 2	20° 2	26° 9	26°13	5°32	20°43	F 16
S 17	1 42 51	23°49'55	1♂46	3°16	22°32	9°R55	27°10	5°39	2°49	22° 5	20° 1	26° 9	26°10	5°39	20°41	S 17
S 18	1 46 47	24°49'23	13°38	4°51	23°45	9°54	27° 8	5°34	2°48	22° 7	20° 0	26° 8	26° 7	5°45	20°38	S 18
M19	1 50 44	25°48'53	25°33	6°26	24°58	9°53	27° 8	5°30	2°48	22° 9	19°59	26°D 8	26° 4	5°52	20°36	M19
T 20	1 54 40	26°48'24	7°Y36	8° 0	26°12	9°50	27° 7	5°25	2°47	22°11	19°58	26° 8	26° 1	5°59	20°34	T 20
W21	1 58 37	27°47'58	19°48	9°33	27°25	9°47	27° 6	5°20	2°46	22°14	19°57	26°R 8	25°57	6° 6	20°32	W21
T 22	2 2 33	28°47'34	2♂11	11° 6	28°39	9°42	27° 6	5°15	2°46	22°16	19°56	26° 8	25°54	6°12	20°30	T 22
F 23	2 6 30	29°47'11	14°45	12°39	29°52	9°37	27°D 6	5°11	2°45	22°18	19°55	26° 8	25°51	6°19	20°28	F 23
S 24	2 10 26	0♂46'51	27°33	14°10	1♂ 6	9°31	27° 6	5° 6	2°44	22°20	19°54	26° 8	25°48	6°26	20°26	S 24
S 25	2 14 23	1°46'33	10♂34	15°41	2°19	9°24	27° 6	5° 1	2°43	22°23	19°53	26° 7	25°45	6°32	20°24	S 25
M26	2 18 20	2°46'18	23°49	17°12	3°33	9°16	27° 7	4°56	2°43	22°25	19°52	26° 6	25°42	6°39	20°22	M26
T 27	2 22 16	3°46'04	7♂18	18°42	4°47	9° 7	27° 7	4°51	2°42	22°27	19°51	26° 6	25°38	6°46	20°20	T 27
W28	2 26 13	4°45'53	21° 0	20°11	6° 1	8°57	27° 8	4°47	2°41	22°29	19°49	26° 5	25°35	6°52	20°19	W28
T 29	2 30 9	5°45'43	4♂56	21°40	7°14	8°47	27° 9	4°42	2°40	22°31	19°48	26°D 5	25°32	6°59	20°17	T 29
F 30	2 34 6	6°45'37	19° 4	23° 8	8°28	8°35	27°11	4°37	2°39	22°34	19°47	26° 5	25°29	7° 6	20°15	F 30
S 31	2 38 2	7♂45'32	3♂22	24♂35	9♂42	8♂23	27♂12	4♂32	2♂37	22♂36	19♂46	26°Y 6	25°Y26	7♂12	20♂13	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	3s11	26n23	5n15	1s 5	1n28	11n 2	0n45	20n17	1s24	13s22	1s15	11n13	2s43	23n36	0n12	6s54
F 2	3 35	23 0	5 8	1 52	1 23	10 38	0 48	20 21	1 22	13 23	1 15	11 12	2 43	23 36	0 12	6 55
S 3	3 58	18 7	4 41	2 39	1 18	10 15	0 50	20 25	1 20	13 25	1 15	11 10	2 43	23 36	0 12	6 56
S 4	4 21	12 5	3 55	3 25	1 13	9 50	0 53	20 28	1 19	13 26	1 14	11 9	2 43	23 36	0 12	6 56
M 5	4 44	5 19	2 52	4 11	1 7	9 26	0 56	20 31	1 17	13 27	1 14	11 7	2 43	23 36	0 12	6 57
T 6	5 7	1s45	1 38	4 57	1 2	9 1	0 58	20 35	1 15	13 28	1 14	11 6	2 43	23 36	0 12	6 58
W 7	5 30	8 38	0 18	5 42	0 56	8 36	1 1	20 38	1 13	13 29	1 14	11 4	2 43	23 36	0 12	6 59
T 8	5 53	14 57	1s 2	6 27	0 49	8 11	1 3	20 41	1 11	13 30	1 14	11 3	2 43	23 36	0 12	7 0
F 9	6 16	20 19	2 16	7 12	0 43	7 45	1 5	20 44	1 9	13 31	1 14	11 1	2 44	23 36	0 12	7 1
S 10	6 38	24 25	3 20	7 56	0 37	7 19	1 8	20 47	1 7	13 32	1 14	11 0	2 44	23 36	0 12	7 1
S 11	7 1	27 5	4 11	8 39	0 30	6 53	1 10	20 50	1 5	13 32	1 14	10 58	2 44	23 36	0 12	7 2
M12	7 24	28 13	4 48	9 22	0 23	6 27	1 12	20 52	1 2	13 33	1 13	10 57	2 44	23 36	0 13	7 3
T 13	7 46	27 51	5 10	10 4	0 17	6 1	1 14	20 55	1 0	13 34	1 13	10 55	2 44	23 36	0 13	7 4
W14	8 8	26 8	5 17	10 45	0 10	5 34	1 16	20 58	0 58	13 34	1 13	10 54	2 44	23 36	0 13	7 5
T 15	8 31	23 15	5 10	11 26	0 3	5 7	1 18	21 0	0 56	13 35	1 13	10 52	2 44	23 36	0 13	7 5
F 16	8 53	19 25	4 40	12 7	0s 4	4 40	1 20	21 3	0 53	13 35	1 13	10 51	2 44	23 36	0 13	7 6
S 17	9 15	14 51	4 18	12 46	0 11	4 13	1 21	21 5	0 51	13 35	1 13	10 49	2 44	23 36	0 13	7 7
S 18	9 36	9 44	3 35	13 25	0 18	3 45	1 23	21 7	0 48	13 36	1 13	10 47	2 44	23 36	0 13	7 8
M19	9 58	4 14	2 42	14 3	0 25	3 18	1 25	21 10	0 46	13 36	1 13	10 46	2 44	23 36	0 13	7 9
T 20	10 20	1n28	1 41	14 40	0 32	2 50	1 26	21 12	0 43	13 36	1 12	10 44	2 44	23 36	0 13	7 10
W21	10 41	7 12	0 35	15 16	0 38	2 22	1 28	21 14	0 41	13 36	1 12	10 43	2 44	23 37	0 13	7 10
T 22	11 2	12 45	0n33	15 52	0 45	1 54	1 29	21 16	0 38	13 36	1 12	10 41	2 44	23 37	0 13	7 11
F 23	11 23	17 52	1 41	16 27	0 52	1 26	1 30	21 18	0 35	13 36	1 12	10 40	2 44	23 37	0 13	7 12
S 24	11 44	22 17	2 46	17 1	0 59	0 58	1 31	21 20	0 33	13 36	1 12	10 38	2 44	23 37	0 13	7 13
S 25	12 5	25 41	3 42	17 34	1 5	0 30	1 33	21 21	0 30	13 35	1 12	10 36	2 44	23 37	0 13	7 14
M26	12 26	27 45	4 28	18 6	1 12	0 1	1 34	21 23	0 27	13 35	1 11	10 35	2 44	23 37	0 13	7 14
T 27	12 46	28 13	5 0	18 38	1 18	0s27	1 35	21 24	0 24	13 35	1 11	10 33	2 44	23 37	0 13	7 15
W28	13 6	26 59	5 16	19 8	1 24	0 56	1 35	21 26	0 21	13 34	1 11	10 32	2 44	23 37	0 13	7 16
T 29	13 26	24 5	5 13	19 37	1 30	1 24	1 36	21 27	0 19	13 34	1 11	10 30	2 44	23 37	0 13	7 17
F 30	13 46	19 43	4 52	20 6	1 36	1 52	1 37	21 28	0 16	13 33	1 11	10 28	2 44	23 37	0 13	7 18
S 31	14s 5	14n11	4n12	20s33	1s42	2s21	1n38	21n29	0s13	13s33	1s11	10n27	2s44	23n37	0n13	7s18

Julian Day Number = 2494186.5, Delta T = 101.51 sec
Ecliptic obliquity = 23°25'35", Nutation = - 0°00'08", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 26°22'18", Lahiri = 25°29'18"

ASTRODIENST EPHEMERIS for the year 2116

geocentric

NOVEMBER 2116

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	2 41 59	8♈45'29	17♏49	26♌2	10♊56	8°R10	27°14	4°R27	2°R36	22°38	19°R45	26°V7	25°V23	7♏19	20°R12	S 1
M 2	2 45 56	9°45'29	2♊20	27°29	12°11	7♈56	27°16	4♊23	2♊35	22°40	19°R44	26°8	25°19	7°26	20°R10	M 2
T 3	2 49 52	10°45'30	16°50	28°54	13°25	7°41	27°18	4°18	2°34	22°42	19°43	26°8	25°16	7°32	20°9	T 3
W 4	2 53 49	11°45'34	1♈15	0♏19	14°39	7°26	27°20	4°13	2°32	22°44	19°42	26°R8	25°13	7°39	20°7	W 4
T 5	2 57 45	12°45'39	15°27	1°43	15°53	7°10	27°23	4°8	2°31	22°47	19°41	26°8	25°10	7°46	20°6	T 5
F 6	3 1 42	13°45'47	29°24	3°7	17°7	6°53	27°25	4°4	2°30	22°49	19°40	26°6	25°7	7°53	20°4	F 6
S 7	3 5 38	14°45'56	13♏1	4°29	18°22	6°35	27°28	3°59	2°28	22°51	19°38	26°4	25°3	7°59	20°3	S 7
S 8	3 9 35	15°46'07	26°16	5°51	19°36	6°17	27°31	3°54	2°27	22°53	19°37	26°1	25°0	8°6	20°2	S 8
M 9	3 13 31	16°46'20	9♊10	7°11	20°51	5°58	27°35	3°50	2°25	22°55	19°36	25°58	24°57	8°13	20°1	M 9
T 10	3 17 28	17°46'34	21°44	8°31	22°5	5°39	27°38	3°45	2°24	22°57	19°35	25°55	24°54	8°19	19°59	T 10
W11	3 21 25	18°46'49	4♏0	9°49	23°19	5°19	27°42	3°40	2°22	22°59	19°34	25°53	24°51	8°26	19°58	W11
T 12	3 25 21	19°47'06	16°3	11°6	24°34	4°59	27°46	3°36	2°20	23°1	19°33	25°D52	24°48	8°33	19°57	T 12
F 13	3 29 18	20°47'25	27°57	12°22	25°49	4°38	27°50	3°31	2°19	23°3	19°32	25°52	24°44	8°39	19°56	F 13
S 14	3 33 14	21°47'45	9♏48	13°35	27°3	4°17	27°54	3°27	2°17	23°5	19°31	25°53	24°41	8°46	19°55	S 14
S 15	3 37 11	22°48'06	21°39	14°47	28°18	3°56	27°58	3°23	2°15	23°7	19°29	25°55	24°38	8°53	19°54	S 15
M16	3 41 7	23°48'28	3♏37	15°57	29°32	3°34	28°3	3°18	2°13	23°9	19°28	25°57	24°35	8°59	19°54	M16
T 17	3 45 4	24°48'52	15°44	17°4	0♈47	3°12	28°8	3°14	2°11	23°11	19°27	25°58	24°32	9°6	19°53	T 17
W18	3 49 0	25°49'18	28°5	18°9	2°2	2°50	28°13	3°10	2°9	23°13	19°26	25°R59	24°29	9°13	19°52	W18
T 19	3 52 57	26°49'45	10♊42	19°11	3°16	2°28	28°18	3°5	2°8	23°15	19°25	25°58	24°25	9°19	19°51	T 19
F 20	3 56 54	27°50'13	23°36	20°9	4°31	2°6	28°23	3°1	2°6	23°17	19°24	25°55	24°22	9°26	19°51	F 20
S 21	4 0 50	28°50'43	6♈47	21°3	5°46	1°44	28°29	2°57	2°4	23°19	19°23	25°51	24°19	9°33	19°50	S 21
S 22	4 4 47	29°51'15	20°14	21°53	7°1	1°21	28°34	2°53	2°2	23°21	19°22	25°46	24°16	9°40	19°50	S 22
M23	4 8 43	0♏51'48	3♊55	22°38	8°16	0°59	28°40	2°49	1°59	23°23	19°21	25°40	24°13	9°46	19°49	M23
T 24	4 12 40	1°52'23	17°47	23°17	9°31	0°37	28°46	2°45	1°57	23°25	19°19	25°34	24°9	9°53	19°49	T 24
W25	4 16 36	2°53'00	1♈47	23°50	10°46	0°15	28°52	2°42	1°55	23°26	19°18	25°29	24°6	10°0	19°48	W25
T 26	4 20 33	3°53'38	15°52	24°16	12°1	29♊54	28°59	2°38	1°53	23°28	19°17	25°26	24°3	10°6	19°48	T 26
F 27	4 24 29	4°54'18	29°59	24°35	13°16	29°32	29°5	2°34	1°51	23°30	19°16	25°D25	24°0	10°13	19°48	F 27
S 28	4 28 26	5°54'59	14♏8	24°44	14°31	29°11	29°12	2°31	1°49	23°32	19°15	25°25	23°57	10°20	19°48	S 28
S 29	4 32 23	6°55'42	28°16	24°R45	15°46	28°50	29°19	2°27	1°46	23°34	19°14	25°26	23°54	10°26	19°48	S 29
M30	4 36 19	7♏56'27	12♊22	24♏35	17♈1	28♊30	29°26	2♊24	1°44	23°35	19♊13	25°V28	23°V50	10♏33	19♏48	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	decl	lat	decl	lat
S 1	14s25	7n50	3n17	21s 0	1s48	2s49	1n38	21n30	0s10	13s32	1s11	10n25	2s44	23n37	0n13	7s19	1n36	2n38	15s35	10n 5	9n49	12s22	0n12	4n26					
M 2	14 44	1 2	2 8	21 25	1 53	3 18	1 39	21 31	0 6	13 31	1 10	10 24	2 44	23 37	0 13	7 20	1 36	2 37	15 35	10 5	9 47	12 19	0 11	4 26					
T 3	15 3	5s49	0 51	21 50	1 59	3 46	1 39	21 32	0 3	13 30	1 10	10 22	2 44	23 37	0 13	7 21	1 36	2 37	15 35	10 5	9 46	12 16	0 11	4 26					
W 4	15 21	12 20	0s28	22 13	2 4	4 15	1 39	21 32	0 0	13 29	1 10	10 21	2 44	23 37	0 13	7 22	1 36	2 37	15 35	10 5	9 45	12 13	0 10	4 26					
T 5	15 40	18 8	1 45	22 35	2 8	4 43	1 40	21 33	0n 3	13 28	1 10	10 19	2 44	23 37	0 13	7 22	1 36	2 37	15 35	10 5	9 44	12 10	0 9	4 25					
F 6	15 58	22 50	2 53	22 56	2 13	5 11	1 40	21 33	0 6	13 27	1 10	10 18	2 44	23 37	0 13	7 23	1 36	2 36	15 35	10 4	9 43	12 7	0 8	4 25					
S 7	16 16	26 10	3 51	23 16	2 17	5 39	1 40	21 33	0 9	13 26	1 10	10 16	2 44	23 37	0 13	7 24	1 36	2 36	15 35	10 4	9 42	12 4	0 7	4 25					
S 8	16 33	27 56	4 34	23 35	2 21	6 7	1 40	21 33	0 12	13 25	1 9	10 15	2 44	23 37	0 13	7 25	1 36	2 36	15 35	10 2	9 40	12 1	0 7	4 25					
M 9	16 50	28 7	5 1	23 53	2 25	6 35	1 40	21 33	0 16	13 24	1 9	10 13	2 44	23 37	0 13	7 25	1 36	2 35	15 35	10 1	9 39	11 58	0 6	4 24					
T 10	17 7	26 50	5 14	24 9	2 28	7 3	1 40	21 33	0 19	13 22	1 9	10 12	2 43	23 37	0 13	7 26	1 36	2 35	15 35	10 0	9 38	11 55	0 5	4 24					
W11	17 24	24 17	5 12	24 24	2 31	7 31	1 39	21 32	0 22	13 21	1 9	10 10	2 43	23 37	0 13	7 27	1 36	2 35	15 35	10 0	9 37	11 52	0 4	4 24					
T 12	17 40	20 43	4 56	24 38	2 34	7 59	1 39	21 32	0 25	13 19	1 9	10 9	2 43	23 37	0 13	7 28	1 36	2 35	15 35	9 59	9 36	11 49	0 4	4 23					
F 13	17 57	16 21	4 27	24 50	2 36	8 26	1 39	21 31	0 28	13 18	1 9	10 8	2 43	23 37	0 13	7 28	1 36	2 34	15 35	9 59	9 35	11 46	0 3	4 23					
S 14	18 12	11 24	3 47	25 1	2 37	8 53	1 38	21 31	0 32	13 16	1 8	10 6	2 43	23 38	0 13	7 29	1 36	2 34	15 35	10 0	9 33	11 42	0 2	4 23					
S 15	18 28	6 1	2 57	25 11	2 38	9 20	1 38	21 30	0 35	13 14	1 8	10 5	2 43	23 38	0 13	7 30	1 36	2 34	15 35	10 0	9 32	11 39	0 2	4 23					
M16	18 43	0 24	2 0	25 19	2 39	9 47	1 37	21 29	0 38	13 13	1 8	10 3	2 43	23 38	0 13	7 30	1 36	2 34	15 35	10 1	9 31	11 36	0 1	4 22					
T 17	18 58	5n20	0 56	25 26	2 39	10 14	1 37	21 28	0 41	13 11	1 8	10 2	2 43	23 38	0 13	7 31	1 36	2 33	15 35	10 2	9 30	11 33	0 1	4 22					
W18	19 12	10 58	0n12	25 31	2 38	10 40	1 36	21 26	0 44	13 9	1 8	10 1	2 42	23 38	0 13	7 32	1 36	2 33	15 35	10 2	9 29	11 30	0 0	4 22					
T 19	19 26	16 17	1 20	25 35	2 37	11 7	1 35	21 25	0 47	13 7	1 8	10 0	2 42	23 38	0 13	7 33	1 36	2 33	15 34	10 1	9 28	11 27	0s 0	4 21					
F 20	19 40	21 0	2 25	25 38	2 34	11 32	1 34	21 24	0 51	13 5	1 8	9 58	2 42	23 38	0 13	7 33	1 36	2 33	15 34	10 0	9 26	11 24	0 1	4 21					
S 21	19 53	24 47	3 24	25 39	2 31	11 58	1 33	21 22	0 54	13 3	1 7	9 57	2 42	23 38	0 13	7 34	1 36	2 33	15 34	9 59	9 25	11 21	0 1	4 21					
S 22	20 6	27 17	4 13	25 38	2 27	12 24	1 32	21 21	0 57	13 1	1 7	9 56	2 42	23 38	0 13	7 35	1 36	2 32	15 34	9 57	9 24	11 18	0 2	4 20					
M23	20 19	28 11	4 49	25 36	2 22	12 49	1 31	21 19	1 0	12 59	1 7	9 55	2 42	23 38	0 13	7 35	1 36	2 32	15 34	9 55	9 23	11 14	0 2	4 20					
T 24	20 31	27 20	5 8	25 32	2 16	13 14	1 30	21 17	1 2	12 57	1 7	9 54	2 41	23 38	0 13	7 36	1 36	2 32	15 34	9 53	9 22	11 11	0 3	4 20					
W25	20 43	24 46	5 9	25 26	2 9	13 38	1 29	21 15	1 5	12 54	1 7	9 52	2 41	23 38	0 13	7 36	1 36	2 32	15 34	9 51	9 21	11 8	0 3	4 20					
T 26	20 55	20 42	4 51	25 19	2 1	14 2	1 28	21 14	1 8	12 52	1 7	9 51	2 41	23 38	0 13	7 37	1 36	2 32	15 34	9 50	9 19	11 5	0 4	4 19					
F 27	21 6	15 28	4 16	25 10	1 51	14 26	1 26	21 12	1 11	12 49	1 7	9 50	2 41	23 38	0 13	7 38	1 36	2 32	15 34	9 49	9 18	11 2	0 4	4 19					
S 28	21 17	9 24	3 25	24 59	1 40	14 50	1 25	21 10	1 14	12 47	1 6	9 49	2 41	23 38	0 13	7 38	1 36	2 31	15 34	9 49	9 17	10 59	0 4	4 18					
S 29	21 27	2 52	2 22	24 47	1 27	15 13	1 24	21 8	1 16	12 44	1 6	9 48	2 40	23 38	0 13	7 39	1 36	2 31	15 34	9 50	9 16	10 56	0 5	4 18					
M30	21s37	3s48	1n10	24s32	1s13	15s36	1n22	21n 6	1n19	12s42	1s 6	9n47	2s40	23n38	0n13	7s40	1n36	2n31	15s33	9n50	9n15	10s53	0s 5	4n18					

ASTRODIENST EPHEMERIS for the year 2116
geocentric

DECEMBER 2116

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	4 40 16	8♌57°13	26♊24	24°R14	18♋16	28°R10	29♌33	2°R20	1°R42	23♎37	19°R12	25°R28	23♏47	10♈40	19°D48	T 1
W 2	4 44 12	9°58'01	10♋20	23♌43	19°31	27♎51	29°40	2♏17	1♑40	23°39	19♒11	25♏27	23°44	10°46	19♈48	W 2
T 3	4 48 9	10°58'50	24° 8	23° 1	20°46	27°32	29°48	2°14	1°37	23°40	19°10	25°24	23°41	10°53	19°48	T 3
F 4	4 52 5	11°59'41	7♌44	22° 7	22° 1	27°13	29°55	2°11	1°35	23°42	19° 9	25°18	23°38	11° 0	19°48	F 4
S 5	4 56 2	13° 0'32	21° 6	21° 5	23°16	26°56	0♈ 3	2° 7	1°32	23°44	19° 8	25°11	23°35	11° 6	19°48	S 5
S 6	4 59 58	14° 1'25	4♌12	19°53	24°31	26°39	0°11	2° 5	1°30	23°45	19° 7	25° 2	23°31	11°13	19°48	S 6
M 7	5 3 55	15° 2'19	17° 1	18°36	25°46	26°22	0°19	2° 2	1°28	23°47	19° 6	24°52	23°28	11°20	19°49	M 7
T 8	5 7 52	16° 3'14	29°33	17°14	27° 2	26° 6	0°27	1°59	1°25	23°48	19° 5	24°43	23°25	11°26	19°49	T 8
W 9	5 11 48	17° 4'09	11♌48	15°51	28°17	25°51	0°36	1°56	1°23	23°50	19° 4	24°36	23°22	11°33	19°50	W 9
T 10	5 15 45	18° 5'05	23°51	14°30	29°32	25°37	0°44	1°54	1°20	23°51	19° 3	24°30	23°19	11°40	19°50	T 10
F 11	5 19 41	19° 6'02	5♈45	13°12	0♌47	25°24	0°53	1°51	1°18	23°53	19° 2	24°27	23°15	11°46	19°51	F 11
S 12	5 23 38	20° 7'00	17°34	12° 2	2° 3	25°11	1° 2	1°49	1°15	23°54	19° 1	24°D26	23°12	11°53	19°51	S 12
S 13	5 27 34	21° 7'58	29°25	11° 0	3°18	24°59	1°11	1°46	1°13	23°56	19° 0	24°26	23° 9	12° 0	19°52	S 13
M14	5 31 31	22° 8'56	11♏21	10° 8	4°33	24°48	1°20	1°44	1°10	23°57	18°59	24°27	23° 6	12° 7	19°53	M14
T 15	5 35 27	23° 9'56	23°30	9°26	5°48	24°37	1°29	1°42	1° 8	23°58	18°58	24°R28	23° 3	12°13	19°54	T 15
W16	5 39 24	24°10'56	5♌54	8°56	7° 4	24°28	1°38	1°40	1° 5	24° 0	18°57	24°27	23° 0	12°20	19°54	W16
T 17	5 43 21	25°11'56	18°39	8°37	8°19	24°19	1°48	1°38	1° 3	24° 1	18°56	24°24	22°56	12°27	19°55	T 17
F 18	5 47 17	26°12'57	1♏46	8°D29	9°34	24°11	1°57	1°37	1° 0	24° 2	18°56	24°19	22°53	12°33	19°56	F 18
S 19	5 51 14	27°13'59	15°17	8°31	10°49	24° 4	2° 7	1°35	0°57	24° 4	18°55	24°11	22°50	12°40	19°57	S 19
S 20	5 55 10	28°15'01	29° 8	8°43	12° 5	23°58	2°17	1°33	0°55	24° 5	18°54	24° 1	22°47	12°47	19°58	S 20
M21	5 59 7	29°16'04	13♏18	9° 3	13°20	23°53	2°27	1°32	0°52	24° 6	18°53	23°50	22°44	12°53	20° 0	M21
T 22	6 3 3	0♌17'07	27°39	9°31	14°35	23°48	2°37	1°31	0°50	24° 7	18°52	23°39	22°41	13° 0	20° 1	T 22
W23	6 7 0	1°18'12	12♏ 6	10° 6	15°51	23°44	2°47	1°29	0°47	24° 8	18°51	23°30	22°37	13° 7	20° 2	W23
T 24	6 10 57	2°19'16	26°33	10°47	17° 6	23°41	2°57	1°28	0°45	24° 9	18°51	23°23	22°34	13°13	20° 3	T 24
F 25	6 14 53	3°20'22	10♏55	11°34	18°21	23°39	3° 8	1°27	0°42	24°10	18°50	23°18	22°31	13°20	20° 5	F 25
S 26	6 18 50	4°21'28	25° 8	12°26	19°37	23°38	3°19	1°26	0°39	24°11	18°49	23°16	22°28	13°27	20° 6	S 26
S 27	6 22 46	5°22'35	9♏11	13°23	20°52	23°D37	3°29	1°25	0°37	24°12	18°48	23°D16	22°25	13°33	20° 8	S 27
M28	6 26 43	6°23'43	23° 3	14°23	22° 8	23°38	3°40	1°25	0°34	24°13	18°48	23°R16	22°21	13°40	20° 9	M28
T 29	6 30 39	7°24'51	6♏44	15°26	23°23	23°39	3°51	1°24	0°32	24°14	18°47	23°16	22°18	13°47	20°11	T 29
W30	6 34 36	8°26'00	20°16	16°33	24°38	23°40	4° 2	1°24	0°29	24°15	18°46	23°13	22°15	13°53	20°12	W30
T 31	6 38 32	9♌27'09	3♌38	17♌42	25♌54	23♌43	4♈13	1♏23	0♑27	24♏16	18♏46	23♏ 7	22♏12	14♈ 0	20♈14	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
T 1	21s47	10s16	0s 5	24s16	0s58	15s58	1n21	21n 4	1n21	12s39	1s 6	9n46	2s40	23n38
W 2	21 56	16 10	1 20	23 57	0 41	16 20	1 19	21 2	1 24	12 37	1 6	9 45	2 40	23 38
T 3	22 5	21 12	2 29	23 37	0 23	16 41	1 17	21 0	1 26	12 34	1 6	9 44	2 40	23 38
F 4	22 13	25 0	3 28	23 15	0 3	17 3	1 16	20 58	1 29	12 31	1 6	9 44	2 39	23 38
S 5	22 21	27 22	4 15	22 51	0n17	17 23	1 14	20 56	1 31	12 28	1 5	9 43	2 39	23 39
S 6	22 28	28 8	4 47	22 26	0 37	17 43	1 12	20 54	1 33	12 25	1 5	9 42	2 39	23 39
M 7	22 35	27 22	5 4	21 59	0 57	18 3	1 10	20 52	1 35	12 22	1 5	9 41	2 39	23 39
T 8	22 42	25 12	5 5	21 32	1 17	18 22	1 8	20 51	1 37	12 19	1 5	9 41	2 38	23 39
W 9	22 48	21 55	4 53	21 5	1 36	18 41	1 6	20 49	1 39	12 16	1 5	9 40	2 38	23 39
T 10	22 54	17 46	4 28	20 40	1 53	18 59	1 4	20 47	1 41	12 13	1 5	9 39	2 38	23 39
F 11	22 59	12 58	3 51	20 15	2 8	19 17	1 2	20 46	1 43	12 10	1 5	9 39	2 38	23 39
S 12	23 4	7 44	3 4	19 54	2 21	19 34	1 0	20 44	1 45	12 6	1 4	9 38	2 37	23 39
S 13	23 8	2 13	2 10	19 35	2 32	19 51	0 58	20 43	1 46	12 3	1 4	9 37	2 37	23 39
M14	23 12	3n25	1 10	19 19	2 40	20 7	0 56	20 42	1 48	12 0	1 4	9 37	2 37	23 39
T 15	23 15	9 2	0 5	19 7	2 46	20 23	0 54	20 41	1 50	11 56	1 4	9 36	2 37	23 39
W16	23 18	14 26	1n 1	18 58	2 50	20 37	0 52	20 40	1 51	11 53	1 4	9 36	2 36	23 39
T 17	23 20	19 22	2 5	18 54	2 52	20 52	0 50	20 39	1 52	11 49	1 4	9 36	2 36	23 39
F 18	23 22	23 32	3 5	18 52	2 52	21 6	0 47	20 39	1 54	11 46	1 4	9 35	2 36	23 39
S 19	23 24	26 32	3 56	18 54	2 51	21 19	0 45	20 38	1 55	11 42	1 4	9 35	2 36	23 39
S 20	23 25	28 0	4 35	18 58	2 49	21 31	0 43	20 38	1 56	11 39	1 3	9 35	2 35	23 39
M21	23 25	27 42	4 57	19 5	2 45	21 43	0 40	20 38	1 58	11 35	1 3	9 34	2 35	23 39
T 22	23 26	25 33	5 2	19 14	2 40	21 54	0 38	20 38	1 59	11 31	1 3	9 34	2 35	23 39
W23	23 25	21 44	4 47	19 24	2 35	22 5	0 36	20 38	2 0	11 27	1 3	9 34	2 35	23 39
T 24	23 24	16 38	4 14	19 36	2 28	22 15	0 33	20 38	2 1	11 24	1 3	9 34	2 34	23 39
F 25	23 23	10 37	3 25	19 49	2 22	22 24	0 31	20 38	2 2	11 20	1 3	9 34	2 34	23 39
S 26	23 21	4 8	2 23	20 3	2 14	22 33	0 28	20 39	2 3	11 16	1 3	9 34	2 34	23 39
S 27	23 19	2s30	1 14	20 18	2 7	22 41	0 26	20 40	2 4	11 12	1 3	9 34	2 33	23 39
M28	23 16	8 56	0 1	20 33	1 59	22 48	0 24	20 41	2 4	11 8	1 3	9 34	2 33	23 39
T 29	23 13	14 52	1s11	20 48	1 51	22 55	0 21	20 41	2 5	11 4	1 3	9 34	2 33	23 39
W30	23 9	20 1	2 18	21 3	1 42	23 0	0 19	20 43	2 6	11 0	1 2	9 34	2 33	23 39
T 31	23s 5	24s 5	3s16	21s18	1n34	23s 6	0n16	20n44	2n 6	10s56	1s 2	9n34	2s32	23n39

Julian Day Number = 2494247.5, Delta T = 101.60 sec
Ecliptic obliquity = 23°25'35", Nutation = - 0°00'08", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 26°22'26", Lahiri = 25°29'26"