



# Astrodienst Ephemeris Tables for the year 2103

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 2103  
geocentric

JANUARY 2103

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	6 40 6	9°51'48	1°56	21°R45	2°43	28°10	6°38	28°129	29°R48	23°R54	5°R19	22°24	22°57	14°13	4°28	M 1
T 2	6 44 3	10°52'57	14°17	21°D43	3°58	28°55	6°52	28°35	29°Y48	23°M54	5°19	22°R24	22°54	14°19	4°35	T 2
W 3	6 47 59	11°54'06	26°57	21°50	5°13	29°39	7° 6	28°41	29°48	23°54	5°19	22°24	22°51	14°26	4°41	W 3
T 4	6 51 56	12°55'16	10°10	22° 5	6°28	0°24	7°19	28°46	29°47	23°54	5°18	22°23	22°48	14°33	4°47	T 4
F 5	6 55 52	13°56'26	23°30	22°28	7°43	1° 9	7°33	28°52	29°47	23°53	5°18	22°22	22°45	14°39	4°54	F 5
S 6	6 59 49	14°57'37	7°27	22°58	8°58	1°53	7°47	28°58	29°47	23°53	5°18	22°21	22°42	14°46	5° 0	S 6
S 7	7 3 46	15°58'47	21°49	23°34	10°12	2°38	8° 1	29° 3	29°47	23°53	5°17	22°20	22°38	14°53	5° 7	S 7
M 8	7 7 42	16°59'58	6°33	24°16	11°27	3°23	8°14	29° 9	29°D47	23°52	5°17	22°19	22°35	14°59	5°13	M 8
T 9	7 11 39	18° 1'09	21°32	25° 3	12°42	4° 8	8°28	29°15	29°47	23°52	5°17	22°D19	22°32	15° 6	5°19	T 9
W10	7 15 35	19° 2'20	6°38	25°54	13°57	4°53	8°42	29°20	29°47	23°51	5°17	22°19	22°29	15°13	5°26	W10
T 11	7 19 32	20° 3'30	21°41	26°49	15°11	5°37	8°56	29°25	29°47	23°51	5°17	22°19	22°26	15°19	5°32	T 11
F 12	7 23 28	21° 4'40	6°33	27°47	16°26	6°22	9° 9	29°31	29°47	23°50	5°16	22°20	22°22	15°26	5°38	F 12
S 13	7 27 25	22° 5'49	21° 7	28°49	17°41	7° 7	9°23	29°36	29°47	23°50	5°16	22°R20	22°19	15°33	5°45	S 13
S 14	7 31 21	23° 6'58	5°20	29°54	18°55	7°52	9°37	29°41	29°48	23°49	5°16	22°20	22°16	15°39	5°51	S 14
M15	7 35 18	24° 8'06	19°10	1°31	20°10	8°37	9°50	29°46	29°48	23°49	5°16	22°D20	22°13	15°46	5°57	M15
T 16	7 39 15	25° 9'14	2°36	2°11	21°24	9°23	10° 4	29°52	29°48	23°48	5°16	22°20	22°10	15°53	6° 3	T 16
W17	7 43 11	26°10'21	15°41	3°22	22°39	10° 8	10°17	29°57	29°49	23°47	5°16	22°20	22° 7	15°59	6°10	W17
T 18	7 47 8	27°11'27	28°27	4°36	23°53	10°53	10°31	0°1	29°49	23°47	5°16	22°20	22° 3	16° 6	6°16	T 18
F 19	7 51 4	28°12'33	10°12	5°51	25° 8	11°38	10°44	0° 6	29°50	23°46	5°D16	22°21	22° 0	16°13	6°22	F 19
S 20	7 55 1	29°13'38	23°14	7° 7	26°22	12°23	10°58	0°11	29°50	23°45	5°16	22°22	21°57	16°19	6°28	S 20
S 21	7 58 57	0°14'42	5°21	8°25	27°37	13° 9	11°11	0°16	29°51	23°44	5°16	22°22	21°54	16°26	6°34	S 21
M22	8 2 54	1°15'45	17°20	9°45	28°51	13°54	11°25	0°21	29°52	23°43	5°16	22°R23	21°51	16°33	6°40	M22
T 23	8 6 50	2°16'48	29°14	11° 5	0°16	14°39	11°38	0°25	29°53	23°42	5°16	22°23	21°48	16°39	6°46	T 23
W24	8 10 47	3°17'50	11°14	12°27	1°20	15°25	11°52	0°30	29°53	23°42	5°16	22°22	21°44	16°46	6°52	W24
T 25	8 14 44	4°18'52	22°53	13°50	2°34	16°10	12° 5	0°34	29°54	23°41	5°16	22°21	21°41	16°53	6°58	T 25
F 26	8 18 40	5°19'53	4°42	15°13	3°48	16°56	12°18	0°38	29°55	23°40	5°16	22°19	21°38	16°59	7° 4	F 26
S 27	8 22 37	6°20'53	16°34	16°38	5° 3	17°41	12°31	0°43	29°56	23°39	5°16	22°17	21°35	17° 6	7°10	S 27
S 28	8 26 33	7°21'52	28°32	18° 3	6°17	18°27	12°45	0°47	29°57	23°38	5°17	22°14	21°32	17°13	7°16	S 28
M29	8 30 30	8°22'51	10°19	19°30	7°31	19°12	12°58	0°51	29°58	23°37	5°17	22°12	21°28	17°19	7°21	M29
T 30	8 34 26	9°23'49	22°59	20°57	8°45	19°58	13°11	0°55	29°59	23°36	5°17	22°11	21°25	17°26	7°27	T 30
W31	8 38 23	10°24'47	5°13	22°35	9°59	20°34	13°24	0°59	0° 0	23°34	5°17	22°D10	21°22	17°23	7°33	W31

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	23s 4	5s19	4s57	20s 9	3n 2	21s 5	1s35	23s59	0s34	23s 9	0n 6	17s51	2n 0	10n54	0s32	3n27	1n 7	2s33	16s45	21s34	21s28	14n46	17s38	5n43					
T 2	22 59	10 27	5 14	20 13	2 58	20 48	1 35	24 0	0 34	23 9	0 6	17 53	2 0	10 54	0 32	3 27	1 7	2 32	16 45	21 34	21 29	14 43	17 38	5 43					
W 3	22 54	15 17	5 16	20 18	2 52	20 31	1 36	24 1	0 35	23 8	0 6	17 54	2 0	10 54	0 32	3 27	1 7	2 32	16 44	21 34	21 30	14 41	17 37	5 44					
T 4	22 48	19 35	5 3	20 25	2 46	20 13	1 37	24 1	0 36	23 7	0 6	17 55	2 0	10 54	0 32	3 27	1 8	2 32	16 44	21 34	21 30	14 38	17 37	5 44					
F 5	22 42	23 1	4 32	20 34	2 39	19 54	1 38	24 1	0 36	23 7	0 6	17 56	2 0	10 54	0 31	3 28	1 8	2 32	16 44	21 34	21 31	14 35	17 37	5 44					
S 6	22 35	25 14	3 44	20 43	2 32	19 35	1 38	24 2	0 37	23 6	0 6	17 57	2 1	10 54	0 31	3 28	1 8	2 31	16 43	21 35	21 31	14 32	17 36	5 44					
S 7	22 28	25 52	2 42	20 53	2 24	19 15	1 39	24 1	0 37	23 5	0 6	17 58	2 1	10 54	0 31	3 28	1 8	2 31	16 43	21 35	21 32	14 30	17 36	5 44					
M 8	22 21	24 42	1 27	21 3	2 15	18 55	1 39	24 1	0 38	23 5	0 6	18 0	2 1	10 54	0 31	3 28	1 8	2 31	16 43	21 35	21 32	14 27	17 35	5 44					
T 9	22 13	21 47	0 4	21 14	2 7	18 35	1 39	24 0	0 38	23 4	0 6	18 1	2 1	10 54	0 31	3 28	1 8	2 31	16 42	21 35	21 33	14 24	17 35	5 45					
W10	22 5	17 20	1n19	21 24	1 58	18 13	1 39	23 59	0 39	23 3	0 6	18 2	2 1	10 54	0 31	3 29	1 8	2 30	16 42	21 35	21 33	14 22	17 34	5 45					
T 11	21 56	11 48	2 36	21 35	1 49	17 52	1 40	23 58	0 40	23 2	0 5	18 3	2 1	10 54	0 31	3 29	1 8	2 30	16 42	21 35	21 34	14 19	17 34	5 45					
F 12	21 47	5 40	3 42	21 45	1 39	17 29	1 40	23 56	0 40	23 1	0 5	18 4	2 1	10 54	0 31	3 29	1 8	2 30	16 41	21 35	21 34	14 16	17 34	5 45					
S 13	21 37	0n39	4 32	21 55	1 30	17 7	1 40	23 55	0 41	23 0	0 5	18 5	2 1	10 54	0 31	3 29	1 8	2 30	16 41	21 35	21 35	14 13	17 33	5 45					
S 14	21 27	6 46	5 4	22 5	1 21	16 43	1 40	23 53	0 41	23 0	0 5	18 6	2 1	10 54	0 31	3 30	1 8	2 29	16 41	21 35	21 35	14 11	17 33	5 46					
M15	21 16	12 23	5 18	22 14	1 12	16 20	1 40	23 50	0 42	22 59	0 5	18 7	2 2	10 55	0 31	3 30	1 8	2 29	16 40	21 35	21 36	14 8	17 32	5 46					
T 16	21 6	17 16	5 13	22 22	1 2	15 56	1 39	23 48	0 42	22 58	0 5	18 8	2 2	10 55	0 31	3 30	1 8	2 29	16 40	21 35	21 36	14 5	17 32	5 46					
W17	20 54	21 11	4 52	22 30	0 53	15 31	1 39	23 45	0 43	22 57	0 5	18 9	2 2	10 55	0 31	3 30	1 8	2 28	16 40	21 35	21 37	14 3	17 31	5 46					
T 18	20 43	23 59	4 17	22 36	0 44	15 6	1 39	23 42	0 43	22 56	0 5	18 10	2 2	10 55	0 31	3 31	1 8	2 28	16 39	21 35	21 37	14 0	17 31	5 47					
F 19	20 31	25 33	3 31	22 42	0 35	14 41	1 38	23 39	0 44	22 55	0 5	18 10	2 2	10 55	0 31	3 31	1 8	2 28	16 39	21 34	21 38	13 57	17 30	5 47					
S 20	20 18	25 50	2 35	22 47	0 27	14 15	1 38	23 35	0 45	22 54	0 5	18 11	2 2	10 56	0 31	3 32	1 8	2 27	16 39	21 34	21 38	13 54	17 29	5 47					
S 21	20 5	24 52	1 33	22 51	0 18	13 49	1 37	23 32	0 45	22 53	0 5	18 12	2 2	10 56	0 31	3 32	1 8	2 27	16 38	21 34	21 39	13 52	17 29	5 47					
M22	19 52	22 46	0 28	22 54	0 10	13 23	1 37	23 27	0 46	22 52	0 4	18 13	2 2	10 56	0 31	3 32	1 8	2 27	16 38	21 34	21 39	13 49	17 28	5 48					
T 23	19 38	19 41	0s38	22 56	0 2	12 56	1 36	23 23	0 46	22 51	0 4	18 14	2 3	10 56	0 31	3 33	1 8	2 26	16 37	21 34	21 40	13 46	17 28	5 48					
W24	19 25	15 48	1 42	22 57	0s 7	12 29	1 35	23 19	0 47	22 50	0 4	18 15	2 3	10 57	0 31	3 33	1 8	2 26	16 37	21 34	21 40	13 43	17 27	5 48					
T 25	19 10	11 20	2 41	22 57	0 14	12 1	1 34	23 14	0 47	22 49	0 4	18 15	2 3	10 57	0 31	3 33	1 8	2 26	16 37	21 35	21 41	13 41	17 27	5 49					
F 26	18 56	6 28	3 34	22 55	0 22	11 33	1 33	23 9	0 48	22 47	0 4	18 16	2 3	10 57	0 31	3 34	1 8	2 25	16 36	21 35	21 41	13 38	17 26	5 49					
S 27	18 41	1 21	4 17	22 53	0 30	11 5	1 32	23 3	0 48	22 46	0 4	18 17	2 3	10 58	0 31	3 34	1 8	2 25	16 36	21 35	21 42	13 35	17 25	5 49					
S 28	18 25	3s51	4 50	22 49	0 37	10 37	1 31	22 58	0 49	22 45	0 4	18 18	2 3	10 58	0 31	3 35	1 9	2 24	16 36	21 36	21 42	13 32	17 25	5 49					
M29	18 10	8 58	5 10	22 44	0 44	10 8	1 30	22 52	0 49	22 44	0 4	18 18	2 3	10 59	0 31	3 35	1 9	2 24	16 35	21 36	21 43	13 30	17 24	5 50					
T 30	17 54	13 49	5 16	22 38	0 51	9 39	1 29	22 46	0 50	22 43	0 4	18 19	2 4	10 59	0 31	3 36	1 9	2 24	16 35	21 36	21 43	13 27	17 23	5 50					
W31	17s37	18s12	5s 8	22s30	0s57	9s10	1s27	22s39	0s50	22s42	0n 4	18s20	2n 4	10n59	0s31	3n36	1n 9	2s23	16s35	21s36	21s44	13n24	17s23	5n50					

# ASTRODIENST EPHEMERIS for the year 2103

## geocentric

FEBRUARY 2103

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	8 42 19	11°25'44"	18°31'	23°35'	11°13'	21°29'	13°37'	1°3'	0°8'	23°R33	5°17'	22°30'	21°19'	17°39'	7°39'	T 1
F 2	8 46 16	12°26'41"	1°50'	25°23'	12°27'	22°15'	13°50'	1°6'	0°3'	23°R32	5°18'	22°11'	21°16'	17°46'	7°44'	F 2
S 3	8 50 13	13°27'36"	15°35'	26°54'	13°41'	23°1'	14°3'	1°10'	0°4'	23°31'	5°18'	22°12'	21°13'	17°53'	7°50'	S 3
S 4	8 54 9	14°28'31"	29°48'	28°25'	14°55'	23°47'	14°16'	1°14'	0°5'	23°30'	5°18'	22°14'	21°9'	17°59'	7°56'	S 4
M 5	8 58 6	15°29'26"	14°25'	29°57'	16°9'	24°33'	14°29'	1°17'	0°7'	23°29'	5°19'	22°15'	21°6'	18°6'	8°1'	M 5
T 6	9 2 2	16°30'19"	29°24'	1°29'	17°23'	25°19'	14°42'	1°21'	0°8'	23°27'	5°19'	22°R15	21°3'	18°13'	8°7'	T 6
W 7	9 5 59	17°31'11"	14°36'	3°3'	18°36'	26°4'	14°54'	1°24'	0°10'	23°26'	5°20'	22°13'	21°0'	18°19'	8°12'	W 7
T 8	9 9 55	18°32'02"	29°52'	4°37'	19°50'	26°50'	15°7'	1°27'	0°11'	23°25'	5°20'	22°11'	20°57'	18°26'	8°17'	T 8
F 9	9 13 52	19°32'52"	15°1'	6°12'	21°4'	27°36'	15°20'	1°30'	0°13'	23°24'	5°20'	22°7'	20°54'	18°32'	8°23'	F 9
S 10	9 17 48	20°33'40"	29°55'	7°47'	22°17'	28°22'	15°32'	1°33'	0°14'	23°22'	5°21'	22°3'	20°50'	18°39'	8°28'	S 10
S 11	9 21 45	21°34'27"	14°25'	9°23'	23°31'	29°8'	15°45'	1°36'	0°16'	23°21'	5°21'	21°59'	20°47'	18°46'	8°33'	S 11
M12	9 25 42	22°35'13"	28°28'	11°1'	24°45'	29°54'	15°57'	1°39'	0°18'	23°20'	5°22'	21°56'	20°44'	18°52'	8°38'	M12
T 13	9 29 38	23°35'57"	12°2'	12°39'	25°58'	0°41'	16°10'	1°42'	0°19'	23°18'	5°22'	21°54'	20°41'	18°59'	8°43'	T 13
W14	9 33 35	24°36'39"	25°9'	14°17'	27°11'	1°27'	16°22'	1°45'	0°21'	23°17'	5°23'	21°D53	20°38'	19°6'	8°49'	W14
T 15	9 37 31	25°37'20"	7°15'	15°57'	28°25'	2°13'	16°34'	1°47'	0°23'	23°15'	5°23'	21°54'	20°34'	19°12'	8°54'	T 15
F 16	9 41 28	26°37'59"	20°16'	17°37'	29°38'	2°59'	16°46'	1°50'	0°25'	23°14'	5°24'	21°55'	20°31'	19°19'	8°59'	F 16
S 17	9 45 24	27°38'36"	2°24'	19°19'	0°51'	3°45'	16°58'	1°52'	0°27'	23°12'	5°25'	21°57'	20°28'	19°26'	9°3'	S 17
S 18	9 49 21	28°39'12"	14°22'	21°1'	2°4'	4°31'	17°10'	1°54'	0°29'	23°11'	5°25'	21°58'	20°25'	19°32'	9°8'	S 18
M19	9 53 17	29°39'46"	26°14'	22°44'	3°18'	5°18'	17°22'	1°57'	0°31'	23°9'	5°26'	21°R58	20°22'	19°39'	9°13'	M19
T 20	9 57 14	0°40'18"	8°2'	24°28'	4°31'	6°4'	17°34'	1°59'	0°33'	23°8'	5°27'	21°57'	20°19'	19°46'	9°18'	T 20
W21	10 1 11	1°40'49"	19°50'	26°12'	5°43'	6°50'	17°46'	2°1'	0°35'	23°6'	5°27'	21°54'	20°15'	19°52'	9°22'	W21
T 22	10 5 7	2°41'18"	1°40'	27°58'	6°56'	7°36'	17°58'	2°3'	0°37'	23°5'	5°28'	21°48'	20°12'	19°59'	9°27'	T 22
F 23	10 9 4	3°41'45"	13°34'	29°45'	8°9'	8°23'	18°10'	2°4'	0°39'	23°3'	5°29'	21°41'	20°9'	20°6'	9°32'	F 23
S 24	10 13 0	4°42'11"	25°34'	1°32'	9°22'	9°9'	18°21'	2°6'	0°42'	23°2'	5°29'	21°33'	20°6'	20°12'	9°36'	S 24
S 25	10 16 57	5°42'35"	7°24'	3°21'	10°35'	9°55'	18°33'	2°8'	0°44'	23°0'	5°30'	21°24'	20°3'	20°19'	9°41'	S 25
M26	10 20 53	6°42'58"	19°55'	5°10'	11°47'	10°42'	18°44'	2°9'	0°46'	22°59'	5°31'	21°16'	20°0'	20°26'	9°45'	M26
T 27	10 24 50	7°43'20"	2°12'	7°1'	13°0'	11°28'	18°55'	2°11'	0°49'	22°57'	5°32'	21°9'	19°56'	20°32'	9°49'	T 27
W28	10 28 46	8°43'40"	15°12'	8°52'	14°12'	12°15'	19°37'	2°12'	0°51'	22°55'	5°33'	21°3'	19°53'	20°39'	9°53'	W28

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	17s21	21s52	4s43	22s21	1s 3	8s41	1s26	22s33	0s51	22s40	0n 4	18s20	2n 4	11n 0	0s31	3n37	1n 9	2s23	16s34	21s36	21s44	13n21	17s22	5n51			
F 2	17 4	24 30	4 4	22 11	1 10	8 11	1 24	22 26	0 51	22 39	0 3	18 21	2 4	11 0	0 31	3 37	1 9	2 22	16 34	21 36	21 45	13 18	17 21	5 51			
S 3	16 46	25 47	3 9	22 0	1 15	7 41	1 23	22 19	0 52	22 38	0 3	18 21	2 4	11 1	0 31	3 38	1 9	2 22	16 34	21 36	21 45	13 16	17 21	5 52			
S 4	16 29	25 26	2 1	21 47	1 21	7 11	1 21	22 12	0 52	22 37	0 3	18 22	2 4	11 1	0 30	3 38	1 9	2 22	16 33	21 36	21 46	13 13	17 20	5 52			
M 5	16 11	23 22	0 43	21 33	1 26	6 41	1 19	22 4	0 53	22 35	0 3	18 23	2 4	11 2	0 30	3 39	1 9	2 21	16 33	21 35	21 46	13 10	17 19	5 52			
T 6	15 53	19 38	0n39	21 18	1 31	6 11	1 18	21 56	0 53	22 34	0 3	18 23	2 5	11 2	0 30	3 39	1 9	2 21	16 32	21 35	21 47	13 7	17 19	5 53			
W 7	15 34	14 32	2 0	21 1	1 36	5 40	1 16	21 48	0 54	22 33	0 3	18 24	2 5	11 3	0 30	3 40	1 9	2 20	16 32	21 36	21 47	13 5	17 18	5 53			
T 8	15 16	8 31	3 12	20 43	1 40	5 9	1 14	21 40	0 54	22 31	0 3	18 24	2 5	11 3	0 30	3 40	1 9	2 20	16 32	21 36	21 48	13 2	17 17	5 53			
F 9	14 57	2 3	4 11	20 24	1 44	4 39	1 12	21 31	0 55	22 30	0 3	18 25	2 5	11 4	0 30	3 41	1 9	2 19	16 31	21 37	21 48	12 59	17 17	5 54			
S 10	14 38	4n24	4 51	20 3	1 48	4 8	1 10	21 23	0 55	22 29	0 3	18 25	2 5	11 5	0 30	3 41	1 9	2 19	16 31	21 37	21 49	12 56	17 16	5 54			
S 11	14 18	10 27	5 11	19 41	1 51	3 37	1 8	21 14	0 56	22 27	0 3	18 25	2 5	11 5	0 30	3 42	1 9	2 18	16 31	21 38	21 49	12 54	17 15	5 55			
M12	13 59	15 46	5 11	19 18	1 55	3 5	1 5	21 4	0 56	22 26	0 2	18 26	2 6	11 6	0 30	3 42	1 9	2 18	16 30	21 39	21 50	12 51	17 14	5 55			
T 13	13 39	20 6	4 54	18 53	1 57	2 34	1 3	20 55	0 57	22 25	0 2	18 26	2 6	11 7	0 30	3 43	1 9	2 17	16 30	21 39	21 50	12 48	17 14	5 56			
W14	13 19	23 17	4 22	18 27	2 0	2 3	1 1	20 45	0 57	22 23	0 2	18 27	2 6	11 7	0 30	3 43	1 9	2 17	16 30	21 39	21 51	12 45	17 13	5 56			
T 15	12 58	25 12	3 38	17 59	2 2	1 32	0 58	20 35	0 58	22 22	0 2	18 27	2 6	11 8	0 30	3 44	1 9	2 16	16 29	21 39	21 51	12 42	17 12	5 56			
F 16	12 38	25 49	2 45	17 30	2 4	1 0	0 56	20 25	0 58	22 20	0 2	18 27	2 6	11 9	0 30	3 45	1 9	2 16	16 29	21 39	21 52	12 40	17 11	5 57			
S 17	12 17	25 9	1 45	17 0	2 5	0 29	0 53	20 15	0 58	22 19	0 2	18 28	2 6	11 9	0 30	3 45	1 9	2 15	16 29	21 38	21 52	12 37	17 10	5 57			
S 18	11 56	23 20	0 41	16 28	2 6	0n 3	0 51	20 4	0 59	22 18	0 2	18 28	2 7	11 10	0 30	3 46	1 9	2 15	16 28	21 38	21 53	12 34	17 10	5 58			
M19	11 35	20 31	0s23	15 55	2 6	0 34	0 48	19 54	0 59	22 16	0 2	18 28	2 7	11 11	0 30	3 46	1 9	2 14	16 28	21 38	21 53	12 31	17 9	5 58			
T 20	11 14	16 51	1 26	15 21	2 7	1 6	0 46	19 43	1 0	22 15	0 2	18 28	2 7	11 11	0 30	3 47	1 9	2 14	16 28	21 38	21 54	12 28	17 8	5 59			
W21	10 52	12 33	2 26	14 45	2 6	1 37	0 43	19 32	1 0	22 13	0 2	18 29	2 7	11 12	0 30	3 48	1 9	2 13	16 27	21 39	21 54	12 26	17 7	5 59			
T 22	10 31	7 47	3 19	14 8	2 5	2 9	0 40	19 20	1 1	22 12	0 2	18 29	2 7	11 13	0 30	3 48	1 9	2 13	16 27	21 40	21 54	12 23	17 7	6 0			
F 23	10 9	2 43	4 3	13 30	2 4	2 40	0 37	19 9	1 1	22 10	0 1	18 29	2 8	11 14	0 30	3 49	1 9	2 12	16 27	21 41	21 55	12 20	17 6	6 0			
S 24	9 47	2s29	4 37	12 50	2 3	3 11	0 34	18 57	1 1	22 9	0 1	18 29	2 8	11 15	0 30	3 50	1 9	2 12	16 26	21 42	21 55	12 17	17 5	6 1			
S 25	9 25	7 38	4 59	12 9	2 0	3 42	0 31	18 45	1 2	22 7	0 1	18 29	2 8	11 15	0 30	3 50	1 9	2 11	16 26	21 44	21 56	12 14	17 4	6 1			
M26	9 3	12 32	5 8	11 26	1 58	4 14	0 28	18 33	1 2	22 6	0 1	18 29	2 8	11 16	0 30	3 51	1 9	2 11	16 26	21 45	21 56	12 12	17 3	6 2			
T 27	8 40	17 1	5 2	10 42	1 54	4 45	0 25	18 20	1 3	22 4	0 1	18 29	2 8	11 17	0 30	3 52	1 9	2 10	16 26	21 46	21 57	12 9	17 3	6 2			
W28	8s18	20s49	4s42	9s57	1s51	5n16	0s22	18s8	1s 3	22s 3	0n 1	18s30	2n 8	11n18	0s30	3n52	1n 9	2s10	16s25	21s47	21s57	12n 6	17s 2	6n3			

Julian Day Number = 2489195.5, Delta T = 94.63 sec

Ecliptic obliquity = 23°25'36", Nutation = 0°00'17", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 26°10'50", Lahiri = 25°17'50"

ASTRODIENST EPHEMERIS for the year 2103  
geocentric

MARCH 2103

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	10 32 43	9♈43'58	27♎55	10♈44	15♋24	13♌1	19♍18	2♎13	0♏53	22°R54	5♐33	21°R 1	19♑50	20♒46	9♓58	T 1
F 2	10 36 40	10°44'16	11♎8	12°37	16°37	13°48	19°29	2°14	0°56	22♎52	5°34	21°D 1	19°47	20°52	10° 2	F 2
S 3	10 40 36	11°44'31	24°42	14°30	17°49	14°34	19°40	2°15	0°58	22°51	5°35	21♑ 1	19°44	20°59	10° 6	S 3
S 4	10 44 33	12°44'46	8♑39	16°25	19° 1	15°21	19°51	2°16	1° 1	22°49	5°36	21° 2	19°40	21° 6	10°10	S 4
M 5	10 48 29	13°44'59	23° 0	18°20	20°13	16° 7	20° 2	2°17	1° 3	22°47	5°37	21°R 3	19°37	21°12	10°14	M 5
T 6	10 52 26	14°45'10	7♎43	20°15	21°25	16°54	20°12	2°18	1° 6	22°46	5°38	21° 2	19°34	21°19	10°17	T 6
W 7	10 56 22	15°45'20	22°43	22°11	22°37	17°40	20°23	2°18	1° 9	22°44	5°39	20°58	19°31	21°26	10°21	W 7
T 8	11 0 19	16°45'27	7♈52	24° 7	23°49	18°27	20°33	2°19	1°11	22°42	5°40	20°52	19°28	21°32	10°25	T 8
F 9	11 4 15	17°45'34	23° 1	26° 3	25° 0	19°14	20°44	2°19	1°14	22°41	5°41	20°44	19°25	21°39	10°28	F 9
S 10	11 8 12	18°45'38	7♋59	27°59	26°12	20° 0	20°54	2°20	1°17	22°39	5°42	20°35	19°21	21°46	10°32	S 10
S 11	11 12 9	19°45'40	22°38	29°54	27°24	20°47	21° 4	2°20	1°19	22°37	5°43	20°26	19°18	21°52	10°35	S 11
M12	11 16 5	20°45'40	6♏51	1♋48	28°35	21°34	21°14	2°R20	1°22	22°36	5°44	20°17	19°15	21°59	10°39	M12
T 13	11 20 2	21°45'38	20°34	3°42	29°46	22°20	21°24	2°20	1°25	22°34	5°45	20°11	19°12	22° 6	10°42	T 13
W14	11 23 58	22°45'34	3♐48	5°33	0♏58	23° 7	21°34	2°20	1°28	22°32	5°46	20° 7	19° 9	22°12	10°45	W14
T 15	11 27 55	23°45'28	16°36	7°23	2° 9	23°53	21°44	2°19	1°31	22°31	5°47	20° 5	19° 5	22°19	10°48	T 15
F 16	11 31 51	24°45'19	29° 1	9°11	3°20	24°40	21°54	2°19	1°34	22°29	5°48	20°D 5	19° 2	22°26	10°51	F 16
S 17	11 35 48	25°45'09	11♑8	10°55	4°31	25°27	22° 3	2°19	1°37	22°27	5°49	20° 6	18°59	22°32	10°54	S 17
S 18	11 39 44	26°44'56	23° 4	12°36	5°41	26°14	22°13	2°18	1°39	22°26	5°50	20°R 6	18°56	22°39	10°57	S 18
M19	11 43 41	27°44'41	4♒53	14°14	6°52	27° 0	22°22	2°18	1°42	22°24	5°51	20° 5	18°53	22°46	11° 0	M19
T 20	11 47 38	28°44'23	16°40	15°47	8° 3	27°47	22°31	2°17	1°45	22°22	5°52	20° 1	18°50	22°52	11° 3	T 20
W21	11 51 34	29°44'04	28°29	17°15	9°13	28°34	22°40	2°16	1°48	22°21	5°53	19°55	18°46	22°59	11° 6	W21
T 22	11 55 31	0♋43'42	10♎23	18°38	10°23	29°20	22°49	2°15	1°52	22°19	5°55	19°46	18°43	23° 6	11° 8	T 22
F 23	11 59 27	1°43'18	22°24	19°56	11°34	0♈7	22°58	2°14	1°55	22°18	5°56	19°35	18°40	23°12	11°11	F 23
S 24	12 3 24	2°42'52	4♒34	21° 7	12°44	0°54	23° 7	2°13	1°58	22°16	5°57	19°22	18°37	23°19	11°13	S 24
S 25	12 7 20	3°42'24	16°53	22°12	13°54	1°41	23°15	2°12	2° 1	22°14	5°58	19° 9	18°34	23°26	11°15	S 25
M26	12 11 17	4°41'54	29°23	23°10	15° 3	2°27	23°24	2°10	2° 4	22°13	5°59	18°56	18°31	23°32	11°18	M26
T 27	12 15 13	5°41'23	12♎3	24° 1	16°13	3°14	23°32	2° 9	2° 7	22°11	6° 0	18°45	18°27	23°39	11°20	T 27
W28	12 19 10	6°40'49	24°55	24°45	17°23	4° 1	23°40	2° 7	2°10	22° 9	6° 2	18°37	18°24	23°46	11°22	W28
T 29	12 23 6	7°40'14	7♊59	25°21	18°32	4°47	23°48	2° 6	2°13	22° 8	6° 3	18°31	18°21	23°52	11°24	T 29
F 30	12 27 3	8°39'37	21°16	25°50	19°41	5°34	23°56	2° 4	2°17	22° 6	6° 4	18°28	18°18	23°59	11°26	F 30
S 31	12 31 0	9♋38'58	4♑48	26°11	20♏50	6♈21	24♑4	2♊2	2♒20	22♎5	6♏5	18♑27	18♓15	24♒6	11♑28	S 31

Day	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	7s55 23s42	4s 7 9s11 1s46	5n47 0s19	17s55 1s 3	22s 2 0n 1	18s30 2n 9	11n19 0s30	3n53 1n 9	2s 9 16s25	21s47 21s58	12n 3 17s 1	6n 3			
F 2	7 32 25 22	3 18 8 23 1 42	6 17 0 15 17 42	1 4 22 0 0 1	18 30 2 9 11 20	0 30 3 54 1 9	2 9 16 25 21 47	21 58 12 0 17 0	6 4						
S 3	7 9 25 36	2 17 7 35 1 36	6 48 0 12 17 29	1 4 21 59 0 1	18 30 2 9 11 21	0 30 3 54 1 9	2 8 16 24 21 47	21 59 11 57 16 59	6 4						
S 4	6 46 24 15	1 6 6 45 1 30	7 19 0 9 17 15	1 5 21 57 0 1	18 30 2 9 11 21	0 30 3 55 1 10	2 7 16 24 21 47	21 59 11 55 16 58	6 5						
M 5	6 23 21 18	0n11 5 54 1 24	7 49 0 5 17 2	1 5 21 56 0 0	18 30 2 9 11 22	0 30 3 55 1 10	2 7 16 24 21 47	22 0 11 52 16 58	6 5						
T 6	6 0 16 54	1 28 5 2 1 17	8 19 0 2 16 48	1 5 21 54 0 0	18 30 2 9 11 23	0 30 3 56 1 10	2 6 16 23 21 47	22 0 11 49 16 57	6 6						
W 7	5 37 11 24	2 41 4 9 1 9	8 49 0n 1 16 34	1 6 21 53 0 0	18 30 2 10 11 24	0 30 3 57 1 10	2 6 16 23 21 48	22 0 11 46 16 56	6 7						
T 8	5 14 5 9	3 44 3 16 1 1	9 19 0 5 16 20	1 6 21 51 0 0	18 29 2 10 11 25	0 30 3 57 1 10	2 5 16 23 21 48	22 1 11 43 16 55	6 7						
F 9	4 50 1n22	4 30 2 22 0 52	9 48 0 8 16 6	1 6 21 50 0 0	18 29 2 10 11 26	0 30 3 58 1 10	2 5 16 23 21 50	22 1 11 41 16 54	6 8						
S 10	4 27 7 43	4 58 1 27 0 42	10 18 0 12 15 52	1 7 21 48 0s 0	18 29 2 10 11 27	0 30 3 59 1 10	2 4 16 22 21 51	22 2 11 38 16 53	6 8						
S 11	4 3 13 31	5 5 0 32 0 32	10 47 0 15 15 37	1 7 21 47 0 0	18 29 2 10 11 28	0 30 3 59 1 10	2 4 16 22 21 52	22 2 11 35 16 53	6 9						
M12	3 40 18 23	4 52 0n23	0 22 11 16 0 19	15 22 1 7 21 45	0 0 18 29 2 11 11 29	0 29 4 0 1 10	2 3 16 22 21 54	22 3 11 32 16 52	6 9						
T 13	3 16 22 7	4 24 1 18 0 11	11 44 0 23 15 8	1 8 21 44 0 0	18 29 2 11 11 30	0 29 4 1 1 10	2 2 16 22 21 55	22 3 11 29 16 51	6 10						
W14	2 52 24 31	3 41 2 13 0n 1	12 13 0 26 14 53	1 8 21 42 0 0	18 29 2 11 11 31	0 29 4 1 1 10	2 2 16 21 21 55	22 4 11 26 16 50	6 11						
T 15	2 29 25 33	2 49 3 8 0 13	12 41 0 30 14 38	1 8 21 41 0 1	18 28 2 11 11 32	0 29 4 2 1 10	2 1 16 21 21 56	22 4 11 24 16 49	6 11						
F 16	2 5 25 16	1 50 4 1 0 25	13 9 0 34 14 22	1 9 21 40 0 1	18 28 2 11 11 33	0 29 4 3 1 10	2 1 16 21 21 56	22 5 11 21 16 48	6 12						
S 17	1 41 23 45	0 48 4 54 0 38	13 36 0 37 14 7	1 9 21 38 0 1	18 28 2 11 11 34	0 29 4 3 1 10	2 0 16 21 21 55	22 5 11 18 16 48	6 12						
S 18	1 18 21 12	0s16 5 45 0 50	14 3 0 41 13 51	1 9 21 37 0 1	18 28 2 12 11 35	0 29 4 4 1 10	2 0 16 20 21 55	22 5 11 15 16 47	6 13						
M19	0 54 17 46	1 18 6 35 1 3	14 30 0 45 13 36	1 10 21 35 0 1	18 27 2 12 11 36	0 29 4 5 1 10	1 59 16 20 21 56	22 6 11 12 16 46	6 14						
T 20	0 30 13 40	2 16 7 23 1 16	14 57 0 49 13 20	1 10 21 34 0 1	18 27 2 12 11 37	0 29 4 5 1 10	1 59 16 20 21 56	22 6 11 9 16 45	6 14						
W21	0 6 9 2	3 9 8 8 1 29	15 23 0 52 13 4	1 10 21 33 0 1	18 27 2 12 11 38	0 29 4 6 1 10	1 58 16 20 21 57	22 7 11 6 16 44	6 15						
T 22	0n17 4 4	3 54 8 52 1 41	15 49 0 56 12 48	1 10 21 31 0 1	18 26 2 12 11 39	0 29 4 7 1 10	1 57 16 20 21 58	22 7 11 4 16 43	6 15						
F 23	0 41 1s 6	4 28 9 33 1 54	16 14 1 0 12 32	1 11 21 30 0 1	18 26 2 12 11 40	0 29 4 7 1 10	1 57 16 19 22 0	22 8 11 1 16 43	6 16						
S 24	1 5 6 16	4 51 10 10 2 6	16 39 1 3 12 15	1 11 21 28 0 2	18 26 2 13 11 42	0 29 4 8 1 10	1 56 16 19 22 2	22 8 10 58 16 42	6 17						
S 25	1 28 11 15	5 1 10 45 2 17	17 4 1 7 11 59	1 11 21 27 0 2	18 25 2 13 11 43	0 29 4 9 1 10	1 56 16 19 22 4	22 8 10 55 16 41	6 17						
M26	1 52 15 51	4 56 11 17 2 28	17 28 1 11 11 42	1 11 21 26 0 2	18 25 2 13 11 44	0 29 4 9 1 10	1 55 16 19 22 5	22 9 10 52 16 40	6 18						
T 27	2 16 19 50	4 37 11 45 2 38	17 52 1 15 11 26	1 12 21 24 0 2	18 24 2 13 11 45	0 29 4 10 1 10	1 55 16 19 22 7	22 9 10 49 16 39	6 19						
W28	2 39 22 55	4 3 12 10 2 47	18 16 1 18 11 9	1 12 21 23 0 2	18 24 2 13 11 46	0 29 4 11 1 10	1 54 16 18 22 8	22 10 10 46 16 39	6 19						
T 29	3 3 24 52	3 17 12 31 2 55	18 39 1 22 10 52	1 12 21 22 0 2	18 24 2 13 11 47	0 29 4 11 1 10	1 54 16 18 22 9	22 10 10 44 16 38	6 20						
F 30	3 26 25 27	2 19 12 48 3 2	19 1 1 26 10 35	1 12 21 21 0 2	18 23 2 13 11 48	0 29 4 12 1 10	1 53 16 18 22 9	22 11 10 41 16 37	6 20						
S 31	3n49 24s32	1s12 13n 2 3n 8	19n24 1n30 10s18	1s12 21s19 0s 2	18s23 2n14 11n49	0s29 4n13 1n10	1s52 16s18 22s 9	22s11 10n38 16s36	6n21						

Julian Day Number = 2489223.5, Delta T = 94.66 sec  
Ecliptic obliquity = 23°25'37", Nutation = 0°00'17", out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 26°10'54", Lahiri = 25°17'54"

# ASTRODIENST EPHEMERIS for the year 2103

## geocentric

APRIL 2103

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	12 34 56	10°38'17	18°37	26°25	21°59	7°8	24°12	2°R 0	28°23	22°R 3	6°8	18°R27	18°31	24°12	11°29	S 1
M 2	12 38 53	11°37'35	2°44	26°R31	23° 8	7°54	24°19	1°59	2°26	22°R 2	6° 8	18°327	18° 8	24°19	11°31	M 2
T 3	12 42 49	12°36'51	17° 7	26°30	24°17	8°41	24°27	1°56	2°30	22° 0	6° 9	18°25	18° 5	24°26	11°33	T 3
W 4	12 46 46	13°36'05	1°46	26°22	25°25	9°28	24°34	1°54	2°33	21°58	6°10	18°20	18° 2	24°32	11°34	W 4
T 5	12 50 42	14°35'17	16°34	26° 7	26°34	10°15	24°41	1°52	2°36	21°57	6°12	18°12	17°59	24°39	11°36	T 5
F 6	12 54 39	15°34'28	1°25	25°46	27°42	11° 1	24°48	1°50	2°40	21°55	6°13	18° 2	17°56	24°46	11°37	F 6
S 7	12 58 35	16°33'36	16°10	25°19	28°50	11°48	24°55	1°47	2°43	21°54	6°14	17°51	17°52	24°52	11°38	S 7
S 8	13 2 32	17°32'42	0°40	24°47	29°58	12°35	25° 1	1°45	2°46	21°52	6°16	17°39	17°49	24°59	11°39	S 8
M 9	13 6 29	18°31'47	14°50	24°11	1°II 6	13°22	25° 8	1°42	2°50	21°51	6°17	17°28	17°46	25° 6	11°40	M 9
T 10	13 10 25	19°30'49	28°34	23°31	2°13	14° 8	25°14	1°40	2°53	21°50	6°18	17°19	17°43	25°13	11°41	T 10
W11	13 14 22	20°29'49	11°II51	22°48	3°21	14°55	25°20	1°37	2°56	21°48	6°20	17°13	17°40	25°19	11°42	W11
T 12	13 18 18	21°28'47	24°42	22° 3	4°28	15°42	25°26	1°34	3° 0	21°47	6°21	17° 9	17°37	25°26	11°43	T 12
F 13	13 22 15	22°27'42	7°310	21°17	5°35	16°28	25°32	1°31	3° 3	21°45	6°22	17° 8	17°33	25°33	11°44	F 13
S 14	13 26 11	23°26'35	19°21	20°31	6°42	17°15	25°38	1°28	3° 7	21°44	6°24	17° 8	17°30	25°39	11°44	S 14
S 15	13 30 8	24°25'26	1°18	19°46	7°48	18° 1	25°43	1°25	3°10	21°43	6°25	17° 8	17°27	25°46	11°45	S 15
M16	13 34 4	25°24'15	13° 9	19° 2	8°55	18°48	25°49	1°22	3°13	21°41	6°26	17° 7	17°24	25°53	11°45	M16
T 17	13 38 1	26°23'01	24°57	18°20	10° 1	19°35	25°54	1°19	3°17	21°40	6°28	17° 4	17°21	25°59	11°46	T 17
W18	13 41 58	27°21'45	6°1748	17°42	11° 7	20°21	25°59	1°15	3°20	21°39	6°29	16°58	17°17	26° 6	11°46	W18
T 19	13 45 54	28°20'27	18°47	17° 7	12°12	21° 8	26° 4	1°12	3°24	21°37	6°30	16°50	17°14	26°13	11°46	T 19
F 20	13 49 51	29°19'07	0°255	16°35	13°18	21°54	26° 9	1° 9	3°27	21°36	6°32	16°39	17°11	26°19	11°R46	F 20
S 21	13 53 47	0°17'45	13°16	16° 9	14°23	22°41	26°13	1° 5	3°31	21°35	6°33	16°27	17° 8	26°26	11°46	S 21
S 22	13 57 44	1°16'20	25°49	15°47	15°28	23°27	26°18	1° 2	3°34	21°34	6°35	16°14	17° 5	26°33	11°46	S 22
M23	14 1 40	2°14'54	8°1737	15°29	16°33	24°14	26°22	0°58	3°38	21°33	6°36	16° 2	17° 2	26°39	11°46	M23
T 24	14 5 37	3°13'26	21°37	15°17	17°37	25° 0	26°26	0°55	3°41	21°31	6°37	15°51	16°58	26°46	11°45	T 24
W25	14 9 33	4°11'56	4°149	15°10	18°42	25°47	26°30	0°51	3°44	21°30	6°39	15°43	16°55	26°53	11°45	W25
T 26	14 13 30	5°10'25	18°12	15°D 8	19°46	26°33	26°33	0°47	3°48	21°29	6°40	15°37	16°52	26°59	11°45	T 26
F 27	14 17 27	6° 8'52	1°345	15°11	20°49	27°20	26°37	0°43	3°51	21°28	6°41	15°34	16°49	27° 6	11°44	F 27
S 28	14 21 23	7° 7'17	15°27	15°18	21°53	28° 6	26°40	0°39	3°55	21°27	6°43	15°D34	16°46	27°13	11°43	S 28
S 29	14 25 20	8° 5'41	29°20	15°31	22°56	28°53	26°43	0°35	3°58	21°26	6°44	15°34	16°42	27°19	11°43	S 29
M30	14 29 16	9° 4'03	13°23	15°Y48	23°II59	29°K39	26°346	0°31	4° 2	21°25	6°46	15°R34	16°39	27°26	11°42	M30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	
S 1	4n13	22s 7	0n 1	13n11	3n13	19n45	1n33	10s 1	1s13	21s18	0s 2	18s22	2n14	11n50	0s29	4n13
M 2	4 36	18 20	1 15	13 17	3 16	20 7	1 37	9 44	1 13	21 17	0 3	18 22	2 14	11 52	0 29	4 14
T 3	4 59	13 23	2 25	13 18	3 18	20 27	1 40	9 26	1 13	21 16	0 3	18 21	2 14	11 53	0 29	4 14
W 4	5 22	7 37	3 27	13 15	3 19	20 47	1 44	9 9	1 13	21 15	0 3	18 20	2 14	11 54	0 29	4 15
T 5	5 45	1 22	4 16	13 9	3 17	21 7	1 48	8 51	1 13	21 14	0 3	18 20	2 14	11 55	0 29	4 16
F 6	6 8	4n58	4 48	12 58	3 15	21 26	1 51	8 34	1 14	21 12	0 3	18 19	2 14	11 56	0 29	4 16
S 7	6 30	10 58	5 0	12 44	3 10	21 45	1 55	8 16	1 14	21 11	0 3	18 19	2 15	11 57	0 29	4 17
S 8	6 53	16 16	4 53	12 27	3 4	22 3	1 58	7 58	1 14	21 10	0 3	18 18	2 15	11 58	0 29	4 17
M 9	7 16	20 32	4 27	12 6	2 56	22 21	2 2	7 41	1 14	21 9	0 3	18 17	2 15	12 0	0 29	4 18
T 10	7 38	23 31	3 47	11 43	2 47	22 38	2 5	7 23	1 14	21 8	0 4	18 17	2 15	12 1	0 29	4 18
W11	8 0	25 5	2 55	11 17	2 36	22 55	2 8	7 5	1 14	21 7	0 4	18 16	2 15	12 2	0 29	4 19
T 12	8 22	25 15	1 56	10 49	2 24	23 11	2 12	6 47	1 14	21 6	0 4	18 15	2 15	12 3	0 29	4 20
F 13	8 44	24 6	0 53	10 19	2 11	23 26	2 15	6 29	1 14	21 5	0 4	18 15	2 15	12 4	0 29	4 20
S 14	9 6	21 50	0s12	9 48	1 56	23 41	2 18	6 11	1 15	21 4	0 4	18 14	2 15	12 5	0 29	4 21
S 15	9 28	18 39	1 14	9 17	1 41	23 55	2 21	5 53	1 15	21 3	0 4	18 13	2 15	12 7	0 29	4 21
M16	9 49	14 44	2 13	8 46	1 25	24 9	2 24	5 34	1 15	21 3	0 4	18 13	2 16	12 8	0 29	4 22
T 17	10 11	10 16	3 6	8 15	1 9	24 22	2 27	5 16	1 15	21 2	0 4	18 12	2 16	12 9	0 29	4 22
W18	10 32	5 26	3 51	7 45	0 52	24 34	2 30	4 58	1 15	21 1	0 5	18 11	2 16	12 10	0 29	4 23
T 19	10 53	0 21	4 26	7 16	0 36	24 46	2 33	4 40	1 15	21 0	0 5	18 10	2 16	12 11	0 29	4 23
F 20	11 14	4s48	4 50	6 49	0 19	24 58	2 36	4 21	1 15	20 59	0 5	18 10	2 16	12 12	0 29	4 24
S 21	11 34	9 50	5 0	6 23	0 2	25 8	2 39	4 3	1 15	20 59	0 5	18 9	2 16	12 14	0 29	4 24
S 22	11 55	14 34	4 57	6 0	0s14	25 18	2 41	3 45	1 15	20 58	0 5	18 8	2 16	12 15	0 29	4 25
M23	12 15	18 45	4 38	5 38	0 29	25 28	2 44	3 26	1 15	20 57	0 5	18 7	2 16	12 16	0 29	4 25
T 24	12 35	22 6	4 5	5 20	0 45	25 37	2 46	3 8	1 15	20 57	0 5	18 6	2 16	12 17	0 29	4 25
W25	12 55	24 20	3 18	5 3	0 59	25 45	2 49	2 49	1 15	20 56	0 5	18 6	2 16	12 18	0 29	4 26
T 26	13 14	25 13	2 20	4 50	1 13	25 53	2 51	2 31	1 15	20 55	0 6	18 5	2 16	12 19	0 29	4 26
F 27	13 34	24 38	1 13	4 39	1 26	26 0	2 53	2 13	1 15	20 55	0 6	18 4	2 16	12 21	0 29	4 27
S 28	13 53	22 32	0 1	4 30	1 39	26 6	2 56	1 54	1 15	20 54	0 6	18 3	2 17	12 22	0 29	4 27
S 29	14 12	19 6	1n13	4 24	1 50	26 12	2 58	1 36	1 15	20 54	0 6	18 2	2 17	12 23	0 29	4 27
M30	14n31	14s31	2n22	4n21	2s 1	26n17	3n 0	1s17	1s15	20s53	0s 6	18s 1	2n17	12n24	0s29	4n28

Julian Day Number = 2489254.5, Delta T = 94.70 sec

Ecliptic obliquity = 23°25'36, Nutation = 0°00'16, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 26°10'58, Lahiri = 25°17'59

# ASTRODIENST EPHEMERIS for the year 2103

## geocentric

MAY 2103

00:00 UT

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

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	14n49	9s 7	3n24	4n20	2s11	26n21	3n 1	0s59	1s15	20s53	0s 6	18s 0	2n17	12n25	0s29	4n28
W 2	15 7	3 11	4 13	4 22	2 20	26 25	3 3	0 40	1 15	20 53	0 6	18 0	2 17	12 26	0 29	4 29
T 3	15 25	2n56	4 47	4 26	2 29	26 28	3 5	0 22	1 15	20 52	0 7	17 59	2 17	12 28	0 29	4 29
F 4	15 43	8 53	5 3	4 32	2 36	26 31	3 6	0 3	1 15	20 52	0 7	17 58	2 17	12 29	0 29	4 29
S 5	16 1	14 20	4 59	4 40	2 43	26 33	3 8	0n15	1 15	20 52	0 7	17 57	2 17	12 30	0 29	4 30
S 6	16 18	18 56	4 37	4 51	2 49	26 35	3 9	0 33	1 15	20 52	0 7	17 56	2 17	12 31	0 29	4 30
M 7	16 35	22 23	3 59	5 3	2 54	26 36	3 10	0 52	1 14	20 51	0 7	17 55	2 17	12 32	0 29	4 30
T 8	16 51	24 30	3 8	5 17	2 59	26 36	3 11	1 10	1 14	20 51	0 7	17 54	2 17	12 33	0 29	4 31
W 9	17 8	25 10	2 9	5 34	3 2	26 35	3 12	1 29	1 14	20 51	0 7	17 53	2 17	12 35	0 29	4 31
T 10	17 24	24 28	1 4	5 52	3 5	26 35	3 13	1 47	1 14	20 51	0 8	17 52	2 17	12 36	0 29	4 31
F 11	17 40	22 32	0s 3	6 11	3 8	26 33	3 14	2 5	1 14	20 51	0 8	17 51	2 17	12 37	0 29	4 31
S 12	17 55	19 36	1 8	6 32	3 9	26 31	3 14	2 23	1 14	20 51	0 8	17 51	2 17	12 38	0 29	4 32
S 13	18 10	15 52	2 9	6 55	3 10	26 28	3 15	2 42	1 14	20 51	0 8	17 50	2 17	12 39	0 29	4 32
M14	18 25	11 33	3 4	7 19	3 10	26 25	3 15	3 0	1 14	20 51	0 8	17 49	2 17	12 40	0 29	4 32
T 15	18 40	6 50	3 51	7 45	3 10	26 22	3 15	3 18	1 13	20 51	0 8	17 48	2 17	12 41	0 29	4 32
W16	18 54	1 51	4 28	8 11	3 8	26 17	3 15	3 36	1 13	20 51	0 9	17 47	2 17	12 42	0 29	4 32
T 17	19 8	3s14	4 53	8 39	3 7	26 13	3 15	3 54	1 13	20 52	0 9	17 46	2 17	12 43	0 29	4 33
F 18	19 22	8 17	5 6	9 9	3 4	26 7	3 14	4 12	1 13	20 52	0 9	17 45	2 17	12 45	0 29	4 33
S 19	19 35	13 6	5 5	9 39	3 1	26 2	3 14	4 30	1 13	20 52	0 9	17 44	2 17	12 46	0 29	4 33
S 20	19 48	17 28	4 49	10 10	2 58	25 55	3 13	4 47	1 12	20 52	0 9	17 43	2 17	12 47	0 29	4 33
M21	20 1	21 7	4 18	10 42	2 53	25 49	3 12	5 5	1 12	20 53	0 9	17 42	2 17	12 48	0 29	4 33
T 22	20 13	23 44	3 32	11 15	2 49	25 42	3 11	5 23	1 12	20 53	0 9	17 41	2 17	12 49	0 29	4 33
W23	20 25	25 1	2 33	11 49	2 43	25 34	3 10	5 41	1 12	20 54	0 10	17 40	2 17	12 50	0 29	4 33
T 24	20 36	24 49	1 24	12 23	2 37	25 26	3 8	5 58	1 11	20 54	0 10	17 40	2 16	12 51	0 29	4 34
F 25	20 48	23 2	0 9	12 58	2 31	25 17	3 7	6 16	1 11	20 54	0 10	17 39	2 16	12 52	0 29	4 34
S 26	20 58	19 50	1n 7	13 34	2 24	25 8	3 5	6 33	1 11	20 55	0 10	17 38	2 16	12 53	0 29	4 34
S 27	21 9	15 27	2 19	14 10	2 17	24 59	3 3	6 50	1 11	20 56	0 10	17 37	2 16	12 54	0 29	4 34
M28	21 19	10 11	3 23	14 46	2 9	24 49	3 1	7 8	1 10	20 56	0 10	17 36	2 16	12 55	0 29	4 34
T 29	21 29	4 24	4 15	15 23	2 1	24 39	2 58	7 25	1 10	20 57	0 11	17 35	2 16	12 56	0 29	4 34
W30	21 38	1n35	4 51	16 0	1 52	24 29	2 55	7 42	1 10	20 57	0 11	17 34	2 16	12 57	0 29	4 34
T 31	21n47	7n27	5n 9	16n37	1s43	24n18	2n53	7n59	1s 9	20s58	0s11	17s33	2n16	12n58	0s29	4n34

Julian Day Number = 2489284.5, Delta T = 94.74 sec

Ecliptic obliquity = 23°25'36", Nutation = 0°00'15", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 26°11'02", Lahiri = 25°18'03"



# ASTRODIENST EPHEMERIS for the year 2103

## geocentric

JUNE 2103

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	16 35 26	9♂57'34	20♀53	23♂53	23♂46	24♀ 5	26°R43	28°R12	5♂46	21°R 8	7♂27	13°R38	14♂58	1♂ 0	10°R36	F 1
S 2	16 39 23	10°55'07	4♂45	25°45	24°32	24°50	26♂40	28♂ 8	5°49	21°D 8	7°29	13♂34	14°54	1° 7	10♂33	S 2
S 3	16 43 19	11°52'40	18°27	27°40	25°16	25°35	26°37	28° 3	5°52	21♂ 8	7°30	13°29	14°51	1°13	10°30	S 3
M 4	16 47 16	12°50'12	1♂54	29°37	26° 0	26°20	26°33	27°59	5°55	21° 8	7°31	13°24	14°48	1°20	10°27	M 4
T 5	16 51 12	13°47'43	15° 5	1♂36	26°43	27° 5	26°30	27°55	5°58	21° 8	7°32	13°20	14°45	1°27	10°24	T 5
W 6	16 55 9	14°45'13	28° 0	3°37	27°25	27°50	26°26	27°51	6° 1	21° 8	7°33	13°18	14°42	1°33	10°20	W 6
T 7	16 59 5	15°42'42	10♂37	5°40	28° 5	28°35	26°22	27°46	6° 4	21° 8	7°34	13°D17	14°39	1°40	10°17	T 7
F 8	17 3 2	16°40'10	22°59	7°45	28°45	29°20	26°18	27°42	6° 6	21° 8	7°36	13°17	14°35	1°47	10°14	F 8
S 9	17 6 58	17°37'36	5♂ 8	9°51	29°24	0♂ 5	26°13	27°38	6° 9	21° 8	7°37	13°19	14°32	1°53	10°10	S 9
S 10	17 10 55	18°35'02	17° 7	11°59	0♂ 1	0°49	26° 9	27°34	6°12	21° 9	7°38	13°20	14°29	2° 0	10° 7	S 10
M 11	17 14 52	19°32'26	28°59	14° 8	0°37	1°34	26° 4	27°30	6°15	21° 9	7°39	13°22	14°26	2° 7	10° 3	M 11
T 12	17 18 48	20°29'50	10♂50	16°19	1°12	2°19	25°59	27°26	6°17	21° 9	7°40	13°23	14°23	2°13	9°59	T 12
W 13	17 22 45	21°27'12	22°45	18°30	1°46	3° 3	25°54	27°22	6°20	21°10	7°41	13°R23	14°20	2°20	9°56	W 13
T 14	17 26 41	22°24'33	4♂47	20°41	2°18	3°48	25°49	27°18	6°23	21°10	7°42	13°23	14°16	2°27	9°52	T 14
F 15	17 30 38	23°21'53	17° 1	22°53	2°49	4°32	25°44	27°15	6°25	21°10	7°43	13°21	14°13	2°33	9°49	F 15
S 16	17 34 34	24°19'13	29°32	25° 5	3°18	5°16	25°38	27°11	6°28	21°11	7°44	13°19	14°10	2°40	9°45	S 16
S 17	17 38 31	25°16'31	12♂23	27°17	3°46	6° 1	25°33	27° 7	6°30	21°11	7°45	13°17	14° 7	2°47	9°41	S 17
M 18	17 42 27	26°13'49	25°34	29°29	4°12	6°45	25°27	27° 4	6°33	21°12	7°46	13°14	14° 4	2°54	9°37	M 18
T 19	17 46 24	27°11'06	9♂ 8	1♂39	4°36	7°29	25°21	27° 0	6°35	21°12	7°47	13°12	14° 0	3° 0	9°34	T 19
W 20	17 50 21	28° 8'22	23° 1	3°49	4°59	8°13	25°15	26°57	6°38	21°13	7°48	13°11	13°57	3° 7	9°30	W 20
T 21	17 54 17	29° 5'38	7♂12	5°57	5°20	8°57	25° 9	26°53	6°40	21°13	7°49	13°D10	13°54	3°14	9°26	T 21
F 22	17 58 14	0♂ 2'53	21°35	8° 4	5°40	9°41	25° 3	26°50	6°43	21°14	7°50	13°10	13°51	3°20	9°22	F 22
S 23	18 2 10	1° 0'08	6♂ 6	10° 9	5°57	10°25	24°57	26°46	6°45	21°15	7°51	13°11	13°48	3°27	9°18	S 23
S 24	18 6 7	1°57'22	20°39	12°13	6°12	11° 9	24°50	26°43	6°47	21°15	7°52	13°12	13°45	3°34	9°15	S 24
M 25	18 10 3	2°54'37	5♂ 8	14°15	6°26	11°53	24°44	26°40	6°50	21°16	7°52	13°12	13°41	3°40	9°11	M 25
T 26	18 14 0	3°51'51	19° 8	16°15	6°37	12°37	24°37	26°37	6°52	21°17	7°53	13°13	13°38	3°47	9° 7	T 26
W 27	18 17 57	4°49'05	3♀43	18°13	6°47	13°20	24°30	26°34	6°54	21°18	7°54	13°R13	13°35	3°54	9° 3	W 27
T 28	18 21 53	5°46'19	17°42	20° 8	6°54	14° 4	24°24	26°31	6°56	21°18	7°55	13°13	13°32	4° 0	8°59	T 28
F 29	18 25 50	6°43'33	1♂28	22° 2	6°59	14°47	24°17	26°28	6°58	21°19	7°56	13°13	13°29	4° 7	8°55	F 29
S 30	18 29 46	7♂40'47	14♂59	23♂54	7♂ 1	15♂31	24♂10	26♂25	7♂ 0	21♂20	7♂56	13♂12	13♂26	4♂14	8♂51	S 30

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	21n56	12n55	5n 9	17n13	1s34	24n 7	2n49	8n16	1s 9	20s59	0s11	17s32	2n16	12n59	0s29	4n34	1n 9	1s27	16s18	22s44	22s35	7n39	16s 4	6n57	
S 2	22 4	17 39	4 51	17 50	1 24	23 56	2 46	8 33	1 9	21 0	0 11	17 32	2 16	13 0	0 29	4 34	1 8	1 27	16 18	22 44	22 36	7 36	16 4	6 58	
S 3	22 12	21 24	4 16	18 26	1 14	23 44	2 43	8 49	1 8	21 0	0 11	17 31	2 16	13 1	0 29	4 34	1 8	1 27	16 18	22 45	22 36	7 33	16 4	6 58	
M 4	22 20	23 55	3 27	19 1	1 3	23 32	2 39	9 6	1 8	21 1	0 11	17 30	2 15	13 2	0 29	4 34	1 8	1 27	16 18	22 45	22 36	7 30	16 4	6 59	
T 5	22 27	25 3	2 28	19 36	0 53	23 20	2 35	9 23	1 8	21 2	0 12	17 29	2 15	13 3	0 29	4 34	1 8	1 27	16 19	22 45	22 37	7 27	16 3	6 59	
W 6	22 33	24 48	1 23	20 10	0 42	23 7	2 30	9 39	1 7	21 3	0 12	17 28	2 15	13 4	0 29	4 34	1 8	1 26	16 19	22 46	22 37	7 24	16 3	6 59	
T 7	22 40	23 15	0 15	20 43	0 31	22 55	2 26	9 55	1 7	21 4	0 12	17 27	2 15	13 5	0 29	4 34	1 8	1 26	16 19	22 46	22 37	7 21	16 3	7 0	
F 8	22 46	20 36	0s53	21 15	0 21	22 42	2 21	10 11	1 7	21 5	0 12	17 27	2 15	13 6	0 29	4 33	1 8	1 26	16 19	22 46	22 38	7 18	16 3	7 0	
S 9	22 51	17 5	1 57	21 45	0 10	22 29	2 16	10 27	1 6	21 6	0 12	17 26	2 15	13 7	0 29	4 33	1 8	1 26	16 19	22 46	22 38	7 15	16 3	7 0	
S 10	22 56	12 55	2 55	22 14	0n 1	22 16	2 10	10 43	1 6	21 7	0 12	17 25	2 15	13 8	0 29	4 33	1 8	1 26	16 19	22 46	22 38	7 12	16 3	7 1	
M11	23 1	8 18	3 45	22 41	0 12	22 2	2 5	10 59	1 6	21 8	0 13	17 24	2 15	13 8	0 29	4 33	1 8	1 26	16 20	22 45	22 39	7 9	16 3	7 1	
T 12	23 5	3 24	4 26	23 5	0 22	21 49	1 59	11 15	1 5	21 9	0 13	17 24	2 14	13 9	0 29	4 33	1 8	1 26	16 20	22 45	22 39	7 7	16 3	7 1	
W13	23 9	1s38	4 55	23 28	0 32	21 35	1 52	11 31	1 5	21 10	0 13	17 23	2 14	13 10	0 29	4 33	1 8	1 25	16 20	22 45	22 39	7 4	16 3	7 2	
T 14	23 13	6 40	5 12	23 48	0 42	21 21	1 46	11 46	1 4	21 11	0 13	17 22	2 14	13 11	0 29	4 33	1 8	1 25	16 20	22 45	22 40	7 1	16 3	7 2	
F 15	23 16	11 31	5 14	24 6	0 52	21 8	1 39	12 1	1 4	21 12	0 13	17 21	2 14	13 12	0 29	4 32	1 8	1 25	16 21	22 45	22 40	6 58	16 3	7 2	
S 16	23 18	16 1	5 3	24 21	1 1	20 54	1 32	12 17	1 3	21 13	0 13	17 21	2 14	13 13	0 29	4 32	1 8	1 25	16 21	22 46	22 40	6 55	16 3	7 2	
S 17	23 21	19 55	4 36	24 33	1 9	20 40	1 24	12 32	1 3	21 15	0 14	17 20	2 14	13 14	0 29	4 32	1 8	1 25	16 21	22 46	22 41	6 52	16 3	7 3	
M18	23 22	22 55	3 53	24 42	1 17	20 26	1 16	12 47	1 2	21 16	0 14	17 19	2 14	13 14	0 29	4 32	1 8	1 25	16 21	22 46	22 41	6 49	16 3	7 3	
T 19	23 24	24 43	2 57	24 49	1 24	20 12	1 8	13 1	1 2	21 17	0 14	17 19	2 13	13 15	0 29	4 32	1 8	1 25	16 21	22 46	22 41	6 46	16 3	7 3	
W20	23 25	25 4	1 49	24 53	1 30	19 59	1 0	13 16	1 1	21 18	0 14	17 18	2 13	13 16	0 29	4 31	1 8	1 25	16 22	22 46	22 42	6 43	16 3	7 3	
T 21	23 25	23 47	0 33	24 54	1 36	19 45	0 51	13 31	1 1	21 20	0 14	17 18	2 13	13 17	0 29	4 31	1 8	1 25	16 22	22 47	22 42	6 40	16 3	7 3	
F 22	23 26	20 56	0n46	24 52	1 41	19 31	0 42	13 45	1 0	21 21	0 14	17 17	2 13	13 17	0 29	4 31	1 8	1 25	16 22	22 47	22 42	6 37	16 3	7 4	
S 23	23 25	16 44	2 4	24 47	1 45	19 18	0 32	13 59	1 0	21 22	0 15	17 16	2 13	13 18	0 29	4 31	1 8	1 25	16 22	22 46	22 43	6 34	16 3	7 4	
S 24	23 25	11 33	3 13	24 41	1 49	19 4	0 22	14 13	0 59	21 23	0 15	17 16	2 12	13 19	0 29	4 30	1 8	1 25	16 23	22 46	22 43	6 31	16 3	7 4	
M25	23 24	5 45	4 10	24 31	1 52	18 51	0 12	14 27	0 59	21 25	0 15	17 15	2 12	13 20	0 29	4 30	1 8	1 25	16 23	22 46	22 43	6 29	16 3	7 4	
T 26	23 22	0n18	4 50	24 19	1 54	18 38	0 2	14 41	0 58	21 26	0 15	17 15	2 12	13 20	0 29	4 30	1 8	1 25	16 23	22 46	22 44	6 26	16 3	7 4	
W27	23 20	6 15	5 13	24 6	1 55	18 25	0s 9	14 55	0 58	21 27	0 15	17 14	2 12	13 21	0 29	4 29	1 8	1 25	16 23	22 46	22 44	6 23	16 4	7 4	
T 28	23 18	11 48	5 16	23 50	1 56	18 12	0 21	15 8	0 57	21 29	0 15	17 14	2 12	13 22	0 29	4 29	1 8	1 25	16 24	22 46	22 44	6 20	16 4	7 4	
F 29	23 15	16 41	5 1	23 32	1 56	18 0	0 32	15 22	0 57	21 30	0 16	17 13	2 11	13 23	0 29	4 29	1 8	1 25	16 24	22 46	22 45	6 17	16 4	7 5	
S 30	23n12	20n37	4n30	23n12	1n55	17n48	0s44	15n35	0s56	21s32	0s16	17s13	2n11	13n23	0s29	4n28	1n 8	1s25	16s24	22s46	22s45	6n14	16s 4	7n	

ASTRODIENST EPHEMERIS for the year 2103  
geocentric

JULY 2103

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Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
S 1	18 33 43	8♌38'01	28♋16	25♌44	7°R 2	16♋14	24°R 2	26°R22	7♋2	21♐21	7♋57	13°R12	13♌22	4♐21	8°R47	S 1
M 2	18 37 39	9°35'15	11♌19	27°31	7♌0	16°58	23♌55	26♌20	7°4	21°22	7°58	13♌11	13°19	4°27	8♌44	M 2
T 3	18 41 36	10°32'29	24°8	29°16	6°56	17°41	23°48	26°17	7°6	21°23	7°59	13°11	13°16	4°34	8°40	T 3
W 4	18 45 32	11°29'43	6♌43	1♌0	6°49	18°24	23°41	26°15	7°8	21°24	7°59	13°11	13°13	4°41	8°36	W 4
T 5	18 49 29	12°26'57	19°6	2°41	6°40	19°7	23°33	26°12	7°10	21°25	8°0	13°D11	13°10	4°47	8°32	T 5
F 6	18 53 26	13°24'11	1♌18	4°19	6°29	19°50	23°26	26°10	7°12	21°26	8°1	13°R11	13°6	4°54	8°28	F 6
S 7	18 57 22	14°21'24	13°21	5°56	6°15	20°33	23°18	26°8	7°14	21°27	8°2	13°11	13°3	5°1	8°24	S 7
S 8	19 1 19	15°18'38	25°16	7°31	5°59	21°16	23°11	26°5	7°16	21°28	8°2	13°10	13°0	5°7	8°20	S 8
M 9	19 5 15	16°15'51	7♐8	9°3	5°41	21°59	23°3	26°3	7°17	21°29	8°3	13°10	12°57	5°14	8°16	M 9
T 10	19 9 12	17°13'04	18°58	10°33	5°20	22°42	22°56	26°1	7°19	21°30	8°3	13°10	12°54	5°21	8°13	T 10
W11	19 13 8	18°10'17	0♌52	12°1	4°57	23°24	22°48	25°59	7°21	21°32	8°4	13°9	12°51	5°28	8°9	W11
T 12	19 17 5	19°7'30	12°53	13°27	4°32	24°7	22°40	25°58	7°22	21°33	8°5	13°9	12°47	5°34	8°5	T 12
F 13	19 21 1	20°4'42	25°6	14°50	4°5	24°49	22°32	25°56	7°24	21°34	8°5	13°D 9	12°44	5°41	8°1	F 13
S 14	19 24 58	21°1'55	7♌35	16°11	3°36	25°32	22°25	25°54	7°25	21°35	8°6	13°9	12°41	5°48	7°58	S 14
S 15	19 28 55	21°59'08	20°24	17°30	3°5	26°14	22°17	25°53	7°27	21°37	8°6	13°10	12°38	5°54	7°54	S 15
M16	19 32 51	22°56'20	3♌36	18°46	2°33	26°56	22°9	25°51	7°28	21°38	8°7	13°11	12°35	6°1	7°50	M16
T 17	19 36 48	23°53'33	17°14	20°0	1°59	27°39	22°2	25°50	7°29	21°39	8°7	13°12	12°32	6°8	7°47	T 17
W18	19 40 44	24°50'46	1♌16	21°11	1°24	28°21	21°54	25°49	7°31	21°41	8°8	13°12	12°28	6°14	7°43	W18
T 19	19 44 41	25°47'59	15°42	22°20	0°48	29°3	21°46	25°47	7°32	21°42	8°8	13°R12	12°25	6°21	7°39	T 19
F 20	19 48 37	26°45'12	0♌25	23°26	0°12	29°45	21°39	25°46	7°33	21°43	8°8	13°12	12°22	6°28	7°36	F 20
S 21	19 52 34	27°42'26	15°20	24°29	29♌35	0♌26	21°31	25°45	7°34	21°45	8°9	13°11	12°19	6°34	7°32	S 21
S 22	19 56 30	28°39'40	0♌18	25°30	28°57	1°8	21°23	25°45	7°35	21°46	8°9	13°9	12°16	6°41	7°29	S 22
M23	20 0 27	29°36'55	15°10	26°27	28°19	1°50	21°16	25°44	7°37	21°48	8°10	13°7	12°12	6°48	7°25	M23
T 24	20 4 24	0♌34'11	29°51	27°22	27°42	2°31	21°8	25°43	7°38	21°49	8°10	13°5	12°9	6°55	7°22	T 24
W25	20 8 20	1°31'27	14°Y14	28°13	27°5	3°13	21°1	25°42	7°39	21°51	8°10	13°4	12°6	7°1	7°19	W25
T 26	20 12 17	2°28'44	28°16	29°1	26°29	3°54	20°53	25°42	7°39	21°52	8°10	13°D 3	12°3	7°8	7°15	T 26
F 27	20 16 13	3°26'02	11♌57	29°45	25°54	4°36	20°46	25°41	7°40	21°54	8°11	13°3	12°0	7°15	7°12	F 27
S 28	20 20 10	4°23'21	25°17	0♐26	25°19	5°17	20°38	25°41	7°41	21°56	8°11	13°4	11°57	7°21	7°9	S 28
S 29	20 24 6	5°20'42	8♐17	1°3	24°46	5°58	20°31	25°41	7°42	21°57	8°11	13°6	11°53	7°28	7°5	S 29
M30	20 28 3	6°18'03	21°2	1°36	24°15	6°39	20°24	25°41	7°43	21°59	8°11	13°7	11°50	7°35	7°2	M30
T 31	20 31 59	7♌15'25	3♌32	2♐5	23♌45	7♐20	20♌17	25°D41	7♋43	22♐1	8♋12	13♌8	11♌47	7♐41	6♌59	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	decl	lat	
S 1	23n 9	23n24	3n44	22n51	1n53	17n36	0s56	15n48	0s56	21s33	0s16	17s12	2n11	13n24	0s29	4n28	1n 8	1s25	16s25	22s46	22s45	6n11	16s 4	7n 5										
M 2	23 5	24 54	2 48	22 28	1 51	17 24	1 9	16 1	0 55	21 34	0 16	17 12	2 11	13 24	0 29	4 27	1 8	1 25	16 25	22 46	22 46	6 8	16 4	7 5										
T 3	23 0	25 1	1 44	22 4	1 48	17 13	1 22	16 13	0 54	21 36	0 16	17 12	2 11	13 25	0 29	4 27	1 8	1 25	16 25	22 46	22 46	6 5	16 5	7 5										
W 4	22 56	23 51	0 36	21 38	1 45	17 2	1 35	16 26	0 54	21 37	0 16	17 11	2 10	13 26	0 29	4 27	1 8	1 25	16 25	22 46	22 46	6 2	16 5	7 5										
T 5	22 51	21 31	0s33	21 11	1 41	16 51	1 48	16 38	0 53	21 39	0 16	17 11	2 10	13 26	0 29	4 26	1 8	1 25	16 26	22 46	22 47	5 59	16 5	7 5										
F 6	22 45	18 15	1 39	20 44	1 36	16 40	2 2	16 51	0 53	21 40	0 17	17 11	2 10	13 27	0 29	4 26	1 7	1 25	16 26	22 46	22 47	5 56	16 5	7 5										
S 7	22 39	14 15	2 40	20 15	1 31	16 30	2 16	17 3	0 52	21 41	0 17	17 10	2 10	13 27	0 29	4 25	1 7	1 25	16 26	22 46	22 47	5 53	16 5	7 5										
S 8	22 33	9 45	3 33	19 45	1 25	16 21	2 30	17 14	0 51	21 43	0 17	17 10	2 10	13 28	0 29	4 25	1 7	1 25	16 27	22 46	22 47	5 50	16 6	7 5										
M 9	22 26	4 55	4 17	19 15	1 19	16 12	2 44	17 26	0 51	21 44	0 17	17 10	2 9	13 29	0 29	4 24	1 7	1 25	16 27	22 47	22 48	5 48	16 6	7 5										
T 10	22 19	0s 5	4 49	18 44	1 12	16 3	2 58	17 38	0 50	21 46	0 17	17 9	2 9	13 29	0 29	4 24	1 7	1 25	16 27	22 47	22 48	5 45	16 6	7 5										
W11	22 12	5 5	5 10	18 13	1 5	15 55	3 12	17 49	0 49	21 47	0 17	17 9	2 9	13 30	0 29	4 23	1 7	1 25	16 27	22 47	22 48	5 42	16 6	7 5										
T 12	22 4	9 57	5 17	17 41	0 57	15 47	3 26	18 0	0 49	21 49	0 17	17 9	2 9	13 30	0 29	4 23	1 7	1 26	16 28	22 47	22 49	5 39	16 7	7 5										
F 13	21 56	14 31	5 10	17 9	0 49	15 39	3 41	18 11	0 48	21 50	0 18	17 9	2 8	13 31	0 29	4 22	1 7	1 26	16 28	22 47	22 49	5 36	16 7	7 5										
S 14	21 47	18 35	4 49	16 37	0 40	15 32	3 55	18 22	0 47	21 51	0 18	17 9	2 8	13 31	0 29	4 22	1 7	1 26	16 28	22 47	22 49	5 33	16 7	7 5										
S 15	21 38	21 54	4 13	16 5	0 31	15 26	4 8	18 32	0 47	21 53	0 18	17 9	2 8	13 31	0 29	4 21	1 7	1 26	16 29	22 47	22 50	5 27	16 8	7 5										
M16	21 29	24 10	3 22	15 32	0 21	15 19	4 22	18 43	0 46	21 54	0 18	17 8	2 8	13 32	0 29	4 21	1 7	1 26	16 29	22 46	22 50	5 30	16 8	7 4										
T 17	21 19	25 7	2 19	14 59	0 12	15 14	4 35	18 53	0 45	21 56	0 18	17 8	2 7	13 32	0 29	4 20	1 7	1 26	16 29	22 46	22 50	5 24	16 8	7 4										
W18	21 9	24 31	1 6	14 27	0 1	15 9	4 48	19 3	0 45	21 57	0 18	17 8	2 7	13 33	0 29	4 20	1 7	1 26	16 30	22 46	22 50	5 21	16 9	7 4										
T 19	20 58	22 17	0n14	13 55	0s 9	15 4	5 1	19 13	0 44	21 58	0 18	17 8	2 7	13 33	0 29	4 19	1 7	1 27	16 30	22 46	22 51	5 18	16 9	7 4										
F 20	20 48	18 31	1 34	13 23	0 20	15 0	5 13	19 23	0 43	22 0	0 19	17 8	2 7	13 34	0 29	4 19	1 7	1 27	16 30	22 46	22 51	5 15	16 9	7 4										
S 21	20 37	13 33	2 48	12 51	0 32	14 56	5 25	19 32	0 43	22 1	0 19	17 8	2 7	13 34	0 29	4 18	1 7	1 27	16 31	22 46	22 51	5 12	16 10	7 4										
S 22	20 25	7 45	3 52	12 20	0 43	14 53	5 36	19 42	0 42	22 2	0 19	17 8	2 6	13 34	0 29	4 17	1 7	1 27	16 31	22 47	22 52	5 9	16 10	7 4										
M23	20 13	1 33	4 39	11 50	0 55	14 50	5 46	19 51	0 41	22 4	0 19	17 8	2 6	13 35	0 30	4 17	1 7	1 27	16 31	22 47	22 52	5 7	16 10	7 3										
T 24	20 1	4n38	5 7	11 20	1 7	14 47	5 56	20 0	0 40	22 5	0 19	17 8	2 6	13 35	0 30	4 16	1 7	1 28	16 31	22 47	22 52	5 4	16 11	7 3										
W25	19 49	10 27	5 15	10 51	1 20	14 45	6 5	20 9	0 40	22 6	0 19	17 9	2 6	13 35	0 30	4 16	1 7	1 28	16 32	22 47	22 53	5 1	16 11	7 3										
T 26	19 36	15 35	5 5	10 22	1 32	14 44	6 13	20 17	0 39	22 7	0 19	17 9	2 5	13 35	0 30	4 15	1 7	1 28	16 32	22 47	22 53	4 58	16 11	7 3										
F 27	19 23	19 48	4 36	9 55	1 45	14 43	6 21	20 25	0 38	22 9	0 19	17 9	2 5	13 36	0 30	4 14	1 7	1 28	16 32	22 47	22 53	4 55	16 12	7 3										
S 28	19 9	22 51	3 54	9 29	1 58	14 42	6 28	20 34	0 37	22 10	0 20	17 9	2 5	13 36	0 30	4 14	1 7	1 28	16 33	22 47	22 53	4 52	16 12	7 2										
S 29	18 55	24 39	3 0	9 4	2 10	14 41	6 34	20 42	0 36	22 11	0 20	17 9	2 5	13 36	0 30	4 13	1 7	1 29	16 33	22 47	22 54	4 49	16 13	7 2										
M30	18 41	25 6	1 59	8 40	2 23	14 41	6 40	20 49	0 36	22 12	0 20	17 9	2 4	13 36	0 30	4 12	1 7	1 29	16 33	22 47	22 54	4 46	16 13	7 2										
T 31	18n27	24n15	0n53	8n17	2s36	14n42	6s44	20n57	0s35	22s13	0s20	17s10	2n 4	13n37	0s30	4n12	1n 7	1s29	16s34	22s47	22s54	4n43	16s13	7n 2										



ASTRODIENST EPHEMERIS for the year 2103  
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00:00 UT

Day	Sid.t	☉	☽	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	20 35 56	8♌12'47	15♊50	2♈30	23°R17	8♌1	20°R10	25♌41	7♈44	22♈2	8♌12	13°R 9	11♌44	7♈48	6°R56	W 1	
T 2	20 39 53	9°10'11	27°59	2°51	22♊51	8°42	20♊3	25°41	7°45	22° 4	8°12	13♊8	11°41	7°55	6♊53	T 2	
F 3	20 43 49	10° 7'35	10♌1	3° 6	22°27	9°22	19°56	25°41	7°45	22° 6	8°12	13° 6	11°38	8° 2	6°50	F 3	
S 4	20 47 46	11° 5'01	21°57	3°17	22° 5	10° 3	19°49	25°42	7°46	22° 8	8°12	13° 2	11°34	8° 8	6°47	S 4	
S 5	20 51 42	12° 2'27	3♈49	3°23	21°46	10°43	19°43	25°42	7°46	22° 9	8°12	12°57	11°31	8°15	6°45	S 5	
M 6	20 55 39	12°59'54	15°39	3°R24	21°28	11°24	19°36	25°43	7°47	22°11	8°12	12°52	11°28	8°22	6°42	M 6	
T 7	20 59 35	13°57'21	27°30	3°19	21°13	12° 4	19°30	25°43	7°47	22°13	8°12	12°47	11°25	8°28	6°39	T 7	
W 8	21 3 32	14°54'49	9♊24	3°10	21° 1	12°44	19°23	25°44	7°47	22°15	8°R12	12°42	11°22	8°35	6°37	W 8	
T 9	21 7 28	15°52'19	21°25	2°55	20°50	13°24	19°17	25°45	7°47	22°17	8°12	12°38	11°18	8°42	6°34	T 9	
F 10	21 11 25	16°49'49	3♈36	2°34	20°43	14° 4	19°11	25°46	7°48	22°19	8°12	12°36	11°15	8°48	6°32	F 10	
S 11	21 15 22	17°47'19	16° 2	2° 9	20°37	14°44	19° 5	25°47	7°48	22°20	8°12	12°D35	11°12	8°55	6°29	S 11	
S 12	21 19 18	18°44'51	28°46	1°38	20°34	15°24	18°59	25°48	7°48	22°22	8°12	12°36	11° 9	9° 2	6°27	S 12	
M13	21 23 15	19°42'23	11♊53	1° 3	20°D33	16° 3	18°54	25°49	7°48	22°24	8°12	12°37	11° 6	9° 9	6°24	M13	
T 14	21 27 11	20°39'57	25°26	0°24	20°35	16°43	18°48	25°51	7°R48	22°26	8°12	12°38	11° 3	9°15	6°22	T 14	
W15	21 31 8	21°37'31	9♊26	29♌41	20°38	17°22	18°43	25°52	7°48	22°28	8°12	12°R39	10°59	9°22	6°20	W15	
T 16	21 35 4	22°35'06	23°53	28°55	20°44	18° 2	18°37	25°54	7°48	22°30	8°12	12°39	10°56	9°29	6°18	T 16	
F 17	21 39 1	23°32'42	8♊44	28° 7	20°52	18°41	18°32	25°55	7°48	22°32	8°12	12°37	10°53	9°35	6°16	F 17	
S 18	21 42 57	24°30'19	23°51	27°16	21° 3	19°20	18°27	25°57	7°48	22°34	8°11	12°33	10°50	9°42	6°14	S 18	
S 19	21 46 54	25°27'58	9♈7	26°26	21°15	19°59	18°22	25°59	7°47	22°36	8°11	12°27	10°47	9°49	6°12	S 19	
M20	21 50 51	26°25'38	24°19	25°35	21°30	20°38	18°18	26° 1	7°47	22°38	8°11	12°21	10°44	9°55	6°10	M20	
T 21	21 54 47	27°23'19	9♈18	24°46	21°46	21°16	18°13	26° 3	7°47	22°40	8°11	12°14	10°40	10° 2	6° 9	T 21	
W22	21 58 44	28°21'02	23°55	23°59	22° 4	21°55	18° 9	26° 5	7°46	22°42	8°10	12° 9	10°37	10° 9	6° 7	W22	
T 23	22 2 40	29°18'46	8♈7	23°16	22°25	22°34	18° 5	26° 7	7°46	22°44	8°10	12° 5	10°34	10°16	6° 5	T 23	
F 24	22 6 37	0♈16'32	21°52	22°37	22°47	23°12	18° 1	26° 9	7°45	22°46	8°10	12° 3	10°31	10°22	6° 4	F 24	
S 25	22 10 33	1°14'20	5♌10	22° 3	23°10	23°50	17°57	26°12	7°45	22°49	8° 9	12°D 3	10°28	10°29	6° 3	S 25	
S 26	22 14 30	2°12'10	18° 4	21°34	23°36	24°28	17°53	26°14	7°44	22°51	8° 9	12° 4	10°24	10°36	6° 1	S 26	
M27	22 18 26	3°10'01	0♊38	21°13	24° 3	25° 6	17°50	26°17	7°44	22°53	8° 9	12° 5	10°21	10°42	6° 0	M27	
T 28	22 22 23	4° 7'54	12°57	20°58	24°31	25°44	17°47	26°19	7°43	22°55	8° 8	12°R 5	10°18	10°49	5°59	T 28	
W29	22 26 20	5° 5'49	25° 4	20°D51	25° 1	26°22	17°43	26°22	7°42	22°57	8° 8	12° 4	10°15	10°56	5°58	W29	
T 30	22 30 16	6° 3'45	7♌3	20°52	25°33	27° 0	17°41	26°25	7°41	22°59	8° 8	12° 1	10°12	11° 3	5°57	T 30	
F 31	22 34 13	7♈1'43	18♌57	21♌1	26♊6	27♌37	17♊38	26♌28	7♈41	23♈1	8♌7	11♌56	10♊9	11♈9	5♊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	decl	lat
W 1	18n12	22n15	0s15	7n57	2s49	14n42	6s48	21n 4	0s34	22s15	0s20	17s10	2n 4	13n37	0s30	4n11	1n 7	1s29	16s34	22s47	22s55	4n40	16s14	7n 1					
T 2	17 57	19 14	1 21	7 38	3 2	14 43	6 52	21 12	0 33	22 16	0 20	17 10	2 4	13 37	0 30	4 10	1 7	1 30	16 34	22 47	22 55	4 37	16 14	7 1					
F 3	17 42	15 27	2 22	7 20	3 14	14 45	6 54	21 19	0 32	22 17	0 20	17 10	2 3	13 37	0 30	4 9	1 7	1 30	16 35	22 47	22 55	4 34	16 15	7 1					
S 4	17 26	11 5	3 17	7 5	3 27	14 46	6 56	21 26	0 31	22 18	0 20	17 11	2 3	13 37	0 30	4 9	1 7	1 30	16 35	22 47	22 55	4 31	16 15	7 0					
S 5	17 10	6 20	4 2	6 52	3 38	14 48	6 57	21 32	0 31	22 19	0 21	17 11	2 3	13 37	0 30	4 8	1 7	1 31	16 35	22 48	22 56	4 29	16 16	7 0					
M 6	16 54	1 23	4 38	6 41	3 50	14 50	6 58	21 39	0 30	22 20	0 21	17 12	2 3	13 38	0 30	4 7	1 7	1 31	16 36	22 48	22 56	4 26	16 16	7 0					
T 7	16 38	3s36	5 1	6 33	4 1	14 52	6 58	21 45	0 29	22 21	0 21	17 12	2 2	13 38	0 30	4 7	1 7	1 31	16 36	22 49	22 56	4 23	16 17	7 0					
W 8	16 21	8 29	5 11	6 27	4 11	14 55	6 57	21 51	0 28	22 22	0 21	17 12	2 2	13 38	0 30	4 6	1 7	1 31	16 36	22 49	22 56	4 20	16 17	6 59					
T 9	16 4	13 6	5 8	6 23	4 20	14 58	6 56	21 57	0 27	22 23	0 21	17 13	2 2	13 38	0 30	4 5	1 7	1 32	16 37	22 50	22 57	4 17	16 17	6 59					
F 10	15 47	17 16	4 51	6 23	4 28	15 0	6 54	22 2	0 26	22 24	0 21	17 13	2 2	13 38	0 30	4 4	1 7	1 32	16 37	22 50	22 57	4 14	16 18	6 59					
S 11	15 30	20 47	4 20	6 25	4 35	15 3	6 52	22 8	0 25	22 25	0 21	17 14	2 1	13 38	0 30	4 4	1 7	1 32	16 37	22 50	22 57	4 11	16 18	6 58					
S 12	15 12	23 23	3 36	6 30	4 41	15 6	6 49	22 13	0 24	22 26	0 21	17 14	2 1	13 38	0 30	4 3	1 7	1 33	16 38	22 50	22 58	4 8	16 19	6 58					
M13	14 54	24 50	2 40	6 38	4 46	15 10	6 46	22 18	0 24	22 27	0 21	17 15	2 1	13 38	0 30	4 2	1 7	1 33	16 38	22 50	22 58	4 5	16 19	6 57					
T 14	14 36	24 53	1 32	6 49	4 49	15 13	6 43	22 23	0 23	22 28	0 21	17 15	2 1	13 38	0 30	4 1	1 7	1 33	16 38	22 50	22 58	4 2	16 20	6 57					
W15	14 17	23 23	0 18	7 2	4 50	15 16	6 39	22 28	0 22	22 29	0 22	17 16	2 0	13 38	0 30	4 1	1 7	1 34	16 39	22 49	22 58	3 59	16 20	6 57					
T 16	13 59	20 19	1n 1	7 18	4 50	15 19	6 35	22 33	0 21	22 29	0 22	17 17	2 0	13 38	0 30	4 0	1 7	1 34	16 39	22 50	22 59	3 56	16 21	6 56					
F 17	13 40	15 52	2 17	7 37	4 48	15 22	6 30	22 37	0 20	22 30	0 22	17 17	2 0	13 38	0 30	3 59	1 7	1 34	16 39	22 50	22 59	3 53	16 21	6 56					
S 18	13 21	10 20	3 25	7 58	4 44	15 26	6 26	22 41	0 19	22 31	0 22	17 18	2 0	13 38	0 30	3 58	1 7	1 35	16 40	22 50	22 59	3 50	16 22	6 55					
S 19	13 2	4 9	4 18	8 20	4 38	15 29	6 21	22 45	0 18	22 32	0 22	17 18	1 59	13 38	0 30	3 57	1 7	1 35	16 40	22 51	22 59	3 48	16 22	6 55					
M20	12 42	2n14	4 54	8 44	4 30	15 32	6 15	22 49	0 17	22 32	0 22	17 19	1 59	13 37	0 30	3 57	1 7	1 35	16 40	22 51	23 0	3 45	16 23	6 55					
T 21	12 22	8 24	5 8	9 10	4 21	15 35	6 10	22 52	0 16	22 33	0 22	17 20	1 59	13 37	0 30	3 56	1 7	1 36	16 40	22 52	23 0	3 42	16 23	6 54					
W22	12 2	13 57	5 2	9 36	4 9	15 38	6 4	22 56	0 15	22 34	0 22	17 21	1 59	13 37	0 30	3 55	1 7	1 36	16 41	22 52	23 0	3 39	16 24	6 54					
T 23	11 42	18 35	4 37	10 2	3 56	15 40	5 58	22 59	0 14	22 34	0 22	17 21	1 58	13 37	0 30	3 54	1 7	1 37	16 41	22 53	23 0	3 36	16 24	6 53					
F 24	11 22	22 3	3 57	10 28	3 42	15 43	5 52	23 2	0 13	22 35	0 22	17 22	1 58	13 37	0 30	3 53	1 7	1 37	16 41	22 53	23 1	3 33	16 25	6 53					
S 25	11 2	24 12	3 6	10 53	3 27	15 45	5 46	23 5	0 12	22 36	0 22	17 23	1 58	13 37	0 30	3 52	1 7	1 37	16 42	22 53	23 1	3 30	16 25	6 52					
S 26	10 41	24 59	2 6	11 18	3 10	15 47	5 40	23 8	0 11	22 36	0 22	17 24	1 58	13 37	0 30	3 52	1 7	1 38	16 42	22 53	23 1	3 27	16 26	6 52					
M27	10 20	24 27	1 1	11 41	2 53	15 49	5 33	23 10	0 10	22 37	0 23	17 24	1 57	13 36	0 30	3 51	1 7	1 38	16 42	22 53	23 1	3 24	16 26	6 52					
T 28	9 59	22 43	0s 5	12 3	2 35	15 50	5 27	23 12	0 9	22 37	0 23	17 25	1 57	13 36	0 30	3 50	1 7	1 39	16 43	22 53	23 2	3 21	16 27	6 51					
W29	9 38	19 58	1 9	12 22	2 17	15 52	5 20	23 15	0 8	22 38	0 23	17 26	1 57	13 36	0 30	3 49	1 7	1 39	16 43	22 53	23 2	3 18	16 27	6 51					
T 30	9 17	16 24	2 10	12 40	1 58	15 53	5 13	23 17	0 7	22 38	0 23	17 27	1 57	13 36	0 30	3 48	1 7	1 39	16 43	22 53	23 2	3 15	16 28	6 50					
F 31	8n56	12n13	3s 4	12n54	1s40	15n54	5s 7	23n18	0s 6	22s39	0s23	17s28	1n56	13n35	0s30	3n47	1n 7	1s40	16s44	22s53	23s 2	3n13	16s28	6n50					

ASTRODIENST EPHEMERIS for the year 2103  
geocentric

SEPTEMBER 2103

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	22 38 9	7♍59°43	0♍48	21♌18	26♍40	28♏15	17°R35	26♏31	7°R40	23♏3	8°R 7	11°R48	10♌5	11♏16	5°R55	S 1
S 2	22 42 6	8°57'44	12°39	21°44	27°16	28°52	17♌33	26°34	7♌39	23° 6	8♌6	11♌38	10° 2	11°23	5♌54	S 2
M 3	22 46 2	9°55'47	24°30	22°17	27°53	29°29	17°31	26°37	7°38	23° 8	8° 6	11°27	9°59	11°29	5°53	M 3
T 4	22 49 59	10°53'51	6♌24	22°59	28°31	0♌6	17°29	26°40	7°37	23°10	8° 5	11°16	9°56	11°36	5°53	T 4
W 5	22 53 55	11°51'57	18°22	23°48	29°10	0°43	17°27	26°43	7°36	23°12	8° 5	11° 5	9°53	11°43	5°52	W 5
T 6	22 57 52	12°50'05	0♏27	24°45	29°50	1°19	17°25	26°47	7°35	23°14	8° 4	10°56	9°49	11°49	5°52	T 6
F 7	23 1 49	13°48'14	12°40	25°49	0♏31	1°56	17°24	26°50	7°34	23°17	8° 3	10°49	9°46	11°56	5°52	F 7
S 8	23 5 45	14°46'24	25° 6	26°59	1°14	2°32	17°22	26°54	7°32	23°19	8° 3	10°45	9°43	12° 3	5°51	S 8
S 9	23 9 42	15°44'36	7♌47	28°16	1°57	3° 8	17°21	26°58	7°31	23°21	8° 2	10°43	9°40	12°10	5°51	S 9
M10	23 13 38	16°42'49	20°48	29°38	2°41	3°44	17°20	27° 1	7°30	23°23	8° 2	10°D43	9°37	12°16	5°51	M10
T 11	23 17 35	17°41'04	4♌12	1♏6	3°27	4°20	17°20	27° 5	7°29	23°25	8° 1	10°R44	9°34	12°23	5°D51	T 11
W12	23 21 31	18°39'21	18° 3	2°38	4°13	4°56	17°19	27° 9	7°27	23°28	8° 0	10°44	9°30	12°30	5°51	W12
T 13	23 25 28	19°37'39	2♌21	4°14	5° 0	5°32	17°19	27°13	7°26	23°30	8° 0	10°42	9°27	12°36	5°51	T 13
F 14	23 29 24	20°35'58	17° 5	5°54	5°47	6° 7	17°D19	27°17	7°25	23°32	7°59	10°38	9°24	12°43	5°51	F 14
S 15	23 33 21	21°34'19	2♏9	7°37	6°36	6°42	17°19	27°21	7°23	23°34	7°58	10°31	9°21	12°50	5°52	S 15
S 16	23 37 18	22°32'42	17°26	9°22	7°26	7°17	17°19	27°25	7°22	23°37	7°57	10°22	9°18	12°57	5°52	S 16
M17	23 41 14	23°31'06	2♏44	11°10	8°16	7°52	17°20	27°30	7°20	23°39	7°57	10°12	9°15	13° 3	5°53	M17
T 18	23 45 11	24°29'33	17°53	12°59	9° 7	8°27	17°20	27°34	7°18	23°41	7°56	10° 2	9°11	13°10	5°53	T 18
W19	23 49 7	25°28'01	2♌42	14°49	9°58	9° 2	17°21	27°39	7°17	23°43	7°55	9°53	9° 8	13°17	5°54	W19
T 20	23 53 4	26°26'32	17° 4	16°40	10°50	9°36	17°22	27°43	7°15	23°45	7°54	9°45	9° 5	13°23	5°55	T 20
F 21	23 57 0	27°25'04	0♏56	18°32	11°43	10°11	17°24	27°48	7°13	23°48	7°53	9°41	9° 2	13°30	5°56	F 21
S 22	0 0 57	28°23'39	14°19	20°24	12°37	10°45	17°25	27°52	7°12	23°50	7°53	9°38	8°59	13°37	5°56	S 22
S 23	0 4 53	29°22'17	27°15	22°16	13°31	11°19	17°27	27°57	7°10	23°52	7°52	9°D38	8°55	13°43	5°57	S 23
M24	0 8 50	0♌20°56	9♌48	24° 8	14°26	11°52	17°28	28° 2	7° 8	23°54	7°51	9°R38	8°52	13°50	5°59	M24
T 25	0 12 46	1°19'38	22° 3	25°59	15°21	12°26	17°30	28° 7	7° 6	23°57	7°50	9°37	8°49	13°57	6° 0	T 25
W26	0 16 43	2°18'22	4♏5	27°51	16°17	12°59	17°33	28°12	7° 4	23°59	7°49	9°35	8°46	14° 4	6° 1	W26
T 27	0 20 40	3°17'08	15°59	29°41	17°14	13°32	17°35	28°17	7° 3	24° 1	7°48	9°31	8°43	14°10	6° 2	T 27
F 28	0 24 36	4°15'56	27°50	1♌31	18°11	14° 5	17°38	28°22	7° 1	24° 3	7°47	9°23	8°40	14°17	6° 4	F 28
S 29	0 28 33	5°14'46	9♏40	3°20	19° 8	14°38	17°40	28°27	6°59	24° 5	7°47	9°13	8°36	14°24	6° 5	S 29
S 30	0 32 29	6♌13°38	21♏31	5♌9	20♏6	15♌11	17♌43	28♏32	6♌57	24♏8	7♌46	9♌1	8♌33	14♏30	6♌7	S 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	8n34	7n35	3s50	13n 6	1s22	15n54	5s 0	23n20	0s 5	22s39	0s23	17s29	1n56	13n35	0s30	3n46	1n 7	1s40	16s44	22s54	23s 3	3n10	16s29	6n49						
S 2	8 12	2 42	4 26	13 15	1 4	15 54	4 53	23 22	0 4	22 39	0 23	17 30	1 56	13 35	0 30	3 46	1 7	1 41	16 44	22 55	23 3	3 7	16 29	6 49						
M 3	7 50	2s16	4 51	13 21	0 46	15 54	4 46	23 23	0 3	22 40	0 23	17 31	1 56	13 34	0 30	3 45	1 7	1 41	16 44	22 56	23 3	3 4	16 30	6 48						
T 4	7 29	7 10	5 2	13 23	0 29	15 54	4 39	23 24	0 2	22 40	0 23	17 32	1 55	13 34	0 30	3 44	1 7	1 41	16 45	22 57	23 3	3 1	16 30	6 48						
W 5	7 6	11 50	5 1	13 22	0 13	15 53	4 32	23 25	0 0	22 40	0 23	17 33	1 55	13 34	0 30	3 43	1 7	1 42	16 45	22 58	23 4	2 58	16 31	6 47						
T 6	6 44	16 5	4 46	13 18	0n 2	15 51	4 25	23 26	0n 1	22 41	0 23	17 34	1 55	13 33	0 30	3 42	1 7	1 42	16 45	22 59	23 4	2 55	16 31	6 47						
F 7	6 22	19 44	4 18	13 10	0 16	15 50	4 18	23 27	0 2	22 41	0 23	17 35	1 55	13 33	0 30	3 41	1 7	1 43	16 45	22 59	23 4	2 52	16 32	6 46						
S 8	6 0	22 33	3 38	12 59	0 30	15 48	4 11	23 27	0 3	22 41	0 23	17 36	1 55	13 32	0 30	3 40	1 7	1 43	16 46	22 59	23 4	2 49	16 32	6 46						
S 9	5 37	24 19	2 46	12 44	0 42	15 45	4 4	23 27	0 4	22 41	0 23	17 37	1 54	13 32	0 30	3 40	1 7	1 44	16 46	23 0	23 4	2 46	16 33	6 45						
M10	5 15	24 50	1 44	12 26	0 54	15 43	3 56	23 28	0 5	22 41	0 23	17 38	1 54	13 32	0 30	3 39	1 7	1 44	16 46	23 0	23 5	2 43	16 33	6 45						
T 11	4 52	23 56	0 35	12 5	1 4	15 39	3 49	23 28	0 6	22 42	0 23	17 39	1 54	13 31	0 30	3 38	1 7	1 45	16 46	23 0	23 5	2 41	16 34	6 44						
W12	4 29	21 34	0n39	11 40	1 13	15 36	3 42	23 28	0 8	22 42	0 24	17 40	1 54	13 31	0 30	3 37	1 7	1 45	16 47	23 0	23 5	2 38	16 34	6 44						
T 13	4 6	17 48	1 52	11 13	1 21	15 32	3 35	23 27	0 9	22 42	0 24	17 41	1 53	13 30	0 30	3 36	1 7	1 45	16 47	23 0	23 5	2 35	16 35	6 43						
F 14	3 43	12 51	3 0	10 43	1 28	15 27	3 28	23 27	0 10	22 42	0 24	17 42	1 53	13 30	0 30	3 35	1 7	1 46	16 47	23 0	23 6	2 32	16 35	6 43						
S 15	3 20	7 1	3 57	10 10	1 34	15 22	3 21	23 27	0 11	22 42	0 24	17 43	1 53	13 29	0 30	3 34	1 7	1 46	16 47	23 1	23 6	2 29	16 36	6 42						
S 16	2 57	0 42	4 38	9 35	1 39	15 17	3 14	23 26	0 12	22 42	0 24	17 45	1 53	13 29	0 30	3 33	1 7	1 47	16 48	23 1	23 6	2 26	16 36	6 42						
M17	2 34	5n40	4 59	8 58	1 43	15 11	3 7	23 25	0 14	22 42	0 24	17 46	1 53	13 28	0 30	3 33	1 7	1 47	16 48	23 2	23 6	2 23	16 37	6 41						
T 18	2 11	11 37	4 59	8 19	1 46	15 4	3 0	23 24	0 15	22 42	0 24	17 47	1 52	13 28	0 30	3 32	1 7	1 48	16 48	23 3	23 6	2 20	16 37	6 41						
W19	1 48	16 45	4 38	7 38	1 48	14 58	2 53	23 23	0 16	22 42	0 24	17 48	1 52	13 27	0 30	3 31	1 7	1 48	16 48	23 4	23 7	2 17	16 38	6 40						
T 20	1 25	20 46	4 0	6 56	1 49	14 50	2 46	23 22	0 17	22 42	0 24	17 49	1 52	13 27	0 30	3 30	1 7	1 48	16 49	23 4	23 7	2 14	16 38	6 40						
F 21	1 2	23 26	3 10	6 13	1 50	14 43	2 39	23 21	0 19	22 42	0 24	17 50	1 52	13 26	0 30	3 29	1 7	1 49	16 49	23 4	23 7	2 11	16 39	6 39						
S 22	0 38	24 39	2 10	5 29	1 50	14 34	2 32	23 19	0 20	22 41	0 24	17 52	1 52	13 26	0 30	3 28	1 7	1 49	16 49	23 5	23 7	2 9	16 39	6 39						
S 23	0 15	24 29	1 5	4 44	1 49	14 26	2 25	23 18	0 21	22 41	0 24	17 53	1 51	13 25	0 30	3 27	1 7	1 50	16 49	23 5	23 8	2 6	16 40	6 38						
M24	0s 8	23 3	0s 1	3 58	1 47	14 17	2 19	23 16	0 22	22 41	0 24	17 54	1 51	13 24	0 31	3 26	1 7	1 50	16 49	23 5	23 8	2 3	16 40	6 38						
T 25	0 32	20 33	1 5	3 12	1 45	14 7	2 12	23 14	0 24	22 41	0 24	17 55	1 51	13 24	0 31	3 26	1 7	1 51	16 50	23 5	23 8	2 0	16 41	6 37						
W26	0 55	17 11	2 6	2 25	1 42	13 57	2 5	23 12	0 25	22 41	0 24	17 57	1 51	13 23	0 31	3 25	1 7	1 51	16 50	23 5	23 8	1 57	16 41	6 37						
T 27	1 18	13 11	2 59	1 38	1 39	13 46	1 59	23 10	0 26	22 40	0 24	17 58	1 51	13 23	0 31	3 24	1 7	1 52	16 50	23 5	23 8	1 54	16 42	6 36						
F 28	1 42	8 42	3 45	0 51	1 35	13 35	1 52	23 8	0 28	22 40	0 24	17 59	1 50	13 22	0 31	3 23	1 7	1 52	16 50	23 6	23 9	1 51	16 42	6 36						
S 29	2 5	3 54	4 21	0 4	1 31	13 24	1 46	23 6	0 29	22 40	0 24	18 1	1 50	13 21	0 31	3 22	1 7	1 53	16 50	23 6	23 9	1 48	16 43	6 35						
S 30	2s28	1s 1	4s46	0s43	1n26	13n12	1s39	23n 4	0n30	22s39	0s24	18s 2	1n50	13n21	0s31	3n21	1n 7	1s53	16s51	23s 7	23s 9	1n45	16s43	6n35						

# ASTRODIENST EPHEMERIS for the year 2103

## geocentric

OCTOBER 2103

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	0 36 26	7 <sup>h</sup> 12 <sup>m</sup> 33 <sup>s</sup>	3 <sup>h</sup> 27 <sup>m</sup>	6 <sup>h</sup> 57 <sup>m</sup>	21 <sup>h</sup> 05 <sup>m</sup>	15 <sup>h</sup> 54 <sup>m</sup>	17 <sup>h</sup> 34 <sup>m</sup>	28 <sup>h</sup> 37 <sup>m</sup>	6 <sup>h</sup> 55 <sup>m</sup>	24 <sup>h</sup> 10 <sup>m</sup>	7 <sup>h</sup> 45 <sup>m</sup>	8 <sup>h</sup> 47 <sup>m</sup>	8 <sup>h</sup> 30 <sup>m</sup>	14 <sup>h</sup> 37 <sup>m</sup>	6 <sup>h</sup> 08 <sup>m</sup>	M 1
T 2	0 40 22	8 <sup>h</sup> 11 <sup>m</sup> 29 <sup>s</sup>	15 <sup>h</sup> 27 <sup>m</sup>	8 <sup>h</sup> 44 <sup>m</sup>	22 <sup>h</sup> 04 <sup>m</sup>	16 <sup>h</sup> 15 <sup>m</sup>	17 <sup>h</sup> 50 <sup>m</sup>	28 <sup>h</sup> 42 <sup>m</sup>	6 <sup>h</sup> 53 <sup>m</sup>	24 <sup>h</sup> 12 <sup>m</sup>	7 <sup>h</sup> 44 <sup>m</sup>	8 <sup>h</sup> 32 <sup>m</sup>	8 <sup>h</sup> 27 <sup>m</sup>	14 <sup>h</sup> 44 <sup>m</sup>	6 <sup>h</sup> 10 <sup>m</sup>	T 2
W 3	0 44 19	9 <sup>h</sup> 10 <sup>m</sup> 27 <sup>s</sup>	27 <sup>h</sup> 34 <sup>m</sup>	10 <sup>h</sup> 30 <sup>m</sup>	23 <sup>h</sup> 03 <sup>m</sup>	16 <sup>h</sup> 47 <sup>m</sup>	17 <sup>h</sup> 53 <sup>m</sup>	28 <sup>h</sup> 48 <sup>m</sup>	6 <sup>h</sup> 51 <sup>m</sup>	24 <sup>h</sup> 14 <sup>m</sup>	7 <sup>h</sup> 43 <sup>m</sup>	8 <sup>h</sup> 18 <sup>m</sup>	8 <sup>h</sup> 24 <sup>m</sup>	14 <sup>h</sup> 51 <sup>m</sup>	6 <sup>h</sup> 12 <sup>m</sup>	W 3
T 4	0 48 15	10 <sup>h</sup> 9 <sup>m</sup> 28 <sup>s</sup>	9 <sup>h</sup> 14 <sup>m</sup> 48 <sup>s</sup>	12 <sup>h</sup> 15 <sup>m</sup>	24 <sup>h</sup> 03 <sup>m</sup>	17 <sup>h</sup> 19 <sup>m</sup>	17 <sup>h</sup> 57 <sup>m</sup>	28 <sup>h</sup> 53 <sup>m</sup>	6 <sup>h</sup> 48 <sup>m</sup>	24 <sup>h</sup> 16 <sup>m</sup>	7 <sup>h</sup> 42 <sup>m</sup>	8 <sup>h</sup> 07 <sup>m</sup>	8 <sup>h</sup> 21 <sup>m</sup>	14 <sup>h</sup> 57 <sup>m</sup>	6 <sup>h</sup> 14 <sup>m</sup>	T 4
F 5	0 52 12	11 <sup>h</sup> 8 <sup>m</sup> 30 <sup>s</sup>	22 <sup>h</sup> 10 <sup>m</sup>	13 <sup>h</sup> 59 <sup>m</sup>	25 <sup>h</sup> 03 <sup>m</sup>	17 <sup>h</sup> 50 <sup>m</sup>	18 <sup>h</sup> 01 <sup>m</sup>	28 <sup>h</sup> 59 <sup>m</sup>	6 <sup>h</sup> 46 <sup>m</sup>	24 <sup>h</sup> 18 <sup>m</sup>	7 <sup>h</sup> 41 <sup>m</sup>	7 <sup>h</sup> 58 <sup>m</sup>	8 <sup>h</sup> 17 <sup>m</sup>	15 <sup>h</sup> 04 <sup>m</sup>	6 <sup>h</sup> 16 <sup>m</sup>	F 5
S 6	0 56 09	12 <sup>h</sup> 7 <sup>m</sup> 34 <sup>s</sup>	4 <sup>h</sup> 47 <sup>m</sup> 43 <sup>s</sup>	15 <sup>h</sup> 43 <sup>m</sup>	26 <sup>h</sup> 04 <sup>m</sup>	18 <sup>h</sup> 22 <sup>m</sup>	18 <sup>h</sup> 05 <sup>m</sup>	29 <sup>h</sup> 04 <sup>m</sup>	6 <sup>h</sup> 44 <sup>m</sup>	24 <sup>h</sup> 21 <sup>m</sup>	7 <sup>h</sup> 40 <sup>m</sup>	7 <sup>h</sup> 51 <sup>m</sup>	8 <sup>h</sup> 14 <sup>m</sup>	15 <sup>h</sup> 11 <sup>m</sup>	6 <sup>h</sup> 18 <sup>m</sup>	S 6
S 7	1 00 5	13 <sup>h</sup> 6 <sup>m</sup> 40 <sup>s</sup>	17 <sup>h</sup> 29 <sup>m</sup>	17 <sup>h</sup> 26 <sup>m</sup>	27 <sup>h</sup> 04 <sup>m</sup>	18 <sup>h</sup> 53 <sup>m</sup>	18 <sup>h</sup> 09 <sup>m</sup>	29 <sup>h</sup> 10 <sup>m</sup>	6 <sup>h</sup> 42 <sup>m</sup>	24 <sup>h</sup> 23 <sup>m</sup>	7 <sup>h</sup> 39 <sup>m</sup>	7 <sup>h</sup> 48 <sup>m</sup>	8 <sup>h</sup> 11 <sup>m</sup>	15 <sup>h</sup> 17 <sup>m</sup>	6 <sup>h</sup> 20 <sup>m</sup>	S 7
M 8	1 4 2	14 <sup>h</sup> 5 <sup>m</sup> 48 <sup>s</sup>	0 <sup>h</sup> 30 <sup>m</sup>	19 <sup>h</sup> 07 <sup>m</sup>	28 <sup>h</sup> 06 <sup>m</sup>	19 <sup>h</sup> 23 <sup>m</sup>	18 <sup>h</sup> 13 <sup>m</sup>	29 <sup>h</sup> 16 <sup>m</sup>	6 <sup>h</sup> 40 <sup>m</sup>	24 <sup>h</sup> 25 <sup>m</sup>	7 <sup>h</sup> 38 <sup>m</sup>	7 <sup>h</sup> 47 <sup>m</sup>	8 <sup>h</sup> 08 <sup>m</sup>	15 <sup>h</sup> 24 <sup>m</sup>	6 <sup>h</sup> 22 <sup>m</sup>	M 8
T 9	1 7 58	15 <sup>h</sup> 4 <sup>m</sup> 58 <sup>s</sup>	13 <sup>h</sup> 50 <sup>m</sup>	20 <sup>h</sup> 48 <sup>m</sup>	29 <sup>h</sup> 08 <sup>m</sup>	19 <sup>h</sup> 54 <sup>m</sup>	18 <sup>h</sup> 18 <sup>m</sup>	29 <sup>h</sup> 21 <sup>m</sup>	6 <sup>h</sup> 38 <sup>m</sup>	24 <sup>h</sup> 27 <sup>m</sup>	7 <sup>h</sup> 37 <sup>m</sup>	7 <sup>h</sup> 47 <sup>m</sup>	8 <sup>h</sup> 05 <sup>m</sup>	15 <sup>h</sup> 31 <sup>m</sup>	6 <sup>h</sup> 25 <sup>m</sup>	T 9
W10	1 11 55	16 <sup>h</sup> 4 <sup>m</sup> 09 <sup>s</sup>	27 <sup>h</sup> 32 <sup>m</sup>	22 <sup>h</sup> 29 <sup>m</sup>	0 <sup>h</sup> 10 <sup>m</sup> 10 <sup>s</sup>	20 <sup>h</sup> 24 <sup>m</sup>	18 <sup>h</sup> 23 <sup>m</sup>	29 <sup>h</sup> 27 <sup>m</sup>	6 <sup>h</sup> 35 <sup>m</sup>	24 <sup>h</sup> 29 <sup>m</sup>	7 <sup>h</sup> 36 <sup>m</sup>	7 <sup>h</sup> 47 <sup>m</sup>	8 <sup>h</sup> 01 <sup>m</sup>	15 <sup>h</sup> 38 <sup>m</sup>	6 <sup>h</sup> 27 <sup>m</sup>	W10
T 11	1 15 51	17 <sup>h</sup> 3 <sup>m</sup> 22 <sup>s</sup>	11 <sup>h</sup> 37 <sup>m</sup>	24 <sup>h</sup> 08 <sup>m</sup>	1 <sup>h</sup> 12 <sup>m</sup>	20 <sup>h</sup> 54 <sup>m</sup>	18 <sup>h</sup> 28 <sup>m</sup>	29 <sup>h</sup> 33 <sup>m</sup>	6 <sup>h</sup> 33 <sup>m</sup>	24 <sup>h</sup> 31 <sup>m</sup>	7 <sup>h</sup> 35 <sup>m</sup>	7 <sup>h</sup> 45 <sup>m</sup>	7 <sup>h</sup> 58 <sup>m</sup>	15 <sup>h</sup> 44 <sup>m</sup>	6 <sup>h</sup> 30 <sup>m</sup>	T 11
F 12	1 19 48	18 <sup>h</sup> 2 <sup>m</sup> 37 <sup>s</sup>	26 <sup>h</sup> 04 <sup>m</sup>	25 <sup>h</sup> 47 <sup>m</sup>	2 <sup>h</sup> 15 <sup>m</sup>	21 <sup>h</sup> 24 <sup>m</sup>	18 <sup>h</sup> 33 <sup>m</sup>	29 <sup>h</sup> 39 <sup>m</sup>	6 <sup>h</sup> 31 <sup>m</sup>	24 <sup>h</sup> 33 <sup>m</sup>	7 <sup>h</sup> 34 <sup>m</sup>	7 <sup>h</sup> 41 <sup>m</sup>	7 <sup>h</sup> 55 <sup>m</sup>	15 <sup>h</sup> 51 <sup>m</sup>	6 <sup>h</sup> 32 <sup>m</sup>	F 12
S 13	1 23 44	19 <sup>h</sup> 1 <sup>m</sup> 53 <sup>s</sup>	10 <sup>h</sup> 45 <sup>m</sup> 2 <sup>s</sup>	27 <sup>h</sup> 25 <sup>m</sup>	3 <sup>h</sup> 18 <sup>m</sup>	21 <sup>h</sup> 54 <sup>m</sup>	18 <sup>h</sup> 38 <sup>m</sup>	29 <sup>h</sup> 45 <sup>m</sup>	6 <sup>h</sup> 28 <sup>m</sup>	24 <sup>h</sup> 35 <sup>m</sup>	7 <sup>h</sup> 33 <sup>m</sup>	7 <sup>h</sup> 34 <sup>m</sup>	7 <sup>h</sup> 52 <sup>m</sup>	15 <sup>h</sup> 58 <sup>m</sup>	6 <sup>h</sup> 35 <sup>m</sup>	S 13
S 14	1 27 41	20 <sup>h</sup> 1 <sup>m</sup> 12 <sup>s</sup>	25 <sup>h</sup> 54 <sup>m</sup>	29 <sup>h</sup> 02 <sup>m</sup>	4 <sup>h</sup> 21 <sup>m</sup>	22 <sup>h</sup> 23 <sup>m</sup>	18 <sup>h</sup> 43 <sup>m</sup>	29 <sup>h</sup> 51 <sup>m</sup>	6 <sup>h</sup> 26 <sup>m</sup>	24 <sup>h</sup> 37 <sup>m</sup>	7 <sup>h</sup> 31 <sup>m</sup>	7 <sup>h</sup> 25 <sup>m</sup>	7 <sup>h</sup> 49 <sup>m</sup>	16 <sup>h</sup> 04 <sup>m</sup>	6 <sup>h</sup> 37 <sup>m</sup>	S 14
M15	1 31 38	21 <sup>h</sup> 0 <sup>m</sup> 32 <sup>s</sup>	11 <sup>h</sup> 1 <sup>m</sup>	0 <sup>h</sup> 13 <sup>m</sup> 38 <sup>s</sup>	5 <sup>h</sup> 25 <sup>m</sup>	22 <sup>h</sup> 52 <sup>m</sup>	18 <sup>h</sup> 49 <sup>m</sup>	29 <sup>h</sup> 57 <sup>m</sup>	6 <sup>h</sup> 24 <sup>m</sup>	24 <sup>h</sup> 39 <sup>m</sup>	7 <sup>h</sup> 30 <sup>m</sup>	7 <sup>h</sup> 14 <sup>m</sup>	7 <sup>h</sup> 46 <sup>m</sup>	16 <sup>h</sup> 11 <sup>m</sup>	6 <sup>h</sup> 40 <sup>m</sup>	M15
T 16	1 35 34	21 <sup>h</sup> 59 <sup>m</sup> 54 <sup>s</sup>	26 <sup>h</sup> 04 <sup>m</sup>	2 <sup>h</sup> 14 <sup>m</sup>	6 <sup>h</sup> 29 <sup>m</sup>	23 <sup>h</sup> 21 <sup>m</sup>	18 <sup>h</sup> 55 <sup>m</sup>	0 <sup>h</sup> 3 <sup>m</sup>	6 <sup>h</sup> 21 <sup>m</sup>	24 <sup>h</sup> 41 <sup>m</sup>	7 <sup>h</sup> 29 <sup>m</sup>	7 <sup>h</sup> 03 <sup>m</sup>	7 <sup>h</sup> 42 <sup>m</sup>	16 <sup>h</sup> 18 <sup>m</sup>	6 <sup>h</sup> 43 <sup>m</sup>	T 16
W17	1 39 31	22 <sup>h</sup> 59 <sup>m</sup> 18 <sup>s</sup>	10 <sup>h</sup> 8 <sup>m</sup> 51 <sup>s</sup>	3 <sup>h</sup> 49 <sup>m</sup>	7 <sup>h</sup> 33 <sup>m</sup>	23 <sup>h</sup> 49 <sup>m</sup>	19 <sup>h</sup> 00 <sup>m</sup>	0 <sup>h</sup> 9 <sup>m</sup>	6 <sup>h</sup> 19 <sup>m</sup>	24 <sup>h</sup> 43 <sup>m</sup>	7 <sup>h</sup> 28 <sup>m</sup>	6 <sup>h</sup> 53 <sup>m</sup>	7 <sup>h</sup> 39 <sup>m</sup>	16 <sup>h</sup> 25 <sup>m</sup>	6 <sup>h</sup> 46 <sup>m</sup>	W17
T 18	1 43 27	23 <sup>h</sup> 58 <sup>m</sup> 45 <sup>s</sup>	25 <sup>h</sup> 15 <sup>m</sup>	5 <sup>h</sup> 23 <sup>m</sup>	8 <sup>h</sup> 38 <sup>m</sup>	24 <sup>h</sup> 17 <sup>m</sup>	19 <sup>h</sup> 07 <sup>m</sup>	0 <sup>h</sup> 15 <sup>m</sup>	6 <sup>h</sup> 17 <sup>m</sup>	24 <sup>h</sup> 45 <sup>m</sup>	7 <sup>h</sup> 27 <sup>m</sup>	6 <sup>h</sup> 45 <sup>m</sup>	7 <sup>h</sup> 36 <sup>m</sup>	16 <sup>h</sup> 31 <sup>m</sup>	6 <sup>h</sup> 49 <sup>m</sup>	T 18
F 19	1 47 24	24 <sup>h</sup> 58 <sup>m</sup> 13 <sup>s</sup>	9 <sup>h</sup> 11 <sup>m</sup> 12 <sup>s</sup>	6 <sup>h</sup> 57 <sup>m</sup>	9 <sup>h</sup> 43 <sup>m</sup>	24 <sup>h</sup> 45 <sup>m</sup>	19 <sup>h</sup> 13 <sup>m</sup>	0 <sup>h</sup> 21 <sup>m</sup>	6 <sup>h</sup> 14 <sup>m</sup>	24 <sup>h</sup> 47 <sup>m</sup>	7 <sup>h</sup> 26 <sup>m</sup>	6 <sup>h</sup> 40 <sup>m</sup>	7 <sup>h</sup> 33 <sup>m</sup>	16 <sup>h</sup> 38 <sup>m</sup>	6 <sup>h</sup> 52 <sup>m</sup>	F 19
S 20	1 51 20	25 <sup>h</sup> 57 <sup>m</sup> 44 <sup>s</sup>	22 <sup>h</sup> 40 <sup>m</sup>	8 <sup>h</sup> 30 <sup>m</sup>	10 <sup>h</sup> 48 <sup>m</sup>	25 <sup>h</sup> 13 <sup>m</sup>	19 <sup>h</sup> 19 <sup>m</sup>	0 <sup>h</sup> 28 <sup>m</sup>	6 <sup>h</sup> 12 <sup>m</sup>	24 <sup>h</sup> 49 <sup>m</sup>	7 <sup>h</sup> 25 <sup>m</sup>	6 <sup>h</sup> 37 <sup>m</sup>	7 <sup>h</sup> 30 <sup>m</sup>	16 <sup>h</sup> 45 <sup>m</sup>	6 <sup>h</sup> 55 <sup>m</sup>	S 20
S 21	1 55 17	26 <sup>h</sup> 57 <sup>m</sup> 18 <sup>s</sup>	5 <sup>h</sup> 54 <sup>m</sup> 1 <sup>s</sup>	10 <sup>h</sup> 02 <sup>m</sup>	11 <sup>h</sup> 54 <sup>m</sup>	25 <sup>h</sup> 40 <sup>m</sup>	19 <sup>h</sup> 26 <sup>m</sup>	0 <sup>h</sup> 34 <sup>m</sup>	6 <sup>h</sup> 09 <sup>m</sup>	24 <sup>h</sup> 51 <sup>m</sup>	7 <sup>h</sup> 24 <sup>m</sup>	6 <sup>h</sup> 36 <sup>m</sup>	7 <sup>h</sup> 26 <sup>m</sup>	16 <sup>h</sup> 51 <sup>m</sup>	6 <sup>h</sup> 58 <sup>m</sup>	S 21
M22	1 59 13	27 <sup>h</sup> 56 <sup>m</sup> 53 <sup>s</sup>	18 <sup>h</sup> 18 <sup>m</sup>	11 <sup>h</sup> 34 <sup>m</sup>	13 <sup>h</sup> 00 <sup>m</sup>	26 <sup>h</sup> 07 <sup>m</sup>	19 <sup>h</sup> 32 <sup>m</sup>	0 <sup>h</sup> 40 <sup>m</sup>	6 <sup>h</sup> 07 <sup>m</sup>	24 <sup>h</sup> 53 <sup>m</sup>	7 <sup>h</sup> 23 <sup>m</sup>	6 <sup>h</sup> 37 <sup>m</sup>	7 <sup>h</sup> 23 <sup>m</sup>	16 <sup>h</sup> 58 <sup>m</sup>	7 <sup>h</sup> 02 <sup>m</sup>	M22
T 23	2 03 10	28 <sup>h</sup> 56 <sup>m</sup> 31 <sup>s</sup>	0 <sup>h</sup> 42 <sup>m</sup> 35 <sup>s</sup>	13 <sup>h</sup> 05 <sup>m</sup>	14 <sup>h</sup> 06 <sup>m</sup>	26 <sup>h</sup> 34 <sup>m</sup>	19 <sup>h</sup> 39 <sup>m</sup>	0 <sup>h</sup> 47 <sup>m</sup>	6 <sup>h</sup> 05 <sup>m</sup>	24 <sup>h</sup> 55 <sup>m</sup>	7 <sup>h</sup> 22 <sup>m</sup>	6 <sup>h</sup> 37 <sup>m</sup>	7 <sup>h</sup> 20 <sup>m</sup>	17 <sup>h</sup> 05 <sup>m</sup>	7 <sup>h</sup> 05 <sup>m</sup>	T 23
W24	2 07 07	29 <sup>h</sup> 56 <sup>m</sup> 11 <sup>s</sup>	12 <sup>h</sup> 38 <sup>m</sup>	14 <sup>h</sup> 36 <sup>m</sup>	15 <sup>h</sup> 12 <sup>m</sup>	27 <sup>h</sup> 00 <sup>m</sup>	19 <sup>h</sup> 46 <sup>m</sup>	0 <sup>h</sup> 53 <sup>m</sup>	6 <sup>h</sup> 02 <sup>m</sup>	24 <sup>h</sup> 57 <sup>m</sup>	7 <sup>h</sup> 20 <sup>m</sup>	6 <sup>h</sup> 36 <sup>m</sup>	7 <sup>h</sup> 17 <sup>m</sup>	17 <sup>h</sup> 12 <sup>m</sup>	7 <sup>h</sup> 09 <sup>m</sup>	W24
T 25	2 11 03	0 <sup>h</sup> 15 <sup>m</sup> 55 <sup>s</sup>	24 <sup>h</sup> 32 <sup>m</sup>	16 <sup>h</sup> 06 <sup>m</sup>	16 <sup>h</sup> 18 <sup>m</sup>	27 <sup>h</sup> 27 <sup>m</sup>	19 <sup>h</sup> 53 <sup>m</sup>	1 <sup>h</sup> 00 <sup>m</sup>	6 <sup>h</sup> 00 <sup>m</sup>	24 <sup>h</sup> 59 <sup>m</sup>	7 <sup>h</sup> 19 <sup>m</sup>	6 <sup>h</sup> 33 <sup>m</sup>	7 <sup>h</sup> 14 <sup>m</sup>	17 <sup>h</sup> 18 <sup>m</sup>	7 <sup>h</sup> 12 <sup>m</sup>	T 25
F 26	2 15 00	1 <sup>h</sup> 55 <sup>m</sup> 37 <sup>s</sup>	6 <sup>h</sup> 17 <sup>m</sup> 23 <sup>s</sup>	17 <sup>h</sup> 35 <sup>m</sup>	17 <sup>h</sup> 25 <sup>m</sup>	27 <sup>h</sup> 52 <sup>m</sup>	20 <sup>h</sup> 01 <sup>m</sup>	1 <sup>h</sup> 06 <sup>m</sup>	5 <sup>h</sup> 57 <sup>m</sup>	25 <sup>h</sup> 01 <sup>m</sup>	7 <sup>h</sup> 18 <sup>m</sup>	6 <sup>h</sup> 28 <sup>m</sup>	7 <sup>h</sup> 11 <sup>m</sup>	17 <sup>h</sup> 25 <sup>m</sup>	7 <sup>h</sup> 16 <sup>m</sup>	F 26
S 27	2 18 56	2 <sup>h</sup> 55 <sup>m</sup> 24 <sup>s</sup>	18 <sup>h</sup> 13 <sup>m</sup>	19 <sup>h</sup> 04 <sup>m</sup>	18 <sup>h</sup> 32 <sup>m</sup>	28 <sup>h</sup> 18 <sup>m</sup>	20 <sup>h</sup> 08 <sup>m</sup>	1 <sup>h</sup> 13 <sup>m</sup>	5 <sup>h</sup> 55 <sup>m</sup>	25 <sup>h</sup> 03 <sup>m</sup>	7 <sup>h</sup> 17 <sup>m</sup>	6 <sup>h</sup> 20 <sup>m</sup>	7 <sup>h</sup> 07 <sup>m</sup>	17 <sup>h</sup> 32 <sup>m</sup>	7 <sup>h</sup> 19 <sup>m</sup>	S 27
S 28	2 22 53	3 <sup>h</sup> 55 <sup>m</sup> 13 <sup>s</sup>	0 <sup>h</sup> 48 <sup>m</sup> 08 <sup>s</sup>	20 <sup>h</sup> 32 <sup>m</sup>	19 <sup>h</sup> 39 <sup>m</sup>	28 <sup>h</sup> 43 <sup>m</sup>	20 <sup>h</sup> 16 <sup>m</sup>	1 <sup>h</sup> 19 <sup>m</sup>	5 <sup>h</sup> 52 <sup>m</sup>	25 <sup>h</sup> 05 <sup>m</sup>	7 <sup>h</sup> 16 <sup>m</sup>	6 <sup>h</sup> 10 <sup>m</sup>	7 <sup>h</sup> 04 <sup>m</sup>	17 <sup>h</sup> 38 <sup>m</sup>	7 <sup>h</sup> 23 <sup>m</sup>	S 28
M29	2 26 49	4 <sup>h</sup> 55 <sup>m</sup> 04 <sup>s</sup>	12 <sup>h</sup> 09 <sup>m</sup>	21 <sup>h</sup> 59 <sup>m</sup>	20 <sup>h</sup> 47 <sup>m</sup>	29 <sup>h</sup> 07 <sup>m</sup>	20 <sup>h</sup> 24 <sup>m</sup>	1 <sup>h</sup> 26 <sup>m</sup>	5 <sup>h</sup> 50 <sup>m</sup>	25 <sup>h</sup> 06 <sup>m</sup>	7 <sup>h</sup> 15 <sup>m</sup>	5 <sup>h</sup> 58 <sup>m</sup>	7 <sup>h</sup> 01 <sup>m</sup>	17 <sup>h</sup> 45 <sup>m</sup>	7 <sup>h</sup> 27 <sup>m</sup>	M29
T 30	2 30 46	5 <sup>h</sup> 54 <sup>m</sup> 56 <sup>s</sup>	22 <sup>h</sup> 09 <sup>m</sup>	23 <sup>h</sup> 26 <sup>m</sup>	21 <sup>h</sup> 54 <sup>m</sup>	29 <sup>h</sup> 32 <sup>m</sup>	20 <sup>h</sup> 31 <sup>m</sup>	1 <sup>h</sup> 32 <sup>m</sup>	5 <sup>h</sup> 47 <sup>m</sup>	25 <sup>h</sup> 08 <sup>m</sup>	7 <sup>h</sup> 14 <sup>m</sup>	5 <sup>h</sup> 47 <sup>m</sup>	6 <sup>h</sup> 58 <sup>m</sup>	17 <sup>h</sup> 52 <sup>m</sup>	7 <sup>h</sup> 30 <sup>m</sup>	T 30
W31	2 34 42	6 <sup>h</sup> 15 <sup>m</sup> 45 <sup>s</sup>	6 <sup>h</sup> 13 <sup>m</sup> 36 <sup>s</sup>	24 <sup>h</sup> 15 <sup>m</sup> 52 <sup>s</sup>	23 <sup>h</sup> 17 <sup>m</sup> 02 <sup>s</sup>	29 <sup>h</sup> 56 <sup>m</sup>	20 <sup>h</sup> 33 <sup>m</sup>	1 <sup>h</sup> 37 <sup>m</sup> 39 <sup>s</sup>	5 <sup>h</sup> 45 <sup>m</sup>	25 <sup>h</sup> 10 <sup>m</sup>	7 <sup>h</sup> 13 <sup>m</sup>	5 <sup>h</sup> 35 <sup>m</sup>	6 <sup>h</sup> 55 <sup>m</sup>	17 <sup>h</sup> 59 <sup>m</sup>	7 <sup>h</sup> 34 <sup>m</sup>	W31

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	2s52	5s56	4s58	1s30	1n22	13n 0	1s33	23n 2	0n32	22s39	0s24	18s 3	1n50	13n20	0s31	3n20	1n 7	1s53	16s51	23s 8	23s 9	1n42	16s43	6n34							
T 2	3 15	10 39	4 57	2 17	1 16	12 47	1 27	22 59	0 33	22 39	0 24	18 5	1 50	13 19	0 31	3 20	1 7	1 54	16 51	23 9	23 9	1 40	16 44	6 34							
W 3	3 38	15 0	4 43	3 4	1 11	12 33	1 21	22 57	0 35	22 38	0 24	18 6	1 50	13 19	0 31	3 19	1 7	1 54	16 51	23 10	23 10	1 37	16 44	6 33							
T 4	4 1	18 47	4 16	3 50	1 5	12 20	1 14	22 54	0 36	22 38	0 25	18 7	1 49	13 18	0 31	3 18	1 7	1 55	16 51	23 11	23 10	1 34	16 45	6 33							
F 5	4 24	21 46	3 36	4 36	1 0	12 6	1 8	22 51	0 37	22 37	0 25	18 9	1 49	13 17	0 31	3 17	1 7	1 55	16 51	23 11	23 10	1 31	16 45	6 32							
S 6	4 47	23 46	2 45	5 21	0 54	11 51	1 2	22 49	0 39	22 37	0 25	18 10	1 49	13 16	0 31	3 16	1 7	1 56	16 51	23 12	23 10	1 28	16 45	6 32							
S 7	5 10	24 35	1 45	6 7	0 47	11 36	0 56	22 46	0 40	22 36	0 25	18 11	1 49	13 16	0 31	3 15	1 7	1 56	16 52	23 12	23 10	1 25	16 46	6 31							
M 8	5 33	24 4	0 38	6 51	0 41	11 20	0 50	22 43	0 42	22 36	0 25	18 13	1 49	13 15	0 31	3 15	1 7	1 56	16 52	23 12	23 11	1 22	16 46	6 31							
T 9	5 56	22 11	0n32	7 35	0 34	11 4	0 45	22 40	0 43	22 35	0 25	18 14	1 49	13 14	0 31	3 14	1 7	1 57	16 52	23 12	23 11	1 19	16 47	6 30							
W10	6 19	18 58	1 42	8 19	0 28	10 48	0 39	22 37	0 45	22 34	0 25	18 15	1 48	13 14	0 31	3 13	1 7	1 57	16 52	23 12	23 11	1 16	16 47	6 30							
T11	6 42	14 35	2 49	9 2	0 21	10 31	0 33	22 34	0 46	22 34	0 25	18 17	1 48	13 13	0 31	3 12	1 7	1 58	16 52	23 12	23 11	1 14	16 47	6 29							
F12	7 4	9 17	3 46	9 44	0 14	10 14	0 28	22 31	0 48	22 33	0 25	18 18	1 48	13 12	0 31	3 11	1 7	1 58	16 52	23 12	23 11	1 11	16 48	6 29							
S13	7 27	3 20	4 29	10 26	0 8	9 57	0 22	22 27	0 49	22 33	0 25	18 20	1 48	13 11	0 31	3 11	1 7	1 59	16 52	23 13	23 12	1 8	16 48	6 28							
S14	7 49	2n53	4 55	11 7	0 1	9 39	0 17	22 24	0 51	22 32	0 25	18 21	1 48	13 11	0 31	3 10	1 7	1 59	16 52	23 13	23 12	1 5	16 48	6 28							
M15	8 12	8 58	5 0	11 47	0s 6	9 20	0 12	22 21	0 52	22 31	0 25	18 23	1 48	13 10	0 31	3 9	1 7	1 59	16 52	23 14	23 12	1 2	16 49	6 27							
T16	8 34	14 29	4 45	12 27	0 13	9 2	0 7	22 18	0 54	22 30	0 25	18 24	1 47	13 9	0 31	3 8	1 7	2 0	16 53	23 14	23 12	0 59	16 49	6 27							
W17	8 56	19 2	4 10	13 6	0 20	8 42	0 1	22 14	0 56	22 29	0 25	18 25	1 47	13 8	0 31	3 7	1 7	2 0	16 53	23 15	23 12	0 56	16 49	6 26							
T18	9 18	22 19	3 20	13 44	0 27	8 23	0n 4	22 11	0 57	22 29	0 25	18 27	1 47	13 7	0 31	3 7	1 7	2 1	16 53	23 15	23 12	0 53	16 50	6 26							
F19	9 40	24 7	2 20	14 22	0 34	8 3	0 8	22 8	0 59	22 28	0 25	18 28	1 47	13 7	0 31	3 6	1 7	2 1	16 53	23 16	23 13	0 50	16 50	6 25							
S20	10 1	24 27	1 13	14 58	0 41	7 43	0 13	22 4	1 0	22 27	0 25	18 30	1 47	13 6	0 31	3 5	1 7	2 1	16 53	23 16	23 13	0 48	16 50	6 25							
S21	10 23	23 23	0 5	15 34	0 48	7 22	0 18	22 1	1 2	22 26	0 25	18 31	1 47	13 5	0 31	3 4	1 7	2 2	16 53	23 16	23 13	0 45	16 51	6 24							
M22	10 44	21 9	1s 2	16 9	0 54	7 2	0 23	21 58	1 4	22 25	0 25	18 33	1 47	13 4	0 31	3 4	1 7	2 2	16 53	23 16	23 13	0 42	16 51	6 24							
T23	11 6	18 0	2 4	16 44	1 1	6 40	0 27	21 54	1 6	22 24	0 25	18 34	1 46	13 3	0 31	3 3	1 7	2 2	16 53	23 16	23 13	0 39	16 51	6 24							
W24	11 27	14 8	2 59	17 17	1 8	6 19	0 32	21 51	1 7	22 23	0 25	18 35	1 46	13 3	0 31	3 2	1 7	2 3	16 53	23 16	23 14	0 36	16 51	6 23							
T25	11 48	9 47	3 46	17 50	1 14	5 57	0 36	21 47	1 9	22 22	0 25	18 37	1 46	13 2	0 31	3 1	1 7	2 3	16 53	23 16	23 14	0 33	16 52	6 23							
F26	12 8	5 5	4 23	18 21	1 21	5 35	0 40	21 44	1 11	22 21	0 25	18 38	1 46	13 1	0 31	3 1	1 7	2 4	16 53	23 16	23 14	0 30	16 52	6 22							
S27	12 29	0 14	4 48	18 52	1 27	5 13	0 44	21 41	1 13	22 20	0 25	18 40	1 46	13 0	0 31	3 0	1 8	2 4	16 53	23 16	23 14	0 27	16 52	6 22							
S28	12 49	4s40	5 1	19 22	1 33	4 50	0 48	21 37	1 14	22 19	0 25	18 41	1 46	12 59	0 31	2 59	1 8	2 4	16 53	23 17	23 14	0 25	16 52	6 21							
M29	13 9	9 25	5 1	19 51	1 35	4 27	0 52	21 34	1 16	22 18	0 25	18 43	1 46	12 59	0 31	2 59	1 8	2 5	16 53	23 17	23 14	0 22	16 53	6 21							
T30	13 29	13 52	4 48	20 19	1 49	4 4	0 56	21 31	1 18	22 17	0 25	18 44	1 46	12 58	0 31	2 58	1 8	2 5	16 53	23 18	23 15	0 19	16 53	6 21							
W31	13s49	17s49	4s21	20s46	1s50	3n41	1n 0	21n27	1n20	22s16	0s25	18s45	1n45	12n57	0s31	2n57	1n 8	2s 5	16s53	23s18	23s15	0n16	16s53	6n20							

ASTRODIENST EPHEMERIS for the year 2103  
geocentric

NOVEMBER 2103

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	2 38 39	7♏54°48'	19♏ 5	26♏18	24♏10	0♏19	20♏38	1♏46	5°R42	25♏12	7°R11	5°R26	6♏52	18♏ 5	7♏38	T 1
F 2	2 42 36	8°54'47"	1♏43	27°43'	25°18'	0°43'	20°56'	1°53'	5♏40	25°13'	7♏10	5♏18	6°48'	18°12'	7°42'	F 2
S 3	2 46 32	9°54'48"	14°32'	29° 7'	26°27'	1° 5'	21° 4'	1°59'	5°38'	25°15'	7° 9'	5°14'	6°45'	18°19'	7°46'	S 3
S 4	2 50 29	10°54'50"	27°33'	0♏30	27°35'	1°28'	21°13'	2° 6'	5°35'	25°17'	7° 8'	5°12'	6°42'	18°25'	7°51'	S 4
M 5	2 54 25	11°54'54"	10♏46	1°52'	28°44'	1°50'	21°22'	2°13'	5°33'	25°19'	7° 7'	5°D11	6°39'	18°32'	7°55'	M 5
T 6	2 58 22	12°55'00"	24°12'	3°13'	29°53'	2°11'	21°31'	2°20'	5°30'	25°20'	7° 6'	5°12'	6°36'	18°39'	7°59'	T 6
W 7	3 2 18	13°55'07"	7♏54	4°34'	1♏ 2	2°33'	21°40'	2°27'	5°28'	25°22'	7° 5'	5°R13	6°32'	18°46'	8° 3'	W 7
T 8	3 6 15	14°55'16"	21°51'	5°53'	2°11'	2°53'	21°49'	2°34'	5°25'	25°23'	7° 4'	5°13'	6°29'	18°52'	8° 8'	T 8
F 9	3 10 11	15°55'26"	6♏ 4	7°11'	3°21'	3°14'	21°58'	2°40'	5°23'	25°25'	7° 2'	5°11'	6°26'	18°59'	8°12'	F 9
S 10	3 14 8	16°55'37"	20°31'	8°27'	4°30'	3°33'	22° 7'	2°47'	5°20'	25°27'	7° 1'	5° 7'	6°23'	19° 6'	8°17'	S 10
S 11	3 18 5	17°55'50"	5♏ 9	9°42'	5°40'	3°53'	22°17'	2°54'	5°18'	25°28'	7° 0'	5° 2'	6°20'	19°12'	8°21'	S 11
M12	3 22 1	18°56'05"	19°51'	10°56'	6°50'	4°12'	22°26'	3° 1'	5°16'	25°30'	6°59'	4°55'	6°17'	19°19'	8°26'	M12
T 13	3 25 58	19°56'21"	4♏30	12° 8'	8° 0'	4°30'	22°36'	3° 8'	5°13'	25°31'	6°58'	4°47'	6°13'	19°26'	8°30'	T 13
W14	3 29 54	20°56'39"	19° 0'	13°17'	9°10'	4°48'	22°46'	3°15'	5°11'	25°33'	6°57'	4°40'	6°10'	19°33'	8°35'	W14
T 15	3 33 51	21°56'58"	3♏12	14°24'	10°21'	5° 6'	22°56'	3°22'	5° 9'	25°34'	6°56'	4°35'	6° 7'	19°39'	8°40'	T 15
F 16	3 37 47	22°57'20"	17° 3'	15°29'	11°31'	5°23'	23° 6'	3°29'	5° 6'	25°35'	6°55'	4°32'	6° 4'	19°46'	8°45'	F 16
S 17	3 41 44	23°57'43"	0♏30	16°30'	12°42'	5°39'	23°16'	3°36'	5° 4'	25°37'	6°54'	4°D30	6° 1'	19°53'	8°50'	S 17
S 18	3 45 40	24°58'08"	13°33'	17°28'	13°53'	5°55'	23°26'	3°44'	5° 2'	25°38'	6°53'	4°30'	5°58'	19°59'	8°55'	S 18
M19	3 49 37	25°58'35"	26°13'	18°23'	15° 4'	6°10'	23°37'	3°51'	5° 0'	25°39'	6°52'	4°32'	5°54'	20° 6'	8°59'	M19
T 20	3 53 34	26°59'03"	8♏34	19°13'	16°15'	6°25'	23°47'	3°58'	4°57'	25°41'	6°51'	4°34'	5°51'	20°13'	9° 4'	T 20
W21	3 57 30	27°59'34"	20°40'	19°58'	17°26'	6°39'	23°58'	4° 5'	4°55'	25°42'	6°49'	4°35'	5°48'	20°20'	9° 9'	W21
T 22	4 1 27	29° 0'06"	2♏37	20°38'	18°37'	6°53'	24° 9'	4°12'	4°53'	25°43'	6°48'	4°R35	5°45'	20°26'	9°15'	T 22
F 23	4 5 23	0♏ 0'40"	14°29'	21°12'	19°48'	7° 6'	24°19'	4°19'	4°51'	25°44'	6°47'	4°34'	5°42'	20°33'	9°20'	F 23
S 24	4 9 20	1° 1'15"	26°21'	21°39'	21° 0'	7°19'	24°30'	4°26'	4°49'	25°46'	6°46'	4°31'	5°38'	20°40'	9°25'	S 24
S 25	4 13 16	2° 1'53"	8♏18	21°59'	22°12'	7°31'	24°41'	4°33'	4°46'	25°47'	6°45'	4°27'	5°35'	20°46'	9°30'	S 25
M26	4 17 13	3° 2'31"	20°22'	22°10'	23°23'	7°42'	24°53'	4°40'	4°44'	25°48'	6°44'	4°22'	5°32'	20°53'	9°35'	M26
T 27	4 21 9	4° 3'12"	2♏39	22°R12	24°35'	7°52'	25° 4'	4°48'	4°42'	25°49'	6°43'	4°16'	5°29'	21° 0'	9°41'	T 27
W28	4 25 6	5° 3'54"	15° 8'	22° 5'	25°47'	8° 2'	25°15'	4°55'	4°40'	25°50'	6°42'	4°11'	5°26'	21° 7'	9°46'	W28
T 29	4 29 3	6° 4'38"	27°51'	21°47'	26°59'	8°12'	25°26'	5° 2'	4°38'	25°51'	6°41'	4° 6'	5°23'	21°13'	9°51'	T 29
F 30	4 32 59	7♏ 5'23"	10♏49	21♏18	28♏11	8♏20	25♏38	5♏ 9	4♏36	25♏52	6♏40	4♏ 3	5♏19	21♏20	9♏57	F 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
T 1	14s 8	21s 1	3s41	21s12	1s56	3n17	1n 3	21n24	1n22	22s14	0s25	18s47	1n45	12n56	0s31	2n57	1n 8	2s 6	16s53	23s19	23s15	0n13	16s53	6n20			
F 2	14 28	23 15	2 49	21 36	2 1	2 53	1 7	21 21	1 24	22 13	0 26	18 48	1 45	12 55	0 31	2 56	1 8	2 6	16 53	23 19	23 15	0 10	16 53	6 19			
S 3	14 47	24 19	1 48	22 0	2 6	2 29	1 10	21 18	1 26	22 12	0 26	18 50	1 45	12 55	0 31	2 55	1 8	2 6	16 53	23 19	23 15	0 7	16 53	6 19			
S 4	15 6	24 5	0 41	22 23	2 11	2 5	1 14	21 15	1 27	22 10	0 26	18 51	1 45	12 54	0 30	2 55	1 8	2 7	16 53	23 19	23 15	0 5	16 54	6 19			
M 5	15 24	22 30	0n30	22 44	2 16	1 41	1 17	21 12	1 29	22 9	0 26	18 53	1 45	12 53	0 30	2 54	1 8	2 7	16 53	23 19	23 16	0 2	16 54	6 18			
T 6	15 42	19 37	1 40	23 5	2 20	1 16	1 20	21 9	1 31	22 8	0 26	18 54	1 45	12 52	0 30	2 53	1 8	2 7	16 53	23 19	23 16	0s 1	16 54	6 18			
W 7	16 0	15 36	2 47	23 24	2 24	0 51	1 23	21 6	1 33	22 6	0 26	18 56	1 45	12 51	0 30	2 53	1 8	2 7	16 53	23 19	23 16	0 4	16 54	6 18			
T 8	16 18	10 41	3 44	23 42	2 27	0 27	1 26	21 3	1 35	22 5	0 26	18 57	1 45	12 51	0 30	2 52	1 8	2 8	16 53	23 19	23 16	0 7	16 54	6 17			
F 9	16 36	5 7	4 29	23 58	2 31	0 2	1 29	21 0	1 37	22 4	0 26	18 58	1 45	12 50	0 30	2 52	1 8	2 8	16 53	23 19	23 16	0 10	16 54	6 17			
S 10	16 53	0n49	4 58	24 14	2 34	0s24	1 31	20 58	1 40	22 2	0 26	19 0	1 44	12 49	0 30	2 51	1 8	2 8	16 53	23 20	23 16	0 13	16 54	6 17			
S 11	17 10	6 45	5 8	24 28	2 36	0 49	1 34	20 55	1 42	22 1	0 26	19 1	1 44	12 48	0 30	2 50	1 8	2 9	16 53	23 20	23 16	0 15	16 54	6 16			
M12	17 27	12 20	4 57	24 41	2 38	1 14	1 36	20 53	1 44	21 59	0 26	19 3	1 44	12 47	0 30	2 50	1 8	2 9	16 52	23 20	23 17	0 18	16 54	6 16			
T 13	17 43	17 13	4 28	24 52	2 39	1 40	1 39	20 50	1 46	21 57	0 26	19 4	1 44	12 47	0 30	2 49	1 8	2 9	16 52	23 20	23 17	0 21	16 54	6 16			
W14	17 59	21 0	3 41	25 2	2 40	2 5	1 41	20 48	1 48	21 56	0 26	19 5	1 44	12 46	0 30	2 49	1 8	2 9	16 52	23 21	23 17	0 24	16 54	6 15			
T 15	18 15	23 25	2 41	25 11	2 41	2 31	1 43	20 46	1 50	21 54	0 26	19 7	1 44	12 45	0 30	2 48	1 8	2 10	16 52	23 21	23 17	0 27	16 54	6 15			
F 16	18 30	24 21	1 33	25 18	2 41	2 56	1 45	20 44	1 52	21 53	0 26	19 8	1 44	12 44	0 30	2 48	1 8	2 10	16 52	23 21	23 17	0 30	16 54	6 15			
S 17	18 45	23 47	0 22	25 23	2 40	3 22	1 47	20 42	1 55	21 51	0 26	19 10	1 44	12 44	0 30	2 47	1 8	2 10	16 52	23 21	23 17	0 33	16 54	6 14			
S 18	19 0	21 56	0s49	25 28	2 38	3 48	1 49	20 40	1 57	21 49	0 26	19 11	1 44	12 43	0 30	2 47	1 8	2 10	16 52	23 21	23 18	0 35	16 54	6 14			
M19	19 14	19 1	1 55	25 30	2 36	4 14	1 51	20 39	1 59	21 47	0 26	19 12	1 44	12 42	0 30	2 46	1 8	2 10	16 52	23 21	23 18	0 38	16 54	6 14			
T 20	19 28	15 18	2 55	25 31	2 32	4 40	1 52	20 37	2 1	21 46	0 26	19 14	1 44	12 41	0 30	2 46	1 8	2 11	16 52	23 21	23 18	0 41	16 54	6 13			
W21	19 42	11 2	3 45	25 30	2 28	5 5	1 54	20 36	2 4	21 44	0 26	19 15	1 44	12 41	0 30	2 45	1 8	2 11	16 51	23 21	23 18	0 44	16 54	6 13			
T 22	19 55	6 25	4 25	25 28	2 23	5 31	1 55	20 34	2 6	21 42	0 26	19 17	1 44	12 40	0 30	2 45	1 8	2 11	16 51	23 21	23 18	0 47	16 54	6 13			
F 23	20 8	1 36	4 53	25 24	2 16	5 57	1 56	20 33	2 9	21 40	0 26	19 18	1 44	12 39	0 30	2 44	1 9	2 11	16 51	23 21	23 18	0 50	16 54	6 13			
S 24	20 21	3s16	5 9	25 18	2 8	6 22	1 57	20 33	2 11	21 38	0 26	19 19	1 43	12 39	0 30	2 44	1 9	2 11	16 51	23 21	23 18	0 52	16 54	6 12			
S 25	20 33	8 3	5 11	25 10	1 59	6 48	1 59	20 32	2 13	21 36	0 26	19 21	1 43	12 38	0 30	2 44	1 9	2 11	16 51	23 21	23 18	0 55	16 54	6 12			
M26	20 45	12 35	5 0	25 0	1 49	7 14	1 59	20 31	2 16	21 34	0 26	19 22	1 43	12 37	0 30	2 43	1 9	2 12	16 51	23 21	23 19	0 58	16 54	6 12			
T 27	20 57	16 41	4 35	24 49	1 37	7 39	2 0	20 31	2 18	21 32	0 26	19 23	1 43	12 37	0 30	2 43	1 9	2 12	16 50	23 21	23 19	1 1	16 54	6 12			
W28	21 8	20 8	3 56	24 35	1 24	8 5	2 1	20 31	2 21	21 30	0 26	19 25	1 43	12 36	0 30	2 42	1 9	2 12	16 50	23 22	23 19	1 4	16 54	6 11			
T 29	21 19	22 41	3 5	24 19	1 9	8 30	2 2	20 31	2 23	21 28	0 26	19 26	1 43	12 35	0 30	2 42	1 9	2 12	16 50	23 22	23 19	1 7	16 53	6 11			
F 30	21s29	24s 6	2s 4	24s 1	0s53	8s55	2n 2	20n31	2n26	21s26	0s27	19s27	1n43	12n35	0s30	2n42	1n 9	2s12	16s50	23s22	23s19	1s 9	16s53	6n11			

ASTRODIENST EPHEMERIS for the year 2103  
geocentric

DECEMBER 2103

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	4 36 56	8♈ 6'09	24♈ 1	20°R38	29♈23	8♈28	25♈50	5♈16	4°R34	25♈53	6°R39	4°R 1	5♈16	21♈27	10♈ 2	S 1
S 2	4 40 52	9° 6'57	7♈26	19♈47	0♈36	8°35	26° 1	5°23	4♈32	25°54	6♈39	4°D 1	5°13	21°34	10° 8	S 2
M 3	4 44 49	10° 7'46	21° 2	18°47	1°48	8°42	26°13	5°30	4°31	25°55	6°38	4♈ 2	5°10	21°40	10°13	M 3
T 4	4 48 45	11° 8'35	4♈48	17°38	3° 0	8°48	26°25	5°37	4°29	25°56	6°37	4° 3	5° 7	21°47	10°19	T 4
W 5	4 52 42	12° 9'26	18°43	16°21	4°13	8°53	26°37	5°45	4°27	25°56	6°36	4° 5	5° 4	21°54	10°24	W 5
T 6	4 56 38	13°10'17	2♈45	15° 1	5°26	8°57	26°49	5°52	4°25	25°57	6°35	4° 6	5° 0	22° 0	10°30	T 6
F 7	5 0 35	14°11'09	16°54	13°38	6°38	9° 0	27° 1	5°59	4°23	25°58	6°34	4°R 6	4°57	22° 7	10°36	F 7
S 8	5 4 32	15°12'02	1°V 7	12°16	7°51	9° 3	27°13	6° 6	4°22	25°59	6°33	4° 5	4°54	22°14	10°41	S 8
S 9	5 8 28	16°12'56	15°22	10°57	9° 4	9° 5	27°25	6°13	4°20	25°59	6°32	4° 4	4°51	22°21	10°47	S 9
M10	5 12 25	17°13'50	29°36	9°45	10°17	9° 6	27°38	6°20	4°18	26° 0	6°32	4° 2	4°48	22°27	10°53	M10
T 11	5 16 21	18°14'45	13♈46	8°41	11°30	9°R 7	27°50	6°27	4°17	26° 1	6°31	3°59	4°44	22°34	10°58	T 11
W12	5 20 18	19°15'41	27°46	7°46	12°43	9° 7	28° 2	6°34	4°15	26° 1	6°30	3°57	4°41	22°41	11° 4	W12
T 13	5 24 14	20°16'38	11♈35	7° 2	13°56	9° 5	28°15	6°41	4°14	26° 2	6°29	3°56	4°38	22°47	11°10	T 13
F 14	5 28 11	21°17'36	25° 7	6°29	15° 9	9° 3	28°28	6°48	4°12	26° 2	6°28	3°55	4°35	22°54	11°16	F 14
S 15	5 32 7	22°18'34	8♈22	6° 8	16°22	9° 1	28°40	6°55	4°11	26° 3	6°28	3°D55	4°32	23° 1	11°22	S 15
S 16	5 36 4	23°19'34	21°18	5°D58	17°35	8°57	28°53	7° 2	4° 9	26° 3	6°27	3°55	4°29	23° 8	11°28	S 16
M17	5 40 1	24°20'34	3♈56	5°58	18°49	8°53	29° 6	7° 9	4° 8	26° 4	6°26	3°56	4°25	23°14	11°33	M17
T 18	5 43 57	25°21'35	16°17	6° 8	20° 2	8°47	29°19	7°16	4° 7	26° 4	6°26	3°57	4°22	23°21	11°39	T 18
W19	5 47 54	26°22'38	28°25	6°26	21°16	8°41	29°32	7°23	4° 6	26° 4	6°25	3°58	4°19	23°28	11°45	W19
T 20	5 51 50	27°23'41	10♈24	6°53	22°29	8°34	29°45	7°30	4° 4	26° 5	6°24	3°59	4°16	23°35	11°51	T 20
F 21	5 55 47	28°24'44	22°17	7°27	23°43	8°27	29°58	7°36	4° 3	26° 5	6°24	3°59	4°13	23°41	11°57	F 21
S 22	5 59 43	29°25'49	4♈10	8° 8	24°56	8°18	0♈11	7°43	4° 2	26° 5	6°23	3°R59	4°10	23°48	12° 3	S 22
S 23	6 3 40	0♈26'55	16° 6	8°54	26°10	8° 8	0°24	7°50	4° 1	26° 6	6°22	3°59	4° 6	23°55	12° 9	S 23
M24	6 7 36	1°28'01	28°12	9°46	27°24	7°58	0°37	7°57	4° 0	26° 6	6°22	3°59	4° 3	24° 1	12°15	M24
T 25	6 11 33	2°29'08	10♈30	10°42	28°38	7°47	0°50	8° 3	3°59	26° 6	6°21	3°58	4° 0	24° 8	12°21	T 25
W26	6 15 30	3°30'16	23° 4	11°42	29°51	7°35	1° 4	8°10	3°58	26° 6	6°21	3°D58	3°57	24°15	12°27	W26
T 27	6 19 26	4°31'25	5♈57	12°46	1♈ 5	7°22	1°17	8°17	3°57	26° 6	6°20	3°58	3°54	24°22	12°33	T 27
F 28	6 23 23	5°32'34	19°11	13°52	2°19	7° 9	1°30	8°23	3°56	26° 6	6°20	3°58	3°50	24°28	12°39	F 28
S 29	6 27 19	6°33'43	2♈43	15° 2	3°33	6°54	1°44	8°30	3°56	26°R 6	6°19	3°R58	3°47	24°35	12°45	S 29
S 30	6 31 16	7°34'53	16°34	16°13	4°47	6°39	1°57	8°37	3°55	26° 6	6°19	3°58	3°44	24°42	12°51	S 30
M31	6 35 12	8♈36'03	0♈39	17♈27	6♈ 1	6♈23	2♈11	8♈43	3♈54	26°R 6	6♈18	3♈58	3♈41	24°48	12♈57	M31

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	21s39	24s12	0s55	23s41	0s35	9s20	2n 3	20n31	2n28	21s24	0s27	19s29	1n43	12n34	0s30	2n41	1n 9	2s12	16s50	23s22	23s19	1s12	16s53	6n11					
S 2	21 48	22 54	0n19	23 18	0 16	9 45	2 3	20 32	2 31	21 22	0 27	19 30	1 43	12 33	0 30	2 41	1 9	2 12	16 49	23 22	23 19	1 15	16 53	6 11					
M 3	21 57	20 16	1 32	22 54	0n 3	10 10	2 3	20 33	2 34	21 20	0 27	19 31	1 43	12 33	0 30	2 41	1 9	2 12	16 49	23 22	23 20	1 18	16 53	6 10					
T 4	22 6	16 27	2 41	22 27	0 24	10 34	2 4	20 34	2 36	21 18	0 27	19 32	1 43	12 32	0 30	2 40	1 9	2 12	16 49	23 22	23 20	1 21	16 52	6 10					
W 5	22 14	11 42	3 42	22 0	0 44	10 59	2 4	20 35	2 39	21 15	0 27	19 34	1 43	12 32	0 30	2 40	1 9	2 12	16 49	23 22	23 20	1 24	16 52	6 10					
T 6	22 22	6 18	4 29	21 31	1 4	11 23	2 4	20 36	2 41	21 13	0 27	19 35	1 43	12 31	0 30	2 40	1 9	2 13	16 49	23 22	23 20	1 26	16 52	6 10					
F 7	22 29	0 33	5 1	21 3	1 23	11 47	2 3	20 38	2 44	21 11	0 27	19 36	1 43	12 30	0 30	2 40	1 9	2 13	16 48	23 22	23 20	1 29	16 52	6 10					
S 8	22 36	5n16	5 15	20 35	1 41	12 10	2 3	20 40	2 47	21 9	0 27	19 37	1 43	12 30	0 30	2 39	1 9	2 13	16 48	23 22	23 20	1 32	16 51	6 9					
S 9	22 43	10 48	5 9	20 8	1 58	12 34	2 3	20 42	2 49	21 6	0 27	19 39	1 43	12 29	0 30	2 39	1 9	2 13	16 48	23 22	23 20	1 35	16 51	6 9					
M10	22 49	15 46	4 45	19 44	2 12	12 57	2 3	20 44	2 52	21 4	0 27	19 40	1 43	12 29	0 30	2 39	1 9	2 13	16 48	23 22	23 20	1 38	16 51	6 9					
T 11	22 54	19 49	4 3	19 22	2 24	13 20	2 2	20 47	2 55	21 1	0 27	19 41	1 43	12 28	0 30	2 39	1 9	2 13	16 47	23 22	23 20	1 40	16 51	6 9					
W12	23 0	22 41	3 7	19 4	2 33	13 43	2 1	20 49	2 58	20 59	0 27	19 42	1 43	12 28	0 30	2 39	1 9	2 13	16 47	23 22	23 21	1 43	16 50	6 9					
T 13	23 4	24 9	2 0	18 50	2 41	14 5	2 1	20 52	3 0	20 57	0 27	19 43	1 43	12 27	0 30	2 38	1 9	2 13	16 47	23 22	23 21	1 46	16 50	6 9					
F 14	23 8	24 9	0 49	18 39	2 46	14 27	2 0	20 55	3 3	20 54	0 27	19 45	1 43	12 27	0 30	2 38	1 9	2 13	16 47	23 22	23 21	1 49	16 50	6 9					
S 15	23 12	22 45	0s25	18 33	2 49	14 49	1 59	20 59	3 6	20 52	0 27	19 46	1 43	12 26	0 30	2 38	1 10	2 13	16 46	23 22	23 21	1 52	16 49	6 9					
S 16	23 15	20 11	1 35	18 30	2 50	15 11	1 58	21 2	3 9	20 49	0 27	19 47	1 43	12 26	0 30	2 38	1 10	2 13	16 46	23 22	23 21	1 55	16 49	6 8					
M17	23 18	16 41	2 39	18 30	2 50	15 32	1 57	21 6	3 11	20 46	0 27	19 48	1 43	12 26	0 30	2 38	1 10	2 13	16 46	23 22	23 21	1 57	16 48	6 8					
T 18	23 21	12 33	3 34	18 33	2 48	15 53	1 56	21 10	3 14	20 44	0 27	19 49	1 43	12 25	0 30	2 38	1 10	2 13	16 46	23 22	23 21	2 0	16 48	6 8					
W19	23 23	7 58	4 18	18 40	2 45	16 13	1 55	21 15	3 17	20 41	0 27	19 50	1 43	12 25	0 30	2 38	1 10	2 12	16 45	23 22	23 21	2 3	16 48	6 8					
T 20	23 24	3 10	4 51	18 48	2 41	16 33	1 54	21 19	3 20	20 38	0 27	19 51	1 43	12 24	0 30	2 37	1 10	2 12	16 45	23 22	23 21	2 6	16 47	6 8					
F 21	23 25	1s42	5 11	18 58	2 36	16 52	1 52	21 24	3 22	20 36	0 28	19 52	1 43	12 24	0 30	2 37	1 10	2 12	16 45	23 22	23 22	2 9	16 47	6 8					
S 22	23 25	6 30	5 17	19 11	2 30	17 12	1 51	21 29	3 25	20 33	0 28	19 54	1 43	12 24	0 29	2 37	1 10	2 12	16 44	23 22	23 22	2 11	16 46	6 8					
S 23	23 26	11 6	5 10	19 24	2 24	17 30	1 50	21 34	3 28	20 30	0 28	19 55	1 43	12 23	0 29	2 37	1 10	2 12	16 44	23 22	23 22	2 14	16 46	6 8					
M24	23 25	15 20	4 49	19 38	2 17	17 49	1 48	21 39	3 30	20 27	0 28	19 56	1 43	12 23	0 29	2 37	1 10	2 12	16 44	23 22	23 22	2 17	16 45	6 8					
T 25	23 24	19 0	4 15	19 53	2 10	18 7	1 46	21 45	3 33	20 25	0 28	19 57	1 43	12 23	0 29	2 37	1 10	2 12	16 43	23 22	23 22	2 20	16 45	6 8					
W26	23 23	21 53	3 28	20 9	2 3	18 24	1 45	21 50	3 36	20 22	0 28	19 58	1 43	12 22	0 29	2 37	1 10	2 12	16 43	23 22	23 22	2 22	16 44	6 8					
T 27	23 21	23 44	2 29	20 25	1 55	18 41	1 43	21 56	3 38	20 19	0 28	19 59	1 43	12 22	0 29	2 37	1 10	2 12	16 43	23 22	23 22	2 25	16 44	6 8					
F 28	23 19	24 20	1 21	20 41	1 47	18 57	1 41	22 2	3 41	20 16	0 28	20 0	1 43	12 22	0 29	2 37	1 10	2 12	16 43	23 22	23 22	2 28	16 43	6 8					
S 29	23 16	23 31	0 7	20 57	1 39	19 13	1 39	22 8	3 43	20 13	0 28	20 1	1 43	12 22	0 29	2 37	1 10	2 11	16 42	23 22	23 22	2 31	16 43	6 8					
S 30	23 13	21 15	1n 9	21 13	1 30	19 29	1 38	22 14	3 46	20 10	0 28	20 2	1 43	12 21	0 29	2 37	1 10	2 11	16 42	23 22	23 22	2 34	16 42	6 8					
M31	23s 9	17s41	2n23	21s29	1n22	19s44	1n36	22n21	3n48	20s 7	0s28	20s 3	1n43	12n21	0s29	2n37	1n10	2s11	16s42	23s22	23s22	2s36	16s42	6n 8					