



# Astrodienst Ephemeris Tables for the year 2166

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 2166

## geocentric

JANUARY 2166

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	6 43 0	10°34'46	24°36	20°26	0°46	8°R12	24°V50	10°359	9°21	7°57	7°R54	3°R 3	4°M26	27°M41	19°K35	W 1
T 2	6 46 57	11°35'56	8°317	22° 3	1°18	7°548	24°53	11° 6	9°24	7°59	7°53	2°M54	4°23	27°48	19°37	T 2
F 3	6 50 54	12°37'06	22°15	23°40	1°51	7°25	24°56	11°13	9°28	8° 1	7°51	2°46	4°20	27°55	19°39	F 3
S 4	6 54 50	13°38'16	6°24	25°17	2°26	7° 2	24°59	11°20	9°31	8° 3	7°50	2°41	4°17	28° 1	19°41	S 4
S 5	6 58 47	14°39'26	20°41	26°53	3° 2	6°40	25° 2	11°27	9°34	8° 6	7°49	2°38	4°13	28° 8	19°43	S 5
M 6	7 2 43	15°40'36	4°59	28°30	3°39	6°17	25° 6	11°34	9°37	8° 8	7°48	2°D37	4°10	28°15	19°45	M 6
T 7	7 6 40	16°41'45	19°17	0°6	4°18	5°55	25°10	11°41	9°41	8°10	7°47	2°38	4° 7	28°21	19°47	T 7
W 8	7 10 36	17°42'54	3°V30	1°42	4°58	5°34	25°13	11°49	9°44	8°12	7°45	2°40	4° 4	28°28	19°49	W 8
T 9	7 14 33	18°44'03	17°38	3°17	5°39	5°13	25°18	11°56	9°47	8°14	7°44	2°R40	4° 1	28°35	19°51	T 9
F 10	7 18 29	19°45'11	1°B39	4°52	6°21	4°53	25°22	12° 3	9°51	8°16	7°43	2°40	3°58	28°41	19°53	F 10
S 11	7 22 26	20°46'19	15°31	6°25	7° 5	4°33	25°26	12°10	9°54	8°19	7°42	2°37	3°54	28°48	19°56	S 11
S 12	7 26 23	21°47'27	29°15	7°57	7°49	4°14	25°31	12°17	9°57	8°21	7°41	2°32	3°51	28°55	19°58	S 12
M13	7 30 19	22°48'34	12°II49	9°28	8°35	3°55	25°36	12°24	10° 1	8°23	7°39	2°26	3°48	29° 1	20° 0	M13
T 14	7 34 16	23°49'41	26°11	10°57	9°21	3°37	25°41	12°31	10° 4	8°25	7°38	2°20	3°45	29° 8	20° 3	T 14
W15	7 38 12	24°50'47	9°20	12°23	10° 8	3°20	25°46	12°38	10° 8	8°27	7°37	2°13	3°42	29°15	20° 5	W15
T 16	7 42 9	25°51'53	22°14	13°47	10°56	3° 3	25°51	12°45	10°11	8°30	7°36	2° 7	3°38	29°21	20° 8	T 16
F 17	7 46 5	26°52'58	4°J54	15° 7	11°45	2°47	25°57	12°52	10°15	8°32	7°35	2° 2	3°35	29°28	20°10	F 17
S 18	7 50 2	27°54'03	17°20	16°23	12°35	2°32	26° 2	12°59	10°18	8°34	7°34	1°59	3°32	29°35	20°13	S 18
S 19	7 53 59	28°55'08	29°32	17°35	13°26	2°17	26° 8	13° 6	10°21	8°36	7°33	1°D58	3°29	29°41	20°15	S 19
M20	7 57 55	29°56'12	11°M33	18°42	14°17	2° 4	26°14	13°13	10°25	8°39	7°31	1°59	3°26	29°48	20°18	M20
T 21	8 1 52	0°55'16	23°26	19°42	15°10	1°51	26°21	13°19	10°28	8°41	7°30	2° 0	3°23	29°55	20°21	T 21
W22	8 5 48	1°58'20	5°J15	20°36	16° 2	1°39	26°27	13°26	10°32	8°43	7°29	2° 2	3°19	0°J 1	20°24	W22
T 23	8 9 45	2°59'23	17° 4	21°21	16°56	1°27	26°34	13°33	10°35	8°45	7°28	2° 4	3°16	0° 8	20°26	T 23
F 24	8 13 41	4° 0'26	28°58	21°59	17°50	1°17	26°40	13°40	10°39	8°48	7°27	2°R 5	3°13	0°15	20°29	F 24
S 25	8 17 38	5° 1'28	11°M 2	22°26	18°45	1° 7	26°47	13°47	10°42	8°50	7°26	2° 5	3°10	0°21	20°32	S 25
S 26	8 21 34	6° 2'30	23°21	22°44	19°41	0°58	26°54	13°53	10°46	8°52	7°25	2° 3	3° 7	0°28	20°35	S 26
M27	8 25 31	7° 3'32	6°J 0	22°R50	20°37	0°50	27° 1	14° 0	10°49	8°54	7°24	2° 1	3° 3	0°35	20°38	M27
T 28	8 29 28	8° 4'33	19° 1	22°45	21°33	0°43	27° 9	14° 7	10°53	8°57	7°23	1°58	3° 0	0°41	20°41	T 28
W29	8 33 24	9° 5'34	2°B28	22°29	22°30	0°36	27°16	14°14	10°56	8°59	7°22	1°54	2°57	0°48	20°44	W29
T 30	8 37 21	10° 6'34	16°18	22° 2	23°28	0°30	27°24	14°20	11° 0	9° 1	7°21	1°51	2°54	0°55	20°47	T 30
F 31	8 41 17	11°7'33	0°B32	21°B23	24°J26	0°26	27°V32	14°B27	11°B 3	9°B 4	7°B20	1°M48	2°M51	1°J 1	20°J50	F 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
W 1	23s 0	18s34	4n45	24s 0	2s10	16s16	4n 7	26n49	3n40	8n26	1s16	22s25	0n33	18s29	0s37	18s 7
T 2	22 55	19 0	4 10	23 45	2 10	16 19	4 10	26 52	3 41	8 27	1 16	22 24	0 33	18 28	0 37	18 7
F 3	22 49	18 17	3 20	23 29	2 10	16 23	4 13	26 54	3 42	8 28	1 16	22 24	0 33	18 28	0 37	18 6
S 4	22 43	16 27	2 17	23 11	2 9	16 27	4 15	26 56	3 43	8 30	1 15	22 23	0 33	18 27	0 37	18 6
S 5	22 37	13 34	1 4	22 51	2 8	16 32	4 17	26 58	3 44	8 31	1 15	22 23	0 33	18 26	0 37	18 5
M 6	22 30	9 52	0s13	22 30	2 6	16 37	4 19	27 0	3 44	8 33	1 15	22 22	0 33	18 25	0 37	18 5
T 7	22 22	5 36	1 29	22 8	2 4	16 43	4 21	27 2	3 45	8 34	1 14	22 22	0 33	18 24	0 37	18 4
W 8	22 15	1 3	2 39	21 44	2 1	16 49	4 22	27 3	3 46	8 36	1 14	22 21	0 32	18 23	0 37	18 4
T 9	22 6	3n32	3 39	21 18	1 57	16 55	4 23	27 5	3 46	8 38	1 14	22 21	0 32	18 22	0 37	18 3
F 10	21 58	7 52	4 26	20 52	1 53	17 1	4 23	27 6	3 46	8 40	1 14	22 20	0 32	18 21	0 37	18 3
S 11	21 49	11 44	4 56	20 24	1 48	17 8	4 24	27 7	3 47	8 41	1 13	22 19	0 32	18 20	0 37	18 2
S 12	21 39	14 56	5 9	19 55	1 43	17 15	4 24	27 8	3 47	8 43	1 13	22 19	0 32	18 20	0 37	18 1
M13	21 29	17 16	5 5	19 25	1 36	17 22	4 24	27 8	3 47	8 45	1 13	22 18	0 32	18 19	0 37	18 1
T 14	21 19	18 38	4 44	18 54	1 29	17 29	4 24	27 9	3 47	8 47	1 12	22 18	0 32	18 18	0 37	18 0
W15	21 8	18 58	4 8	18 22	1 21	17 36	4 23	27 9	3 47	8 50	1 12	22 17	0 32	18 17	0 37	18 0
T 16	20 57	18 18	3 20	17 49	1 12	17 44	4 23	27 9	3 47	8 52	1 12	22 16	0 32	18 16	0 37	17 59
F 17	20 46	16 43	2 22	17 16	1 2	17 51	4 22	27 10	3 46	8 54	1 11	22 16	0 32	18 15	0 37	17 59
S 18	20 34	14 22	1 19	16 43	0 51	17 58	4 21	27 10	3 46	8 56	1 11	22 15	0 32	18 14	0 37	17 58
S 19	20 21	11 25	0 13	16 10	0 39	18 6	4 19	27 10	3 46	8 59	1 11	22 15	0 32	18 13	0 37	17 57
M20	20 9	8 2	0n52	15 38	0 27	18 13	4 18	27 9	3 45	9 1	1 11	22 14	0 32	18 12	0 37	17 57
T 21	19 56	4 22	1 55	15 6	0 13	18 20	4 16	27 9	3 45	9 4	1 10	22 13	0 32	18 11	0 37	17 56
W22	19 42	0 34	2 53	14 35	0n 2	18 28	4 15	27 9	3 44	9 6	1 10	22 13	0 32	18 10	0 37	17 56
T 23	19 28	3s16	3 43	14 6	0 17	18 35	4 13	27 8	3 44	9 9	1 10	22 12	0 32	18 9	0 37	17 55
F 24	19 14	6 59	4 24	13 38	0 34	18 42	4 11	27 7	3 43	9 12	1 10	22 12	0 32	18 8	0 37	17 55
S 25	18 59	10 28	4 54	13 13	0 50	18 49	4 8	27 7	3 42	9 14	1 9	22 11	0 31	18 7	0 37	17 54
S 26	18 45	13 34	5 11	12 51	1 8	18 56	4 6	27 6	3 41	9 17	1 9	22 10	0 31	18 6	0 37	17 53
M27	18 29	16 8	5 14	12 32	1 26	19 2	4 3	27 5	3 41	9 20	1 9	22 10	0 31	18 5	0 37	17 53
T 28	18 14	17 58	5 1	12 17	1 44	19 8	4 1	27 4	3 40	9 23	1 8	22 9	0 31	18 5	0 37	17 52
W29	17 58	18 52	4 31	12 5	2 1	19 15	3 58	27 4	3 39	9 26	1 8	22 8	0 31	18 4	0 37	17 52
T 30	17 42	18 42	3 45	11 58	2 19	19 20	3 55	27 3	3 38	9 29	1 8	22 8	0 31	18 3	0 37	17 51
F 31	17s25	17s21	2n44	11s55	2n35	19s26	3n52	27n 2	3n37	9n32	1s 8	22s 7	0n31	18s 2	0s37	17s50

Julian Day Number = 2512175.5, Delta T = 133.32 sec  
 Ecliptic obliquity = 23°24'55, Nutation = - 0°00'07, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 27°03'36, Lahiri = 26°10'36



ASTRODIENST EPHEMERIS for the year 2166  
geocentric

MARCH 2166

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	10 35 37	10♌26'47	23♋0	13♎32	25♏3	3♌15	2♌16	17♏19	12♋42	10♋7	6♌R58	1♎146	1♎19	4♎14	22♌30	S 1
S 2	10 39 34	11°27'06	7♌56	14°30	26°10	3°30	2°28	17°24	12°45	10°9	6♌58	1♌R47	1°15	4°21	22°33	S 2
M 3	10 43 30	12°27'23	23°3	15°31	27°17	3°45	2°39	17°29	12°48	10°11	6°58	1°46	1°12	4°28	22°37	M 3
T 4	10 47 27	13°27'39	8♏11	16°34	28°25	4°1	2°51	17°34	12°52	10°13	6°57	1°45	1°9	4°34	22°41	T 4
W 5	10 51 23	14°27'52	23°11	17°39	29°32	4°17	3°3	17°39	12°55	10°15	6°57	1°43	1°6	4°41	22°45	W 5
T 6	10 55 20	15°28'04	7♏55	18°47	0♋40	4°34	3°14	17°44	12°58	10°17	6°56	1°42	1°3	4°48	22°48	T 6
F 7	10 59 17	16°28'14	22°18	19°57	1°48	4°51	3°26	17°49	13°1	10°19	6°56	1°40	1°0	4°54	22°52	F 7
S 8	11 3 13	17°28'21	6♌16	21°9	2°56	5°9	3°38	17°54	13°4	10°21	6°56	1°39	0°56	5°1	22°56	S 8
S 9	11 7 10	18°28'27	19°49	22°23	4°4	5°26	3°50	17°58	13°7	10°23	6°55	1°D39	0°53	5°8	23°0	S 9
M10	11 11 6	19°28'30	2♌59	23°38	5°12	5°45	4°3	18°3	13°10	10°25	6°55	1°39	0°50	5°14	23°3	M10
T 11	11 15 3	20°28'31	15°49	24°55	6°20	6°3	4°15	18°7	13°13	10°27	6°55	1°41	0°47	5°21	23°7	T 11
W12	11 18 59	21°28'31	28°20	26°14	7°29	6°23	4°27	18°12	13°16	10°28	6°55	1°42	0°44	5°28	23°11	W12
T 13	11 22 56	22°28'27	10♌38	27°35	8°37	6°42	4°40	18°16	13°19	10°30	6°55	1°44	0°40	5°34	23°15	T 13
F 14	11 26 52	23°28'22	22°45	28°56	9°46	7°2	4°52	18°20	13°22	10°32	6°54	1°45	0°37	5°41	23°18	F 14
S 15	11 30 49	24°28'15	4♎44	0♌20	10°55	7°22	5°5	18°25	13°25	10°34	6°54	1°R45	0°34	5°48	23°22	S 15
S 16	11 34 46	25°28'06	16°38	1°45	12°4	7°43	5°17	18°29	13°27	10°36	6°54	1°44	0°31	5°54	23°26	S 16
M17	11 38 42	26°27'54	28°29	3°11	13°13	8°3	5°30	18°33	13°30	10°37	6°54	1°42	0°28	6°1	23°30	M17
T 18	11 42 39	27°27'41	10♌18	4°39	14°22	8°25	5°43	18°37	13°33	10°39	6°54	1°39	0°25	6°8	23°33	T 18
W19	11 46 35	28°27'26	22°8	6°8	15°31	8°46	5°55	18°40	13°36	10°41	6°54	1°34	0°21	6°15	23°37	W19
T 20	11 50 32	29°27'09	4♎2	7°38	16°40	9°8	6°8	18°44	13°38	10°42	6°54	1°29	0°18	6°21	23°41	T 20
F 21	11 54 28	0♏26'50	16°0	9°10	17°50	9°30	6°21	18°48	13°41	10°44	6°D54	1°24	0°15	6°28	23°44	F 21
S 22	11 58 25	1°26'30	28°6	10°42	18°59	9°53	6°34	18°52	13°44	10°46	6°54	1°20	0°12	6°35	23°48	S 22
S 23	12 2 21	2°26'08	10♌23	12°17	20°9	10°15	6°47	18°55	13°46	10°47	6°54	1°16	0°9	6°41	23°52	S 23
M24	12 6 18	3°25'44	22°55	13°52	21°19	10°38	7°0	18°59	13°49	10°49	6°54	1°14	0°6	6°48	23°56	M24
T 25	12 10 14	4°25'18	5♏45	15°29	22°28	11°2	7°14	19°2	13°51	10°50	6°54	1°D14	0°2	6°55	23°59	T 25
W26	12 14 11	5°24'51	18°57	17°7	23°38	11°25	7°27	19°5	13°54	10°52	6°54	1°14	29♌59	7°1	24°3	W26
T 27	12 18 8	6°24'21	2♋34	18°47	24°48	11°49	7°40	19°8	13°56	10°53	6°54	1°16	29°56	7°8	24°7	T 27
F 28	12 22 4	7°23'51	16°37	20°27	25°58	12°13	7°53	19°11	13°59	10°55	6°54	1°17	29°53	7°15	24°10	F 28
S 29	12 26 1	8°23'18	1♌6	22°9	27°8	12°37	8°7	19°14	14°1	10°56	6°55	1°R18	29°50	7°21	24°14	S 29
S 30	12 29 57	9°22'43	15°58	23°53	28°19	13°2	8°20	19°17	14°4	10°58	6°55	1°17	29°46	7°28	24°18	S 30
M31	12 33 54	10♏22'07	1♏6	25♌37	29♋29	13♌27	8♏34	19♏20	14♋6	10♋59	6♌55	1♎15	29♌43	7♎35	24♌21	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	7s39	13s 4	0n49	16s44	0n 1	19s15	1n52	26n23	3n 1	11n18	1 s 1	21s48	0n30	17s34	0s37	17s34	0n 8	18n48	4s26	10n50	11n 0	0n53	0n45	4n 3					
S 2	7 16	9 7	0s34	16 37	0s 9	19 8	1 48	26 21	2 59	11 22	1 1	21 47	0 30	17 34	0 37	17 33	0 8	18 48	4 26	10 50	11 1	0 51	0 47	4 3					
M 3	6 53	4 32	1 55	16 29	0 19	19 0	1 43	26 20	2 58	11 26	1 1	21 47	0 30	17 33	0 37	17 33	0 8	18 49	4 26	10 50	11 2	0 49	0 48	4 3					
T 4	6 30	0n21	3 9	16 19	0 29	18 51	1 38	26 18	2 57	11 30	1 1	21 46	0 30	17 32	0 37	17 32	0 8	18 49	4 26	10 51	11 3	0 47	0 49	4 3					
W 5	6 7	5 9	4 8	16 8	0 38	18 42	1 34	26 16	2 55	11 34	1 0	21 46	0 30	17 31	0 37	17 32	0 8	18 49	4 25	10 51	11 4	0 45	0 51	4 3					
T 6	5 43	9 33	4 50	15 55	0 47	18 32	1 29	26 14	2 54	11 38	1 0	21 45	0 30	17 30	0 37	17 31	0 8	18 49	4 25	10 52	11 6	0 44	0 52	4 3					
F 7	5 20	13 17	5 13	15 41	0 55	18 22	1 25	26 12	2 53	11 43	1 0	21 44	0 30	17 29	0 37	17 31	0 8	18 49	4 25	10 52	11 7	0 42	0 53	4 3					
S 8	4 57	16 9	5 16	15 26	1 3	18 11	1 20	26 10	2 52	11 47	1 0	21 44	0 30	17 28	0 37	17 30	0 8	18 49	4 25	10 53	11 8	0 40	0 55	4 3					
S 9	4 33	18 1	5 1	15 10	1 11	18 0	1 15	26 8	2 50	11 51	1 0	21 43	0 30	17 28	0 37	17 30	0 8	18 50	4 25	10 53	11 9	0 38	0 56	4 3					
M10	4 10	18 52	4 31	14 52	1 18	17 48	1 11	26 6	2 49	11 55	0 59	21 43	0 30	17 27	0 37	17 29	0 8	18 50	4 25	10 52	11 10	0 36	0 58	4 3					
T 11	3 46	18 43	3 48	14 32	1 25	17 36	1 6	26 4	2 48	12 0	0 59	21 42	0 30	17 26	0 37	17 29	0 8	18 50	4 25	10 52	11 11	0 34	0 59	4 3					
W12	3 23	17 38	2 54	14 12	1 32	17 23	1 2	26 2	2 47	12 4	0 59	21 41	0 30	17 25	0 37	17 28	0 8	18 50	4 24	10 52	11 12	0 32	1 1	4 2					
T 13	2 59	15 43	1 54	13 50	1 38	17 10	0 57	26 0	2 45	12 8	0 59	21 41	0 30	17 24	0 37	17 28	0 8	18 50	4 24	10 51	11 13	0 30	1 2	4 2					
F 14	2 35	13 8	0 50	13 27	1 43	16 56	0 53	25 58	2 44	12 12	0 59	21 40	0 30	17 23	0 37	17 27	0 8	18 50	4 24	10 51	11 15	0 28	1 3	4 2					
S 15	2 12	10 1	0n16	13 2	1 49	16 42	0 48	25 55	2 43	12 17	0 59	21 40	0 30	17 23	0 37	17 27	0 8	18 51	4 24	10 50	11 16	0 26	1 5	4 2					
S 16	1 48	6 31	1 21	12 37	1 54	16 28	0 44	25 53	2 42	12 21	0 58	21 39	0 29	17 22	0 37	17 26	0 8	18 51	4 24	10 51	11 17	0 24	1 6	4 2					
M17	1 24	2 47	2 22	12 10	1 58	16 12	0 39	25 51	2 41	12 25	0 58	21 39	0 29	17 21	0 38	17 26	0 8	18 51	4 24	10 52	11 18	0 22	1 8	4 2					
T 18	1 1	1s 4	3 16	11 42	2 2	15 57	0 35	25 48	2 39	12 30	0 58	21 38	0 29	17 20	0 38	17 25	0 8	18 51	4 23	10 53	11 19	0 20	1 9	4 2					
W19	0 37	4 52	4 2	11 12	2 6	15 41	0 31	25 45	2 38	12 34	0 58	21 38	0 29	17 20	0 38	17 25	0 8	18 51	4 23	10 54	11 20	0 18	1 10	4 2					
T 20	0 13	8 29	4 38	10 42	2 9	15 24	0 26	25 43	2 37	12 39	0 58	21 37	0 29	17 19	0 38	17 24	0 8	18 51	4 23	10 56	11 21	0 16	1 12	4 2					
F 21	0n11	11 47	5 2	10 10	2 12	15 7	0 22	25 40	2 36	12 43	0 58	21 37	0 29	17 18	0 38	17 24	0 8	18 52	4 23	10 58	11 22	0 14	1 13	4 2					
S 22	0 34	14 38	5 12	9 37	2 14	14 50	0 18	25 37	2 35	12 47	0 58	21 36	0 29	17 17	0 38	17 24	0 8	18 52	4 23	10 59	11 23	0 12	1 15	4 2					
S 23	0 58	16 53	5 9	9 3	2 16	14 32	0 14	25 34	2 34	12 52	0 57	21 36	0 29	17 17	0 38	17 23	0 8	18 52	4 23	11 1	11 25	0 10	1 16	4 2					
M24	1 22	18 23	4 51	8 27	2 18	14 14	0 10	25 31	2 32	12 56	0 57	21 35	0 29	17 16	0 38	17 23	0 8	18 52	4 22	11 1	11 26	0 8	1 18	4 2					
T 25	1 45	19 0	4 18	7 51	2 19	13 55	0 6	25 28	2 31	13 1	0 57	21 35	0 29	17 15	0 38	17 22	0 8	18 52	4 22	11 2	11 27	0 6	1 19	4 2					
W26	2 9	18 36	3 31	7 13	2 19	13 36	0 2	25 25	2 30	13 5	0 57	21 35	0 29	17 15	0 38	17 22	0 8	18 52	4 22	11 1	11 28	0 4	1 21	4 2					
T 27	2 32	17 7	2 31	6 34	2 19	13 17	0s 2	25 22	2 29	13 9	0 57	21 34	0 29	17 14	0 38	17 22	0 8	18 52	4 22	11 1	11 29	0 2	1 22	4 2					
F 28	2 56	14 35	1 19	5 54	2 19	12 57	0 6	25 19	2 28	13 14	0 57	21 34	0 29	17 13	0 38	17 21	0 8	18 53	4 22	11 0	11 30	0 0	1 23	4 2					
S 29	3 19	11 3	0 1	5 13	2 18	12 36	0 10	25 15	2 27	13 18	0 57	21 33	0 29	17 13	0 38	17 21	0 8	18 53	4 22	11 0	11 31	0s 2	1 25	4 2					
S 30	3 43	6 45	1s19	4 31	2 17	12 16	0 14	25 12	2 26	13 23	0 56	21 33	0 29	17 12	0 38	17 20	0 8	18 53	4 22	11 0	11 32	0 4	1 26	4 2					
M31	4n 6	1s56	2s35	3s48	2s15	11s55	0s17	25n 8	2n25	13n27	0s56	21s33	0n29	17s11	0s38	17s20	0n 8	18n53	4s21	11n 1	11n34	0s 6	1n28	4n 2					

ASTRODIENST EPHEMERIS for the year 2166  
geocentric

APRIL 2166

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	12 37 50	11°21'28	16°22	27°23	0°39	13°52	8°47	19°23	14°8	11°0	6°55	1°R10	29°40	7°41	24°25	T 1
W 2	12 41 47	12°20'48	1°35	29°11	1°50	14°17	9°1	19°26	14°10	11°2	6°55	1°4	29°37	7°48	24°29	W 2
T 3	12 45 43	13°20'05	16°35	1°0	3°0	14°43	9°14	19°28	14°13	11°3	6°56	0°58	29°34	7°55	24°32	T 3
F 4	12 49 40	14°19'20	1°14	2°50	4°11	15°9	9°28	19°31	14°15	11°4	6°56	0°52	29°31	8°1	24°36	F 4
S 5	12 53 37	15°18'33	15°25	4°41	5°21	15°35	9°42	19°33	14°17	11°6	6°56	0°47	29°27	8°8	24°39	S 5
S 6	12 57 33	16°17'44	29°7	6°34	6°32	16°1	9°55	19°35	14°19	11°7	6°57	0°43	29°24	8°15	24°43	S 6
M 7	13 1 30	17°16'53	12°21	8°29	7°42	16°28	10°9	19°38	14°21	11°8	6°57	0°D42	29°21	8°21	24°47	M 7
T 8	13 5 26	18°15'59	25°9	10°24	8°53	16°54	10°23	19°40	14°23	11°9	6°58	0°42	29°18	8°28	24°50	T 8
W 9	13 9 23	19°15'02	7°37	12°21	10°4	17°21	10°37	19°42	14°25	11°10	6°58	0°43	29°15	8°35	24°54	W 9
T 10	13 13 19	20°14'04	19°48	14°20	11°15	17°48	10°51	19°44	14°27	11°11	6°58	0°44	29°12	8°41	24°57	T 10
F 11	13 17 16	21°13'03	1°48	16°20	12°26	18°15	11°5	19°45	14°29	11°12	6°59	0°R45	29°8	8°48	25°0	F 11
S 12	13 21 12	22°12'00	13°40	18°21	13°37	18°43	11°19	19°47	14°31	11°13	6°59	0°44	29°5	8°55	25°4	S 12
S 13	13 25 9	23°10'55	25°29	20°23	14°48	19°10	11°33	19°49	14°32	11°14	7°0	0°41	29°2	9°1	25°7	S 13
M14	13 29 6	24°9'47	7°17	22°26	15°59	19°38	11°47	19°50	14°34	11°15	7°0	0°35	28°59	9°8	25°11	M14
T 15	13 33 2	25°8'38	19°8	24°30	17°10	20°6	12°1	19°52	14°36	11°16	7°1	0°27	28°56	9°15	25°14	T 15
W16	13 36 59	26°7'26	1°2	26°36	18°21	20°34	12°15	19°53	14°37	11°17	7°2	0°17	28°52	9°21	25°17	W16
T 17	13 40 55	27°6'13	13°2	28°41	19°32	21°3	12°29	19°54	14°39	11°18	7°2	0°7	28°49	9°28	25°21	T 17
F 18	13 44 52	28°4'57	25°9	0°48	20°43	21°31	12°43	19°55	14°41	11°19	7°3	29°J56	28°46	9°35	25°24	F 18
S 19	13 48 48	29°3'40	7°24	2°55	21°54	22°0	12°57	19°56	14°42	11°20	7°3	29°46	28°43	9°41	25°27	S 19
S 20	13 52 45	0°2'21	19°49	5°2	23°6	22°29	13°11	19°57	14°44	11°21	7°4	29°37	28°40	9°48	25°31	S 20
M21	13 56 41	1°1'01	2°36	7°8	24°17	22°57	13°25	19°58	14°45	11°21	7°5	29°31	28°37	9°55	25°34	M21
T 22	14 0 38	1°59'39	15°18	9°15	25°28	23°27	13°39	19°59	14°46	11°22	7°6	29°28	28°33	10°1	25°37	T 22
W23	14 4 35	2°58'15	28°27	11°20	26°40	23°56	13°53	20°0	14°48	11°23	7°6	29°D26	28°30	10°8	25°40	W23
T 24	14 8 31	3°56'49	11°56	13°25	27°51	24°25	14°8	20°0	14°49	11°23	7°7	29°26	28°27	10°15	25°43	T 24
F 25	14 12 28	4°55'22	25°47	15°28	29°3	24°55	14°22	20°1	14°50	11°24	7°8	29°R27	28°24	10°21	25°46	F 25
S 26	14 16 24	5°53'53	10°1	17°29	0°Y14	25°24	14°36	20°1	14°51	11°25	7°9	29°27	28°21	10°28	25°49	S 26
S 27	14 20 21	6°52'23	24°38	19°29	1°26	25°54	14°50	20°1	14°53	11°25	7°9	29°24	28°17	10°35	25°52	S 27
M28	14 24 17	7°50'51	9°Y33	21°26	2°37	26°24	15°5	20°1	14°54	11°26	7°10	29°20	28°14	10°42	25°55	M28
T 29	14 28 14	8°49'17	24°40	23°20	3°49	26°54	15°19	20°R1	14°55	11°26	7°11	29°12	28°11	10°48	25°58	T 29
W30	14 32 10	9°47'41	9°48	25°12	5°Y1	27°24	15°33	20°3	14°56	11°27	7°12	29°J3	28°J8	10°55	26°1	W30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	4n29	3n 2	3s40	3s 4	2s13	11s34	0s21	25n 5	2n24	13n32	0s56	21s32	0n29	17s11	0s38	17s20	0n 8	18n53	4s21	11n 3	11n35	0s 8	1n29	4n 2			
W 2	4 52	7 47	4 30	2 19	2 10	11 12	0 25	25 1	2 23	13 36	0 56	21 32	0 29	17 10	0 38	17 19	0 8	18 53	4 21	11 5	11 36	0 10	1 31	4 2			
T 3	5 16	11 59	5 0	1 33	2 7	10 50	0 28	24 57	2 22	13 40	0 56	21 32	0 29	17 9	0 38	17 19	0 8	18 53	4 21	11 7	11 37	0 12	1 32	4 2			
F 4	5 38	15 20	5 10	0 46	2 3	10 28	0 32	24 53	2 20	13 45	0 56	21 31	0 29	17 9	0 38	17 19	0 8	18 54	4 21	11 9	11 38	0 14	1 33	4 2			
S 5	6 1	17 39	5 0	0n 3	1 59	10 5	0 35	24 49	2 19	13 49	0 56	21 31	0 29	17 8	0 38	17 18	0 8	18 54	4 21	11 11	11 39	0 16	1 35	4 2			
S 6	6 24	18 52	4 33	0 52	1 54	9 42	0 38	24 45	2 18	13 54	0 56	21 31	0 29	17 8	0 38	17 18	0 8	18 54	4 20	11 12	11 40	0 18	1 36	4 2			
M 7	6 47	19 0	3 52	1 41	1 49	9 19	0 42	24 40	2 17	13 58	0 55	21 30	0 29	17 7	0 38	17 18	0 8	18 54	4 20	11 13	11 41	0 20	1 38	4 2			
T 8	7 9	18 7	3 0	2 32	1 43	8 55	0 45	24 36	2 16	14 3	0 55	21 30	0 29	17 6	0 38	17 17	0 8	18 54	4 20	11 13	11 42	0 22	1 39	4 2			
W 9	7 32	16 23	2 2	3 24	1 37	8 32	0 48	24 32	2 15	14 7	0 55	21 30	0 29	17 6	0 38	17 17	0 8	18 54	4 20	11 13	11 44	0 24	1 41	4 2			
T 10	7 54	13 56	0 59	4 16	1 30	8 8	0 51	24 27	2 14	14 11	0 55	21 30	0 29	17 5	0 38	17 17	0 8	18 54	4 20	11 12	11 45	0 26	1 42	4 2			
F 11	8 16	10 55	0n 6	5 8	1 23	7 43	0 54	24 22	2 13	14 16	0 55	21 29	0 29	17 5	0 38	17 16	0 8	18 55	4 20	11 12	11 46	0 28	1 43	4 2			
S 12	8 38	7 29	1 9	6 2	1 15	7 19	0 57	24 18	2 12	14 20	0 55	21 29	0 29	17 4	0 38	17 16	0 8	18 55	4 20	11 12	11 47	0 30	1 45	4 2			
S 13	9 0	3 46	2 9	6 55	1 7	6 54	1 0	24 13	2 11	14 25	0 55	21 29	0 29	17 4	0 38	17 16	0 8	18 55	4 19	11 13	11 48	0 32	1 46	4 2			
M14	9 22	0s 5	3 3	7 49	0 58	6 29	1 2	24 8	2 10	14 29	0 55	21 29	0 29	17 3	0 38	17 16	0 8	18 55	4 19	11 15	11 49	0 34	1 48	4 2			
T 15	9 43	3 56	3 50	8 44	0 49	6 4	1 5	24 3	2 9	14 33	0 55	21 29	0 29	17 3	0 38	17 15	0 8	18 55	4 19	11 18	11 50	0 36	1 49	4 2			
W16	10 5	7 40	4 26	9 38	0 40	5 38	1 8	23 57	2 8	14 38	0 55	21 28	0 29	17 3	0 38	17 15	0 8	18 55	4 19	11 22	11 51	0 38	1 50	4 2			
T 17	10 26	11 6	4 51	10 32	0 30	5 13	1 10	23 52	2 7	14 42	0 54	21 28	0 29	17 2	0 38	17 15	0 8	18 55	4 19	11 25	11 52	0 40	1 52	4 2			
F 18	10 47	14 7	5 3	11 26	0 20	4 47	1 12	23 47	2 7	14 47	0 54	21 28	0 29	17 2	0 39	17 15	0 8	18 55	4 19	11 29	11 53	0 42	1 53	4 2			
S 19	11 8	16 34	5 2	12 20	0 9	4 21	1 15	23 41	2 6	14 51	0 54	21 28	0 28	17 1	0 39	17 14	0 8	18 55	4 19	11 33	11 55	0 44	1 54	4 2			
S 20	11 28	18 16	4 46	13 13	0n 2	3 55	1 17	23 36	2 5	14 55	0 54	21 28	0 28	17 1	0 39	17 14	0 8	18 56	4 18	11 36	11 56	0 46	1 56	4 3			
M21	11 49	19 8	4 16	14 5	0 12	3 29	1 19	23 30	2 4	15 0	0 54	21 28	0 28	17 1	0 39	17 14	0 8	18 56	4 18	11 38	11 57	0 48	1 57	4 3			
T 22	12 9	19 1	3 33	14 56	0 23	3 2	1 21	23 24	2 3	15 4	0 54	21 28	0 28	17 0	0 39	17 14	0 8	18 56	4 18	11 39	11 58	0 50	1 58	4 3			
W23	12 29	17 53	2 37	15 46	0 34	2 36	1 23	23 18	2 2	15 8	0 54	21 28	0 28	17 0	0 39	17 14	0 8	18 56	4 18	11 39	11 59	0 52	2 0	4 3			
T 24	12 49	15 43	1 32	16 34	0 45	2 9	1 25	23 12	2 1	15 12	0 54	21 28	0 28	16 59	0 39	17 13	0 8	18 56	4 18	11 39	12 0	0 54	2 1	4 3			
F 25	13 9	12 36	0 20	17 21	0 56	1 43	1 27	23 6	2 0	15 17	0 54	21 28	0 28	16 59	0 39	17 13	0 8	18 56	4 18	11 39	12 1	0 56	2 2	4 3			
S 26	13 28	8 40	0s56	18 6	1 6	1 16	1 29	22 59	1 59	15 21	0 54	21 28	0 28	16 59	0 39	17 13	0 8	18 56	4 18	11 39	12 2	0 58	2 4	4 3			
S 27	13 48	4 7	2 10	18 48	1 16	0 49	1 31	22 53	1 58	15 25	0 54	21 28	0 28	16 59	0 39	17 13	0 8	18 56	4 17	11 40	12 3	1 0	2 5	4 3			
M28	14 7	0n46	3 16	19 29	1 26	0 22	1 32	22 46	1 57	15 29	0 53	21 28	0 28	16 58	0 39	17 13	0 8	18 56	4 17	11 42	12 4	1 2	2 6	4 3			
T 29	14 26	5 40	4 10	20 8	1 35	0n 5	1 34	22 40	1 56	15 34	0 53	21 28	0 28	16 58	0 39	17 13	0 8	18 57	4 17	11 44	12 6	1 4	2 7	4 3			
W30	14n44	10n13	4s45	20n44	1n44	0n32	1s35	22n33	1n55	15n38	0s53	21s28	0n28	16s58	0s39	17s13	0n 8	18n57	4s17	11n48	12n 7	1s 6	2n 9	4n 3			

ASTRODIENST EPHEMERIS for the year 2166  
geocentric

MAY 2166

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	14 36 7	10 <sup>8</sup> 46'04	24 <sup>8</sup> 48	27 <sup>8</sup> 0	6 <sup>Υ</sup> 12	27 <sup>☿</sup> 55	15 <sup>♈</sup> 47	20 <sup>♉</sup> R 1	14 <sup>♊</sup> 57	11 <sup>♋</sup> 27	7 <sup>♌</sup> 13	28 <sup>♍</sup> R52	28 <sup>♎</sup> Ω 5	11 <sup>♏</sup> Δ 2	26 <sup>♐</sup> Υ 4	T 1
F 2	14 40 3	11°44'25	9 <sup>♊</sup> 31	28°46	7°24	28°25	16° 2	20 <sup>♋</sup> 3 1	14°58	11°28	7°14	28 <sup>♌</sup> Ω42	28° 2	11° 8	26° 7	F 2
S 3	14 44 0	12°42'44	23°48	0 <sup>♊</sup> 27	8°36	28°56	16°16	20° 1	14°58	11°28	7°15	28°33	27°58	11°15	26°10	S 3
S 4	14 47 57	13°41'01	7 <sup>♌</sup> 37	2° 5	9°48	29°26	16°30	20° 0	14°59	11°28	7°16	28°26	27°55	11°22	26°13	S 4
M 5	14 51 53	14°39'16	20°57	3°39	10°59	29°57	16°45	20° 0	15° 0	11°29	7°16	28°22	27°52	11°28	26°15	M 5
T 6	14 55 50	15°37'29	3 <sup>♊</sup> Ω49	5°10	12°11	0 <sup>♊</sup> 28	16°59	19°59	15° 1	11°29	7°17	28°20	27°49	11°35	26°18	T 6
W 7	14 59 46	16°35'40	16°19	6°36	13°23	0°59	17°13	19°58	15° 1	11°29	7°18	28°D19	27°46	11°42	26°21	W 7
T 8	15 3 43	17°33'49	28°30	7°58	14°35	1°30	17°28	19°57	15° 2	11°29	7°19	28°R20	27°43	11°48	26°24	T 8
F 9	15 7 39	18°31'56	10 <sup>♊</sup> 29	9°16	15°47	2° 2	17°42	19°57	15° 2	11°30	7°20	28°19	27°39	11°55	26°26	F 9
S 10	15 11 36	19°30'01	22°19	10°30	16°59	2°33	17°56	19°56	15° 3	11°30	7°22	28°17	27°36	12° 2	26°29	S 10
S 11	15 15 32	20°28'04	4 <sup>♊</sup> Δ 8	11°39	18°11	3° 5	18°10	19°54	15° 3	11°30	7°23	28°13	27°33	12° 8	26°31	S 11
M12	15 19 29	21°26'05	15°57	12°44	19°22	3°36	18°25	19°53	15° 4	11°30	7°24	28° 5	27°30	12°15	26°34	M12
T 13	15 23 26	22°24'05	27°51	13°45	20°34	4° 8	18°39	19°52	15° 4	11°30	7°25	27°56	27°27	12°22	26°36	T 13
W14	15 27 22	23°22'03	9 <sup>♊</sup> Δ51	14°41	21°46	4°40	18°53	19°51	15° 4	11°R30	7°26	27°43	27°23	12°28	26°39	W14
T 15	15 31 19	24°19'59	22° 2	15°32	22°58	5°12	19° 8	19°49	15° 5	11°30	7°27	27°30	27°20	12°35	26°41	T 15
F 16	15 35 15	25°17'54	4 <sup>♊</sup> Δ21	16°19	24°10	5°44	19°22	19°47	15° 5	11°30	7°28	27°16	27°17	12°42	26°43	F 16
S 17	15 39 12	26°15'47	16°50	17° 1	25°22	6°16	19°36	19°46	15° 5	11°30	7°29	27° 4	27°14	12°48	26°46	S 17
S 18	15 43 8	27°13'39	29°30	17°38	26°35	6°48	19°50	19°44	15° 5	11°30	7°30	26°53	27°11	12°55	26°48	S 18
M19	15 47 5	28°11'30	12 <sup>♊</sup> 30	18°11	27°47	7°20	20° 4	19°42	15° 5	11°29	7°32	26°45	27° 8	13° 2	26°50	M19
T 20	15 51 1	29° 9'19	25°23	18°38	28°59	7°52	20°19	19°40	15°R 5	11°29	7°33	26°40	27° 4	13° 9	26°52	T 20
W21	15 54 58	0 <sup>♊</sup> II 7'07	8 <sup>♊</sup> Δ39	19° 1	0 <sup>♊</sup> Δ11	8°25	20°33	19°38	15° 5	11°29	7°34	26°38	27° 1	13°15	26°54	W21
T 22	15 58 55	1° 4'54	22° 9	19°19	1°23	8°57	20°47	19°36	15° 5	11°29	7°35	26°37	26°58	13°22	26°56	T 22
F 23	16 2 51	2° 2'40	5 <sup>♊</sup> Δ56	19°32	2°35	9°30	21° 1	19°34	15° 5	11°28	7°36	26°37	26°55	13°29	26°58	F 23
S 24	16 6 48	3° 0'25	20° 0	19°40	3°47	10° 3	21°15	19°32	15° 5	11°28	7°38	26°36	26°52	13°35	27° 0	S 24
S 25	16 10 44	3°58'09	4 <sup>Υ</sup> 20	19°R43	5° 0	10°35	21°29	19°29	15° 5	11°28	7°39	26°34	26°49	13°42	27° 2	S 25
M26	16 14 41	4°55'51	18°56	19°42	6°12	11° 8	21°44	19°27	15° 4	11°27	7°40	26°29	26°45	13°49	27° 4	M26
T 27	16 18 37	5°53'33	3 <sup>♊</sup> Δ42	19°36	7°24	11°41	21°58	19°24	15° 4	11°27	7°41	26°21	26°42	13°55	27° 6	T 27
W28	16 22 34	6°51'14	18°31	19°25	8°36	12°14	22°12	19°22	15° 4	11°27	7°43	26°12	26°39	14° 2	27° 8	W28
T 29	16 26 30	7°48'53	3 <sup>II</sup> 15	19°11	9°49	12°47	22°26	19°19	15° 3	11°26	7°44	26° 1	26°36	14° 9	27° 9	T 29
F 30	16 30 27	8°46'32	17°45	18°53	11° 1	13°21	22°40	19°16	15° 3	11°26	7°45	25°50	26°33	14°15	27°11	F 30
S 31	16 34 24	9 <sup>II</sup> 44'09	1 <sup>☿</sup> 56	18 <sup>II</sup> 31	12 <sup>♊</sup> Δ13	13 <sup>♊</sup> Ω54	22 <sup>♊</sup> Δ54	19 <sup>♊</sup> 314	15 <sup>♊</sup> Δ 2	11 <sup>♊</sup> Δ25	7 <sup>☿</sup> Δ47	25 <sup>♊</sup> Ω40	26 <sup>♊</sup> Ω29	14 <sup>♊</sup> Δ22	27 <sup>♊</sup> Δ13	S 31

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒		♓	♈	♉	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	lat
T 1	15n 2	14n 4	5s 1	21n18	1n53	0n59	1s36	22n26	1n55	15n42	0s53	21s28	0n28	16s57	0s39	17s12	0n 7	18n57	4s17	11n51	12n 8	1s 8	2n10	4n 3	
F 2	15 20	16 58	4 57	21 49	2 0	1 26	1 38	22 19	1 54	15 46	0 53	21 28	0 28	16 57	0 39	17 12	0 7	18 57	4 17	11 55	12 9	1 10	2 11	4 3	
S 3	15 38	18 43	4 34	22 18	2 7	1 53	1 39	22 12	1 53	15 50	0 53	21 28	0 28	16 57	0 39	17 12	0 7	18 57	4 17	11 58	12 10	1 12	2 12	4 4	
S 4	15 56	19 17	3 55	22 44	2 13	2 21	1 40	22 4	1 52	15 55	0 53	21 28	0 28	16 57	0 39	17 12	0 7	18 57	4 16	12 0	12 11	1 14	2 13	4 4	
M 5	16 13	18 45	3 5	23 8	2 19	2 48	1 41	21 57	1 51	15 59	0 53	21 28	0 28	16 57	0 39	17 12	0 7	18 57	4 16	12 2	12 12	1 16	2 15	4 4	
T 6	16 30	17 14	2 6	23 29	2 23	3 15	1 42	21 49	1 50	16 3	0 53	21 28	0 28	16 56	0 39	17 12	0 7	18 57	4 16	12 3	12 13	1 18	2 16	4 4	
W 7	16 47	14 55	1 3	23 48	2 27	3 42	1 43	21 42	1 49	16 7	0 53	21 28	0 28	16 56	0 39	17 12	0 7	18 57	4 16	12 3	12 14	1 20	2 17	4 4	
T 8	17 3	12 0	0n 1	24 5	2 30	4 9	1 43	21 34	1 49	16 11	0 53	21 28	0 28	16 56	0 39	17 12	0 7	18 57	4 16	12 3	12 15	1 22	2 18	4 4	
F 9	17 19	8 37	1 4	24 19	2 31	4 36	1 44	21 26	1 48	16 15	0 53	21 29	0 28	16 56	0 39	17 12	0 7	18 57	4 16	12 3	12 17	1 24	2 19	4 4	
S 10	17 35	4 56	2 4	24 31	2 32	5 3	1 45	21 18	1 47	16 19	0 53	21 29	0 28	16 56	0 39	17 12	0 7	18 57	4 16	12 4	12 18	1 26	2 20	4 4	
S 11	17 51	1 5	2 57	24 41	2 32	5 30	1 45	21 10	1 46	16 23	0 53	21 29	0 28	16 56	0 39	17 12	0 7	18 57	4 16	12 5	12 19	1 28	2 21	4 4	
M12	18 6	2s50	3 44	24 48	2 31	5 57	1 46	21 2	1 45	16 27	0 53	21 29	0 28	16 56	0 39	17 12	0 7	18 58	4 15	12 8	12 20	1 30	2 23	4 5	
T 13	18 21	6 39	4 20	24 54	2 29	6 23	1 46	20 54	1 44	16 31	0 52	21 29	0 28	16 56	0 39	17 12	0 7	18 58	4 15	12 11	12 21	1 32	2 24	4 5	
W14	18 36	10 14	4 46	24 58	2 26	6 50	1 46	20 45	1 44	16 35	0 52	21 30	0 28	16 56	0 39	17 12	0 7	18 58	4 15	12 15	12 22	1 34	2 25	4 5	
T 15	18 50	13 27	4 59	24 59	2 22	7 16	1 46	20 37	1 43	16 39	0 52	21 30	0 28	16 56	0 40	17 12	0 7	18 58	4 15	12 20	12 23	1 36	2 26	4 5	
F 16	19 4	16 7	4 58	24 59	2 17	7 43	1 47	20 28	1 42	16 43	0 52	21 30	0 28	16 56	0 40	17 12	0 7	18 58	4 15	12 24	12 24	1 38	2 27	4 5	
S 17	19 18	18 5	4 43	24 58	2 11	8 9	1 47	20 19	1 41	16 47	0 52	21 31	0 27	16 56	0 40	17 12	0 7	18 58	4 15	12 29	12 25	1 40	2 28	4 5	
S 18	19 31	19 11	4 13	24 54	2 4	8 35	1 46	20 10	1 40	16 50	0 52	21 31	0 27	16 56	0 40	17 12	0 7	18 58	4 15	12 32	12 26	1 42	2 29	4 5	
M19	19 44	19 20	3 31	24 49	1 56	9 1	1 46	20 1	1 40	16 54	0 52	21 31	0 27	16 56	0 40	17 12	0 7	18 58	4 15	12 35	12 27	1 44	2 30	4 5	
T 20	19 57	18 28	2 37	24 42	1 47	9 27	1 46	19 52	1 39	16 58	0 52	21 31	0 27	16 56	0 40	17 12	0 7	18 58	4 14	12 37	12 28	1 46	2 31	4 6	
W21	20 9	16 35	1 34	24 34	1 37	9 52	1 46	19 43	1 38	17 2	0 52	21 32	0 27	16 56	0 40	17 12	0 7	18 58	4 14	12 38	12 30	1 48	2 32	4 6	
T 22	20 21	13 44	0 24	24 25	1 26	10 18	1 45	19 34	1 37	17 6	0 52	21 32	0 27	16 56	0 40	17 12	0 7	18 58	4 14	12 38	12 31	1 50	2 33	4 6	
F 23	20 33	10 5	0s49	24 14	1 14	10 43	1 45	19 24	1 36	17 9	0 52	21 32	0 27	16 56	0 40	17 12	0 7	18 58	4 14	12 38	12 32	1 52	2 34	4 6	
S 24	20 44	5 48	2 0	24 1	1 1	11 8	1 45	19 15	1 36	17 13	0 52	21 33	0 27	16 56	0 40	17 12	0 7	18 58	4 14	12 38	12 33	1 54	2 35	4 6	
S 25	20 55	1 7	3 5	23 48	0 47	11 32	1 44	19 5	1 35	17 17	0 52	21 33	0 27	16 56	0 40	17 12	0 7	18 58	4 14	12 39	12 34	1 56	2 35	4 6	
M26	21 6	3n43	3 59	23 33	0 32	11 57	1 43	18 55	1 34	17 21	0 52	21 34	0 27	16 56	0 40	17 13	0 7	18 58	4 14	12 41	12 35	1 58	2 36	4 6	
T 27	21 16	8 22	4 38	23 17	0 17	12 21	1 43	18 45	1 33	17 24	0 52	21 34	0 27	16 56	0 40	17 13	0 7	18 58	4 14	12 43	12 36	2 0	2 37	4 7	
W28	21 26	12 32	4 58	23 0	0 1	12 45	1 42	18 35	1 33	17 28	0 52	21 34	0 27	16 56	0 40	17 13	0 7	18 58	4 14	12 46	12 37	2 2	2 38	4 7	
T 29	21 35	15 54	4 59	22 43	0s16	13 9	1 41	18 25	1 32	17 31	0 52	21 35	0 27	16 57	0 40	17 13	0 7	18 58	4 13	12 50	12 38	2 4	2 39	4 7	
F 30	21 45	18 13	4 40	22 24	0 33	13 32	1 40	18 15	1 31	17 35	0 52	21 35	0 27	16 57	0 40	17 13	0 7	18 58	4 13	12 54	12 39	2 6	2 40	4 7	
S 31	21n53	19n21	4s 3	22n 5	0s50	13n55	1s39	18n 5	1n30	17n39	0s52	21s36	0n27	16s57	0s40	17s13	0n 7	18n58	4s13	12n57	12n40	2s 8	2n40	4n 7	



# ASTRODIENST EPHEMERIS for the year 2166

## geocentric

JUNE 2166

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	16 38 20	10♐41'45	15♌43	18°R 6	13♌26	14♏27	23♌ 8	19°R11	15°R 2	11°R25	7♌48	25°R32	26♏26	14♏29	27♌14	S 1
M 2	16 42 17	11°39'20	29° 2	17♐38	14°38	15° 1	23°21	19♌ 8	15° 1	11°24	7°49	25♏27	26°23	14°35	27°16	M 2
T 3	16 46 13	12°36'53	11♏57	17° 8	15°51	15°34	23°35	19° 5	15° 0	11°23	7°51	25°25	26°20	14°42	27°17	T 3
W 4	16 50 10	13°34'25	24°29	16°36	17° 3	16° 8	23°49	19° 2	15° 0	11°23	7°52	25°D24	26°17	14°49	27°19	W 4
T 5	16 54 6	14°31'56	6♐42	16° 4	18°15	16°42	24° 3	18°58	14°59	11°22	7°53	25°24	26°14	14°56	27°20	T 5
F 6	16 58 3	15°29'25	18°43	15°30	19°28	17°15	24°17	18°55	14°58	11°21	7°55	25°R25	26°10	15° 2	27°22	F 6
S 7	17 1 59	16°26'53	0♏35	14°57	20°40	17°49	24°30	18°52	14°57	11°21	7°56	25°24	26° 7	15° 9	27°23	S 7
S 8	17 5 56	17°24'20	12°25	14°24	21°53	18°23	24°44	18°48	14°56	11°20	7°58	25°21	26° 4	15°16	27°24	S 8
M 9	17 9 53	18°21'45	24°17	13°52	23° 5	18°57	24°58	18°45	14°55	11°19	7°59	25°15	26° 1	15°22	27°25	M 9
T 10	17 13 49	19°19'10	6♐15	13°21	24°18	19°31	25°11	18°41	14°54	11°18	8° 0	25° 8	25°58	15°29	27°26	T 10
W11	17 17 46	20°16'33	18°23	12°53	25°30	20° 5	25°25	18°38	14°53	11°17	8° 2	24°58	25°55	15°36	27°27	W11
T 12	17 21 42	21°13'56	0♏42	12°28	26°43	20°39	25°39	18°34	14°52	11°16	8° 3	24°47	25°51	15°42	27°28	T 12
F 13	17 25 39	22°11'18	13°15	12° 6	27°55	21°13	25°52	18°31	14°51	11°16	8° 5	24°36	25°48	15°49	27°29	F 13
S 14	17 29 35	23° 8'39	26° 0	11°47	29° 8	21°48	26° 6	18°27	14°50	11°15	8° 6	24°26	25°45	15°56	27°30	S 14
S 15	17 33 32	24° 5'59	8♌59	11°31	0♐20	22°22	26°19	18°23	14°49	11°14	8° 7	24°17	25°42	16° 2	27°31	S 15
M16	17 37 29	25° 3'18	22°10	11°20	1°33	22°56	26°32	18°19	14°47	11°13	8° 9	24°11	25°39	16° 9	27°32	M16
T 17	17 41 25	26° 0'37	5♏32	11°13	2°46	23°31	26°46	18°15	14°46	11°12	8°10	24° 7	25°35	16°16	27°33	T 17
W18	17 45 22	26°57'56	19° 5	11°D10	3°58	24° 5	26°59	18°11	14°45	11°11	8°12	24°D 5	25°32	16°23	27°33	W18
T 19	17 49 18	27°55'14	2♐48	11°12	5°11	24°40	27°12	18° 7	14°43	11°10	8°13	24° 6	25°29	16°29	27°34	T 19
F 20	17 53 15	28°52'31	16°41	11°18	6°24	25°15	27°25	18° 3	14°42	11° 9	8°15	24° 6	25°26	16°36	27°35	F 20
S 21	17 57 11	29°49'49	0♐44	11°29	7°36	25°49	27°38	17°59	14°41	11° 7	8°16	24°R 7	25°23	16°43	27°35	S 21
S 22	18 1 8	0♏47'06	14°56	11°45	8°49	26°24	27°51	17°55	14°39	11° 6	8°18	24° 6	25°20	16°49	27°36	S 22
M23	18 5 4	1°44'23	29°16	12° 5	10° 2	26°59	28° 4	17°51	14°38	11° 5	8°19	24° 3	25°16	16°56	27°36	M23
T 24	18 9 1	2°41'40	13♌39	12°30	11°15	27°34	28°17	17°47	14°36	11° 4	8°21	23°58	25°13	17° 3	27°37	T 24
W25	18 12 58	3°38'56	28° 3	12°59	12°27	28° 9	28°30	17°43	14°35	11° 3	8°22	23°52	25°10	17° 9	27°37	W25
T 26	18 16 54	4°36'13	12♐21	13°33	13°40	28°44	28°43	17°38	14°33	11° 2	8°24	23°44	25° 7	17°16	27°37	T 26
F 27	18 20 51	5°33'29	26°28	14°12	14°53	29°19	28°56	17°34	14°31	11° 0	8°25	23°36	25° 4	17°23	27°37	F 27
S 28	18 24 47	6°30'45	10♌20	14°54	16° 6	29°54	29° 9	17°30	14°30	10°59	8°26	23°30	25° 1	17°29	27°38	S 28
S 29	18 28 44	7°28'01	23°53	15°42	17°19	0♐30	29°21	17°26	14°28	10°58	8°28	23°24	24°57	17°36	27°38	S 29
M30	18 32 40	8°25'16	7♏ 4	16♐33	18♐32	1♐ 5	29°34	17°32	14°26	10°57	8°29	23♏21	24♏54	17°43	27°R38	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	22n 2	19n17	3s14	21n45	1s 8	14n18	1s38	17n54	1n30	17n42	0s52	21s36	0n27	16s57	0s40	17s13
M 2	22 10 18	8 2	15 21	25 1	25 14	40 1	37 17	44 1	29 17	46 0	52 21	37 0	27 16	57 0	40 17	14 0
T 3	22 17 16	3 1	11 21	5 1	43 15	2 1	35 17	33 1	28 17	49 0	52 21	37 0	27 16	58 0	40 17	14 0
W 4	22 24 13	16 0	5 20	45 2	0 15	24 1	34 17	22 1	27 17	52 0	52 21	38 0	27 16	58 0	40 17	14 0
T 5	22 31 9	58 1n	0 20	25 2	17 15	46 1	33 17	12 1	27 17	56 0	52 21	38 0	27 16	58 0	40 17	14 0
F 6	22 38 6	19 2	1 20	6 2	33 16	7 1	31 17	1 1	26 17	59 0	52 21	39 0	26 16	58 0	40 17	14 0
S 7	22 44 2	27 2	56 19	47 2	48 16	27 1	30 16	50 1	25 18	3 0	52 21	39 0	26 16	59 0	40 17	15 0
S 8	22 49 1s	29 3	43 19	29 3	2 16	48 1	29 16	38 1	24 18	6 0	52 21	40 0	26 16	59 0	40 17	15 0
M 9	22 54 5	22 4	20 19	12 3	16 17	7 1	27 16	27 1	24 18	9 0	52 21	40 0	26 16	59 0	40 17	15 0
T 10	22 59 9	4 4	47 18	56 3	28 17	27 1	25 16	16 1	23 18	12 0	52 21	41 0	26 17	0 0	40 17	15 0
W11	23 4 12	27 5	1 18	42 3	39 17	46 1	24 16	4 1	22 18	16 0	52 21	41 0	26 17	0 0	41 17	15 0
T 12	23 8 15	22 5	1 18	29 3	49 18	4 1	22 15	53 1	21 18	19 0	52 21	42 0	26 17	0 0	41 17	16 0
F 13	23 11 17	37 4	47 18	18 3	57 18	22 1	20 15	41 1	21 18	22 0	52 21	42 0	26 17	1 0	41 17	16 0
S 14	23 14 19	2 4	19 18	8 4	5 18	40 1	18 15	29 1	20 18	25 0	52 21	43 0	26 17	1 0	41 17	16 0
S 15	23 17 19	31 3	37 18	0 4	10 18	57 1	16 15	18 1	19 18	28 0	52 21	44 0	26 17	1 0	41 17	17 0
M16	23 19 18	56 2	42 17	54 4	15 19	14 1	15 15	6 1	19 18	31 0	52 21	44 0	26 17	2 0	41 17	17 0
T 17	23 21 17	17 1	38 17	50 4	18 19	30 1	13 14	54 1	18 18	35 0	52 21	45 0	26 17	2 0	41 17	17 0
W18	23 23 14	40 0	27 17	48 4	20 19	46 1	11 14	41 1	17 18	38 0	52 21	45 0	26 17	3 0	41 17	17 0
T 19	23 24 11	11 0s	47 17	47 4	21 20	1 1	9 14	29 1	16 18	41 0	52 21	46 0	26 17	3 0	41 17	18 0
F 20	23 25 7	4 1	58 17	49 4	20 20	16 1	6 14	17 1	16 18	44 0	52 21	47 0	26 17	3 0	41 17	18 0
S 21	23 25 2	31 3	4 17	52 4	19 20	30 1	4 14	5 1	15 18	47 0	52 21	47 0	25 17	4 0	41 17	18 0
S 22	23 25 2n	13 3	58 17	56 4	16 20	43 1	2 13	52 1	14 18	49 0	52 21	48 0	25 17	4 0	41 17	19 0
M23	23 24 6	51 4	39 18	3 4	12 20	56 1	0 13	39 1	14 18	52 0	52 21	48 0	25 17	5 0	41 17	19 0
T 24	23 23 11	7 5	2 18	11 4	8 21	9 0	58 13	27 1	13 18	55 0	52 21	49 0	25 17	5 0	41 17	19 0
W25	23 22 14	44 5	6 18	20 4	2 21	21 0	56 13	14 1	12 18	58 0	52 21	50 0	25 17	6 0	41 17	20 0
T 26	23 20 17	27 4	51 18	30 3	56 21	32 0	53 13	1 1	12 19	1 0	52 21	50 0	25 17	6 0	41 17	20 0
F 27	23 18 19	4 4	18 18	42 3	48 21	43 0	51 12	48 1	11 19	4 0	52 21	51 0	25 17	7 0	41 17	20 0
S 28	23 15 19	31 3	31 18	55 3	40 21	53 0	49 12	35 1	10 19	6 0	52 21	52 0	25 17	7 0	41 17	21 0
S 29	23 12 18	48 2	32 19	8 3	32 22	3 0	46 12	22 1	9 19	9 0	52 21	52 0	25 17	8 0	41 17	21 0
M30	23n 9	17n 5	1s27	19n23	3s22	22n12	0s44	12n 9	1n 9	19n12	0s52	21s53	0n25	17s 8	0s41	17s21

Julian Day Number = 2512326.5, Delta T = 133.64 sec  
 Ecliptic obliquity = 23°24'55, Nutation = - 0°00'10, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 27°03'57, Lahiri = 26°10'57

ASTRODIENST EPHEMERIS for the year 2166  
geocentric

JULY 2166

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	18 36 37	9 <sup>52</sup> 22'30	19 <sup>8</sup> 53	17 <sup>II</sup> 28	19 <sup>II</sup> 45	1 <sup>III</sup> 40	29 <sup>8</sup> 46	17°R17	14°R24	10°R55	8 <sup>53</sup> 31	23°D20	24 <sup>8</sup> 51	17 <sup>5</sup> 50	27°R38	T 1
W 2	18 40 33	10°19'45	2 <sup>III</sup> 24	18°28	20°58	2°16	29°59	17 <sup>3</sup> 12	14 <sup>22</sup> 22	10 <sup>54</sup> 22	8°32	23 <sup>8</sup> 20	24°48	17°56	27 <sup>II</sup> 38	W 2
T 3	18 44 30	11°16'59	14°38	19°32	22°10	2°51	0 <sup>II</sup> 11	17° 8	14°21	10°53	8°34	23°21	24°45	18° 3	27°38	T 3
F 4	18 48 27	12°14'12	26°39	20°40	23°23	3°27	0°23	17° 4	14°19	10°51	8°35	23°23	24°41	18°10	27°37	F 4
S 5	18 52 23	13°11'25	8 <sup>5</sup> 33	21°51	24°36	4° 2	0°36	16°59	14°17	10°50	8°37	23°R24	24°38	18°16	27°37	S 5
S 6	18 56 20	14° 8'38	20°25	23° 7	25°49	4°38	0°48	16°55	14°15	10°48	8°38	23°24	24°35	18°23	27°37	S 6
M 7	19 0 16	15° 5'50	2 <sup>III</sup> 19	24°27	27° 2	5°13	1° 0	16°50	14°13	10°47	8°40	23°22	24°32	18°30	27°37	M 7
T 8	19 4 13	16° 3'02	14°20	25°50	28°16	5°49	1°12	16°46	14°11	10°46	8°41	23°19	24°29	18°36	27°36	T 8
W 9	19 8 9	17° 0'14	26°32	27°17	29°29	6°25	1°24	16°42	14° 9	10°44	8°43	23°15	24°26	18°43	27°36	W 9
T 10	19 12 6	17°57'26	8 <sup>5</sup> 58	28°48	0 <sup>5</sup> 42	7° 1	1°36	16°37	14° 7	10°43	8°44	23° 9	24°22	18°50	27°35	T 10
F 11	19 16 2	18°54'38	21°41	0 <sup>5</sup> 23	1°55	7°37	1°48	16°33	14° 5	10°41	8°46	23° 3	24°19	18°57	27°35	F 11
S 12	19 19 59	19°51'49	4 <sup>3</sup> 41	2° 1	3° 8	8°13	1°59	16°28	14° 3	10°40	8°47	22°58	24°16	19° 3	27°34	S 12
S 13	19 23 56	20°49'01	17°58	3°42	4°21	8°49	2°11	16°24	14° 0	10°38	8°49	22°54	24°13	19°10	27°33	S 13
M14	19 27 52	21°46'13	1 <sup>2</sup> 31	5°27	5°34	9°25	2°22	16°19	13°58	10°37	8°50	22°51	24°10	19°17	27°33	M14
T 15	19 31 49	22°43'25	15°18	7°15	6°48	10° 1	2°34	16°15	13°56	10°35	8°51	22°49	24° 7	19°23	27°32	T 15
W16	19 35 45	23°40'37	29°16	9° 7	8° 1	10°37	2°45	16°11	13°54	10°34	8°53	22°D49	24° 3	19°30	27°31	W16
T 17	19 39 42	24°37'50	13 <sup>3</sup> 21	11° 1	9°14	11°13	2°57	16° 6	13°52	10°32	8°54	22°50	24° 0	19°37	27°30	T 17
F 18	19 43 38	25°35'04	27°32	12°57	10°27	11°49	3° 8	16° 2	13°50	10°31	8°56	22°52	23°57	19°43	27°29	F 18
S 19	19 47 35	26°32'17	11°V45	14°56	11°41	12°26	3°19	15°58	13°47	10°29	8°57	22°53	23°54	19°50	27°28	S 19
S 20	19 51 31	27°29'32	2 <sup>5</sup> 59	16°58	12°54	13° 2	3°30	15°53	13°45	10°27	8°59	22°R53	23°51	19°57	27°27	S 20
M21	19 55 28	28°26'47	10 <sup>8</sup> 10	19° 1	14° 7	13°38	3°41	15°49	13°43	10°26	9° 0	22°53	23°47	20° 4	27°26	M21
T 22	19 59 25	29°24'03	24°18	21° 5	15°21	14°15	3°52	15°45	13°40	10°24	9° 1	22°51	23°44	20°10	27°25	T 22
W23	20 3 21	0 <sup>8</sup> 21'20	8 <sup>II</sup> 19	23°11	16°34	14°51	4° 2	15°41	13°38	10°23	9° 3	22°49	23°41	20°17	27°24	W23
T 24	20 7 18	1°18'38	22°11	25°18	17°48	15°28	4°13	15°36	13°36	10°21	9° 4	22°46	23°38	20°24	27°23	T 24
F 25	20 11 14	2°15'56	5 <sup>5</sup> 51	27°25	19° 1	16° 5	4°23	15°32	13°34	10°19	9° 6	22°43	23°35	20°30	27°22	F 25
S 26	20 15 11	3°13'15	19°17	29°33	20°15	16°41	4°34	15°28	13°31	10°18	9° 7	22°41	23°32	20°37	27°20	S 26
S 27	20 19 7	4°10'35	2 <sup>8</sup> 28	1 <sup>8</sup> 41	21°28	17°18	4°44	15°24	13°29	10°16	9° 8	22°39	23°28	20°44	27°19	S 27
M28	20 23 4	5° 7'55	15°23	3°48	22°42	17°55	4°54	15°20	13°26	10°15	9°10	22°38	23°25	20°50	27°17	M28
T 29	20 27 0	6° 5'15	28° 1	5°55	23°55	18°32	5° 4	15°16	13°24	10°13	9°11	22°D38	23°22	20°57	27°16	T 29
W30	20 30 57	7° 2'37	10 <sup>II</sup> 25	8° 1	25° 9	19° 9	5°14	15°12	13°22	10°11	9°12	22°39	23°19	21° 4	27°15	W30
T 31	20 34 54	7 <sup>8</sup> 59'58	22 <sup>II</sup> 35	10 <sup>8</sup> 6	26 <sup>5</sup> 23	19 <sup>II</sup> 46	5 <sup>II</sup> 24	15 <sup>3</sup> 8	13 <sup>2</sup> 19	10 <sup>2</sup> 10	9 <sup>5</sup> 14	22 <sup>8</sup> 40	23 <sup>8</sup> 16	21 <sup>5</sup> 11	27 <sup>II</sup> 13	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	23n 5	14n32	0s19	19n38	3s12	22n20	0s41	11n56	1n 8	19n14	0s52	21s53	0n25	17s 9	0s41	17s22
W 2	23 1	11 22	0n49	19 54	3 2	22 27	0 39	11 43	1 7	19 17	0 52	21 54	0 25	17 10	0 41	17 22
T 3	22 56	7 47	1 53	20 10	2 51	22 35	0 37	11 29	1 7	19 20	0 52	21 55	0 25	17 10	0 41	17 22
F 4	22 51	3 57	2 51	20 26	2 40	22 41	0 34	11 16	1 6	19 22	0 52	21 55	0 24	17 11	0 41	17 23
S 5	22 46	0s 0	3 41	20 42	2 28	22 47	0 32	11 2	1 5	19 25	0 52	21 56	0 24	17 11	0 41	17 23
S 6	22 40	3 56	4 21	20 58	2 16	22 52	0 29	10 48	1 5	19 27	0 52	21 57	0 24	17 12	0 41	17 24
M 7	22 34	7 43	4 50	21 14	2 4	22 56	0 27	10 35	1 4	19 30	0 52	21 57	0 24	17 12	0 41	17 24
T 8	22 27	11 14	5 7	21 30	1 51	23 0	0 24	10 21	1 3	19 32	0 52	21 58	0 24	17 13	0 41	17 24
W 9	22 20	14 19	5 10	21 45	1 38	23 3	0 22	10 7	1 3	19 34	0 52	21 59	0 24	17 14	0 41	17 25
T 10	22 13	16 50	4 59	21 59	1 26	23 6	0 19	9 53	1 2	19 37	0 52	21 59	0 24	17 14	0 41	17 25
F 11	22 5	18 36	4 33	22 12	1 13	23 8	0 17	9 39	1 1	19 39	0 52	22 0	0 24	17 15	0 41	17 26
S 12	21 57	19 27	3 53	22 24	1 0	23 9	0 14	9 25	1 1	19 41	0 52	22 0	0 24	17 15	0 41	17 26
S 13	21 48	19 15	2 59	22 35	0 47	23 9	0 12	9 11	1 0	19 44	0 52	22 1	0 24	17 16	0 41	17 26
M14	21 39	17 57	1 54	22 44	0 35	23 9	0 9	8 57	0 59	19 46	0 52	22 2	0 24	17 17	0 41	17 27
T 15	21 30	15 35	0 41	22 51	0 22	23 8	0 6	8 43	0 59	19 48	0 52	22 2	0 24	17 17	0 41	17 27
W16	21 21	12 16	0s35	22 56	0 10	23 6	0 4	8 28	0 58	19 50	0 52	22 3	0 23	17 18	0 41	17 28
T 17	21 11	8 14	1 50	23 0	0n 2	23 4	0 1	8 14	0 57	19 52	0 52	22 4	0 23	17 19	0 41	17 28
F 18	21 0	3 43	2 59	23 1	0 14	23 1	0n 1	8 0	0 57	19 54	0 52	22 4	0 23	17 19	0 41	17 29
S 19	20 50	1n 0	3 57	22 59	0 25	22 58	0 4	7 45	0 56	19 56	0 52	22 5	0 23	17 20	0 41	17 29
S 20	20 38	5 40	4 40	22 55	0 35	22 53	0 6	7 31	0 55	19 59	0 52	22 5	0 23	17 21	0 42	17 29
M21	20 27	10 0	5 7	22 49	0 45	22 49	0 9	7 16	0 55	20 1	0 52	22 6	0 23	17 21	0 42	17 30
T 22	20 15	13 45	5 14	22 39	0 54	22 43	0 11	7 1	0 54	20 3	0 52	22 7	0 23	17 22	0 42	17 30
W23	20 3	16 41	5 3	22 27	1 3	22 37	0 13	6 47	0 53	20 4	0 52	22 7	0 23	17 23	0 42	17 31
T 24	19 51	18 37	4 34	22 13	1 11	22 30	0 16	6 32	0 53	20 6	0 53	22 8	0 23	17 23	0 42	17 31
F 25	19 38	19 27	3 50	21 55	1 18	22 22	0 18	6 17	0 52	20 8	0 53	22 8	0 23	17 24	0 42	17 32
S 26	19 25	19 10	2 54	21 36	1 24	22 14	0 21	6 2	0 51	20 10	0 53	22 9	0 22	17 25	0 42	17 32
S 27	19 12	17 49	1 49	21 13	1 30	22 5	0 23	5 47	0 51	20 12	0 53	22 9	0 22	17 25	0 42	17 33
M28	18 58	15 34	0 40	20 49	1 34	21 55	0 25	5 33	0 50	20 14	0 53	22 10	0 22	17 26	0 42	17 33
T 29	18 44	12 37	0n30	20 22	1 38	21 45	0 28	5 18	0 50	20 15	0 53	22 11	0 22	17 27	0 42	17 33
W30	18 30	9 9	1 37	19 53	1 41	21 34	0 30	5 2	0 49	20 17	0 53	22 11	0 22	17 27	0 42	17 34
T 31	18n15	5n22	2n38	19n22	1n44	21n23	0n32	4n47	0n48	20n19	0s53	22s12	0n22	17s28	0s42	17s34

Julian Day Number = 2512356.5, Delta T = 133.71 sec  
Ecliptic obliquity = 23°24'55", Nutation = - 0°00'09", out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 27°04'01", Lahiri = 26°11'01"



ASTRODIENST EPHEMERIS for the year 2166  
geocentric

AUGUST 2166

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	20 38 50	8♂57'21	4♂35	12♂10	27♂36	20♂23	5♂34	15°R 4	13°R17	10°R 8	9♂15	22♂41	23♂12	21♂17	27°R11	F 1
S 2	20 42 47	9°54'43	16°29	14°13	28°50	21° 0	5°44	15♂ 0	13♂15	10♂ 6	9°16	22°42	23° 9	21°24	27°R10	S 2
S 3	20 46 43	10°52'07	28°21	16°15	0♂ 4	21°37	5°53	14°57	13°12	10° 5	9°18	22°43	23° 6	21°31	27° 8	S 3
M 4	20 50 40	11°49'31	10♂15	18°15	1°17	22°14	6° 3	14°53	13°10	10° 3	9°19	22°R43	23° 3	21°37	27° 6	M 4
T 5	20 54 36	12°46'55	22°16	20°14	2°31	22°51	6°12	14°49	13° 7	10° 2	9°20	22°43	23° 0	21°44	27° 5	T 5
W 6	20 58 33	13°44'21	4♂28	22°12	3°45	23°29	6°21	14°46	13° 5	10° 0	9°21	22°42	22°57	21°51	27° 3	W 6
T 7	21 2 29	14°41'46	16°56	24° 7	4°59	24° 6	6°30	14°42	13° 3	9°58	9°23	22°42	22°53	21°57	27° 1	T 7
F 8	21 6 26	15°39'13	29°43	26° 2	6°12	24°43	6°39	14°39	13° 0	9°57	9°24	22°41	22°50	22° 4	26°59	F 8
S 9	21 10 23	16°36'41	12♂51	27°55	7°26	25°21	6°48	14°35	12°58	9°55	9°25	22°40	22°47	22°11	26°57	S 9
S 10	21 14 19	17°34'09	26°21	29°46	8°40	25°58	6°57	14°32	12°55	9°53	9°26	22°39	22°44	22°18	26°55	S 10
M 11	21 18 16	18°31'38	10♂12	1♂35	9°54	26°36	7° 5	14°29	12°53	9°52	9°28	22°39	22°41	22°24	26°53	M 11
T 12	21 22 12	19°29'08	24°22	3°23	11° 8	27°13	7°13	14°25	12°51	9°50	9°29	22°D39	22°38	22°31	26°51	T 12
W 13	21 26 9	20°26'39	8♂46	5°10	12°22	27°51	7°22	14°22	12°48	9°49	9°30	22°39	22°34	22°38	26°49	W 13
T 14	21 30 5	21°24'11	23°19	6°55	13°36	28°29	7°30	14°19	12°46	9°47	9°31	22°39	22°31	22°44	26°47	T 14
F 15	21 34 2	22°21'45	7°Y54	8°38	14°50	29° 6	7°38	14°16	12°44	9°46	9°32	22°R39	22°28	22°51	26°45	F 15
S 16	21 37 58	23°19'20	22°28	10°20	16° 4	29°44	7°46	14°13	12°41	9°44	9°33	22°39	22°25	22°58	26°42	S 16
S 17	21 41 55	24°16'56	6♂53	12° 1	17°18	0♂22	7°54	14°10	12°39	9°42	9°34	22°39	22°22	23° 4	26°40	S 17
M 18	21 45 52	25°14'34	21° 8	13°40	18°32	1° 0	8° 1	14° 8	12°37	9°41	9°36	22°D39	22°18	23°11	26°38	M 18
T 19	21 49 48	26°12'14	5♂ 9	15°17	19°46	1°38	8° 9	14° 5	12°34	9°39	9°37	22°39	22°15	23°18	26°36	T 19
W 20	21 53 45	27° 9'55	18°56	16°53	21° 0	2°16	8°16	14° 2	12°32	9°38	9°38	22°39	22°12	23°25	26°33	W 20
T 21	21 57 41	28° 7'38	2♂27	18°28	22°14	2°54	8°23	14° 0	12°30	9°36	9°39	22°40	22° 9	23°31	26°31	T 21
F 22	22 1 38	29° 5'22	15°43	20° 1	23°28	3°32	8°30	13°57	12°27	9°35	9°40	22°40	22° 6	23°38	26°29	F 22
S 23	22 5 34	0♂ 3'08	28°46	21°32	24°42	4°10	8°37	13°55	12°25	9°33	9°41	22°41	22° 3	23°45	26°26	S 23
S 24	22 9 31	1° 0'55	11♂34	23° 3	25°57	4°48	8°44	13°52	12°23	9°32	9°42	22°41	21°59	23°51	26°24	S 24
M 25	22 13 27	1°58'44	24° 9	24°31	27°11	5°26	8°50	13°50	12°21	9°30	9°43	22°R42	21°56	23°58	26°21	M 25
T 26	22 17 24	2°56'34	6♂33	25°58	28°25	6° 5	8°57	13°48	12°18	9°29	9°44	22°41	21°53	24° 5	26°19	T 26
W 27	22 21 21	3°54'26	18°46	27°24	29°39	6°43	9° 3	13°46	12°16	9°27	9°45	22°40	21°50	24°12	26°16	W 27
T 28	22 25 17	4°52'19	0♂50	28°48	0♂54	7°22	9° 9	13°44	12°14	9°26	9°46	22°39	21°47	24°18	26°14	T 28
F 29	22 29 14	5°50'13	12°47	0♂11	2° 8	8° 0	9°15	13°42	12°12	9°24	9°47	22°37	21°44	24°25	26°11	F 29
S 30	22 33 10	6°48'09	24°39	1°32	3°22	8°39	9°21	13°40	12°10	9°23	9°48	22°35	21°40	24°32	26° 8	S 30
S 31	22 37 7	7♂46'06	6♂30	2♂51	4♂37	9♂17	9♂26	13♂39	12♂ 8	9♂22	9♂48	22♂33	21♂37	24♂38	26♂ 6	S 31

Day	☉	☾		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	18n 0	1n25	3n32	18n49	1n45	21n11	0n34	4n32	0n48	20n21	0s53	22s12	0n22	17s29	0s42	17s35	0n 7	18n56	4s10	13n56	13n46	4s14	2n49	4n17	
S 2	17 45	2s32	4 16	18 15	1 46	20 58	0 37	4 17	0 47	20 22	0 53	22 13	0 22	17 30	0 42	17 35	0 7	18 56	4 10	13 56	13 47	4 16	2 49	4 17	
S 3	17 29	6 23	4 49	17 39	1 47	20 45	0 39	4 2	0 46	20 24	0 53	22 13	0 22	17 30	0 42	17 36	0 7	18 56	4 10	13 56	13 48	4 18	2 48	4 17	
M 4	17 14	9 59	5 9	17 1	1 46	20 31	0 41	3 47	0 46	20 25	0 53	22 14	0 22	17 31	0 42	17 36	0 7	18 56	4 10	13 56	13 49	4 20	2 47	4 18	
T 5	16 57	13 13	5 17	16 23	1 45	20 17	0 43	3 31	0 45	20 27	0 53	22 14	0 21	17 32	0 42	17 37	0 7	18 56	4 10	13 56	13 50	4 23	2 47	4 18	
W 6	16 41	15 56	5 10	15 44	1 43	20 1	0 45	3 16	0 44	20 28	0 53	22 15	0 21	17 32	0 42	17 37	0 7	18 56	4 10	13 56	13 51	4 25	2 46	4 18	
T 7	16 25	17 59	4 49	15 3	1 41	19 46	0 47	3 1	0 44	20 30	0 53	22 15	0 21	17 33	0 42	17 37	0 7	18 56	4 10	13 56	13 52	4 27	2 46	4 18	
F 8	16 8	19 12	4 13	14 22	1 38	19 30	0 49	2 45	0 43	20 31	0 53	22 16	0 21	17 34	0 42	17 38	0 7	18 56	4 10	13 57	13 53	4 29	2 45	4 18	
S 9	15 51	19 25	3 23	13 40	1 35	19 13	0 51	2 30	0 42	20 33	0 53	22 16	0 21	17 34	0 42	17 38	0 7	18 55	4 10	13 57	13 54	4 31	2 44	4 18	
S 10	15 33	18 33	2 21	12 58	1 31	18 56	0 53	2 14	0 42	20 34	0 54	22 17	0 21	17 35	0 42	17 39	0 7	18 55	4 10	13 57	13 55	4 33	2 44	4 18	
M11	15 16	16 34	1 9	12 15	1 27	18 38	0 55	1 59	0 41	20 35	0 54	22 17	0 21	17 36	0 42	17 39	0 7	18 55	4 10	13 57	13 57	4 35	2 43	4 18	
T 12	14 58	13 32	0s10	11 32	1 22	18 19	0 56	1 43	0 41	20 37	0 54	22 18	0 21	17 36	0 42	17 40	0 7	18 55	4 10	13 57	13 58	4 37	2 42	4 18	
W13	14 40	9 38	1 28	10 48	1 17	18 0	0 58	1 28	0 40	20 38	0 54	22 18	0 21	17 37	0 42	17 40	0 7	18 55	4 10	13 57	13 59	4 39	2 41	4 18	
T 14	14 21	5 8	2 42	10 4	1 11	17 41	1 0	1 12	0 39	20 39	0 54	22 18	0 21	17 38	0 42	17 41	0 7	18 55	4 10	13 57	14 0	4 41	2 41	4 19	
F 15	14 3	0 19	3 46	9 20	1 5	17 21	1 2	0 57	0 39	20 41	0 54	22 19	0 20	17 38	0 42	17 41	0 7	18 55	4 10	13 57	14 1	4 43	2 40	4 19	
S 16	13 44	4n29	4 34	8 36	0 59	17 1	1 3	0 41	0 38	20 42	0 54	22 19	0 20	17 39	0 42	17 41	0 7	18 55	4 10	13 57	14 2	4 45	2 39	4 19	
S 17	13 25	8 59	5 5	7 52	0 53	16 40	1 5	0 26	0 37	20 43	0 54	22 20	0 20	17 40	0 42	17 42	0 7	18 55	4 10	13 57	14 3	4 47	2 38	4 19	
M18	13 6	12 55	5 17	7 8	0 46	16 19	1 6	0 10	0 37	20 44	0 54	22 20	0 20	17 40	0 42	17 42	0 7	18 55	4 10	13 57	14 4	4 49	2 37	4 19	
T 19	12 46	16 3	5 10	6 23	0 39	15 57	1 8	0s 6	0 36	20 45	0 54	22 20	0 20	17 41	0 42	17 43	0 7	18 55	4 10	13 57	14 5	4 51	2 36	4 19	
W20	12 27	18 14	4 45	5 39	0 32	15 34	1 9	0 21	0 35	20 46	0 54	22 21	0 20	17 42	0 42	17 43	0 6	18 54	4 10	13 57	14 6	4 53	2 36	4 19	
T 21	12 7	19 20	4 4	4 56	0 24	15 12	1 10	0 37	0 35	20 47	0 54	22 21	0 20	17 42	0 42	17 44	0 6	18 54	4 10	13 57	14 7	4 55	2 35	4 19	
F 22	11 47	19 20	3 11	4 12	0 16	14 49	1 12	0 53	0 34	20 48	0 54	22 22	0 20	17 43	0 42	17 44	0 6	18 54	4 10	13 57	14 8	4 57	2 34	4 19	
S 23	11 27	18 17	2 9	3 29	0 8	14 25	1 13	1 8	0 34	20 49	0 55	22 22	0 20	17 44	0 42	17 44	0 6	18 54	4 10	13 56	14 9	4 59	2 33	4 19	
S 24	11 6	16 19	1 1	2 46	0 0	14 1	1 14	1 24	0 33	20 50	0 55	22 22	0 19	17 44	0 42	17 45	0 6	18 54	4 10	13 56	14 10	5 1	2 32	4 19	
M25	10 46	13 35	0n 8	2 3	0s 8	13 37	1 15	1 40	0 32	20 51	0 55	22 23	0 19	17 45	0 42	17 45	0 6	18 54	4 10	13 56	14 11	5 4	2 31	4 19	
T 26	10 25	10 17	1 16	1 21	0 17	13 12	1 16	1 56	0 32	20 52	0 55	22 23	0 19	17 45	0 42	17 46	0 6	18 54	4 10	13 56	14 12	5 6	2 30	4 19	
W27	10 4	6 35	2 19	0 39	0 25	12 47	1 17	2 11	0 31	20 53	0 55	22 23	0 19	17 46	0 42	17 46	0 6	18 54	4 10	13 57	14 13	5 8	2 29	4 19	
T 28	9 43	2 40	3 16	0s 3	0 34	12 22	1 18	2 27	0 30	20 54	0 55	22 24	0 19	17 47	0 42	17 46	0 6	18 54	4 10	13 57	14 14	5 10	2 28	4 19	
F 29	9 22	1s19	4 3	0 44	0 43	11 56	1 19	2 43	0 30	20 55	0 55	22 24	0 19	17 47	0 42	17 47	0 6	18 54	4 10	13 58	14 15	5 12	2 27	4 19	
S 30	9 0	5 13	4 39	1 24	0 52	11 30	1 20	2 59	0 29	20 55	0 55	22 24	0 19	17 48	0 42	17 47	0 6	18 54	4 10	13 58	14 16	5 14	2 26	4 19	
S 31	8n39	8s54	5n 3	2s 4	1s 1	11n 4	1n21	3s14	0n29	20n56	0s55	22s24	0n19	17s48	0s42	17s48	0n 6	18n53	4s10	13n59	14n17	5s16	2n25	4n19	

# ASTRODIENST EPHEMERIS for the year 2166

## geocentric

SEPTEMBER 2166

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	22 41 3	8 <sup>h</sup> 44'04"	18 <sup>m</sup> 23	4 <sup>h</sup> 9	5 <sup>m</sup> 51	9 <sup>h</sup> 56	9 <sup>h</sup> 32	13°R37	12°R 6	9°R20	9 <sup>h</sup> 49	22°R31	21 <sup>h</sup> 34	24 <sup>h</sup> 45	26°R 3	M 1
T 2	22 45 0	9°42'04"	0 <sup>h</sup> 22	5°25	7° 5	10°34	9°37	13°35	12°4 4	9°19	9°50	22°30	21°31	24°52	26°R 0	T 2
W 3	22 48 56	10°40'05"	12°32	6°39	8°20	11°13	9°42	13°34	12° 2	9°18	9°51	22°D30	21°28	24°58	25°58	W 3
T 4	22 52 53	11°38'08"	24°57	7°51	9°34	11°52	9°47	13°33	12° 0	9°16	9°52	22°31	21°24	25° 5	25°55	T 4
F 5	22 56 49	12°36'12"	7 <sup>h</sup> 34	9° 2	10°48	12°31	9°52	13°31	11°58	9°15	9°53	22°32	21°21	25°12	25°52	F 5
S 6	23 0 46	13°34'17"	20°49	10°10	12° 3	13°10	9°56	13°30	11°56	9°14	9°53	22°33	21°18	25°19	25°50	S 6
S 7	23 4 43	14°32'24"	4 <sup>h</sup> 21	11°16	13°17	13°49	10° 0	13°29	11°54	9°12	9°54	22°35	21°15	25°25	25°47	S 7
M 8	23 8 39	15°30'32"	18°20	12°20	14°32	14°28	10° 5	13°28	11°52	9°11	9°55	22°R35	21°12	25°32	25°44	M 8
T 9	23 12 36	16°28'41"	2 <sup>h</sup> 43	13°22	15°46	15° 7	10° 9	13°27	11°50	9°10	9°55	22°35	21° 9	25°39	25°41	T 9
W10	23 16 32	17°26'53"	17°27	14°21	17° 1	15°46	10°13	13°27	11°48	9° 9	9°56	22°34	21° 5	25°45	25°39	W10
T 11	23 20 29	18°25'06"	2 <sup>h</sup> 24	15°18	18°15	16°25	10°16	13°26	11°47	9° 8	9°57	22°31	21° 2	25°52	25°36	T 11
F 12	23 24 25	19°23'20"	17°25	16°11	19°30	17° 4	10°20	13°25	11°45	9° 6	9°57	22°28	20°59	25°59	25°33	F 12
S 13	23 28 22	20°21'37"	2 <sup>h</sup> 23	17° 2	20°44	17°43	10°23	13°25	11°43	9° 5	9°58	22°24	20°56	26° 6	25°30	S 13
S 14	23 32 18	21°19'56"	17° 8	17°49	21°59	18°23	10°26	13°25	11°41	9° 4	9°59	22°20	20°53	26°12	25°28	S 14
M15	23 36 15	22°18'17"	1 <sup>h</sup> 35	18°33	23°13	19° 2	10°29	13°24	11°40	9° 3	9°59	22°18	20°49	26°19	25°25	M15
T 16	23 40 12	23°16'40"	15°40	19°14	24°28	19°41	10°32	13°24	11°38	9° 2	10° 0	22°16	20°46	26°26	25°22	T 16
W17	23 44 8	24°15'05"	29°23	19°50	25°43	20°21	10°34	13°D24	11°37	9° 1	10° 0	22°D16	20°43	26°32	25°19	W17
T 18	23 48 5	25°13'33"	12 <sup>h</sup> 24	20°22	26°57	21° 0	10°37	13°24	11°35	9° 0	10° 1	22°17	20°40	26°39	25°16	T 18
F 19	23 52 1	26°12'02"	25°45	20°49	28°12	21°40	10°39	13°24	11°34	8°59	10° 1	22°19	20°37	26°46	25°14	F 19
S 20	23 55 58	27°10'34"	8 <sup>h</sup> 30	21°12	29°27	22°19	10°41	13°24	11°32	8°58	10° 2	22°20	20°34	26°53	25°11	S 20
S 21	23 59 54	28° 9'08"	21° 0	21°29	0 <sup>h</sup> 41	22°59	10°43	13°25	11°31	8°57	10° 2	22°R21	20°30	26°59	25° 8	S 21
M22	0 3 51	29° 7'44"	3 <sup>h</sup> 19	21°41	1°56	23°39	10°44	13°25	11°29	8°56	10° 3	22°20	20°27	27° 6	25° 5	M22
T 23	0 7 47	0 <sup>h</sup> 21	15°28	21°R46	3°11	24°19	10°46	13°25	11°28	8°55	10° 3	22°18	20°24	27°13	25° 2	T 23
W24	0 11 44	1° 5'01"	27°31	21°45	4°25	24°59	10°47	13°26	11°27	8°54	10° 4	22°14	20°21	27°19	25° 0	W24
T 25	0 15 41	2° 3'43"	9 <sup>h</sup> 28	21°38	5°40	25°38	10°48	13°27	11°25	8°54	10° 4	22° 7	20°18	27°26	24°57	T 25
F 26	0 19 37	3° 2'27"	21°21	21°23	6°55	26°18	10°48	13°28	11°24	8°53	10° 4	22° 0	20°15	27°33	24°54	F 26
S 27	0 23 34	4° 1'12"	3 <sup>h</sup> 12	21° 1	8°10	26°58	10°49	13°28	11°23	8°52	10° 5	21°52	20°11	27°40	24°51	S 27
S 28	0 27 30	5° 0'00"	15° 3	20°32	9°24	27°39	10°49	13°29	11°22	8°51	10° 5	21°44	20° 8	27°46	24°48	S 28
M29	0 31 27	5°58'49"	26°56	19°56	10°39	28°19	10°R50	13°31	11°21	8°51	10° 5	21°37	20° 5	27°53	24°46	M29
T 30	0 35 23	6 <sup>h</sup> 57'40"	8 <sup>h</sup> 55	19 <sup>h</sup> 13	11 <sup>h</sup> 54	28 <sup>h</sup> 59	10 <sup>h</sup> 50	13°32	11 <sup>h</sup> 20	8 <sup>h</sup> 50	10 <sup>h</sup> 5	21 <sup>h</sup> 31	20 <sup>h</sup> 2	28 <sup>h</sup> 0	24 <sup>h</sup> 43	T 30

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
M 1	8n17	12s14	5n15	2s43	1s10	10n37	1n21	3s30	0n28	20n57	0s55	22s25	0n19	17s49	0s42	M 1
T 2	7 55	15 7	5 13	3 21	1 19	10 10	1 22	3 46	0 27	20 58	0 55	22 25	0 18	17 50	0 42	T 2
W 3	7 34	17 22	4 57	3 59	1 28	9 43	1 23	4 1	0 27	20 58	0 55	22 25	0 18	17 50	0 42	W 3
T 4	7 12	18 53	4 27	4 36	1 37	9 16	1 23	4 17	0 26	20 59	0 56	22 25	0 18	17 51	0 42	T 4
F 5	6 49	19 29	3 43	5 12	1 46	8 48	1 24	4 33	0 25	20 59	0 56	22 26	0 18	17 51	0 42	F 5
S 6	6 27	19 4	2 46	5 47	1 55	8 20	1 24	4 49	0 25	21 0	0 56	22 26	0 18	17 52	0 42	S 6
S 7	6 5	17 33	1 39	6 21	2 4	7 52	1 24	5 4	0 24	21 1	0 56	22 26	0 18	17 52	0 41	S 7
M 8	5 42	14 57	0 23	6 54	2 13	7 23	1 25	5 20	0 24	21 1	0 56	22 26	0 18	17 53	0 41	M 8
T 9	5 20	11 21	0s55	7 26	2 21	6 54	1 25	5 36	0 23	21 2	0 56	22 27	0 18	17 53	0 41	T 9
W10	4 57	6 59	2 12	7 57	2 30	6 26	1 25	5 51	0 22	21 2	0 56	22 27	0 18	17 54	0 41	W10
T 11	4 35	2 8	3 21	8 56	2 38	5 57	1 25	6 7	0 22	21 2	0 56	22 27	0 17	17 54	0 41	T 11
F 12	4 12	2n53	4 17	8 27	2 47	5 27	1 25	6 22	0 21	21 3	0 56	22 27	0 17	17 55	0 41	F 12
S 13	3 49	7 41	4 54	9 23	2 55	4 58	1 25	6 38	0 20	21 3	0 56	22 27	0 17	17 55	0 41	S 13
S 14	3 26	11 57	5 12	9 48	3 3	4 28	1 25	6 53	0 20	21 4	0 56	22 27	0 17	17 56	0 41	S 14
M15	3 3	15 25	5 9	10 12	3 10	3 59	1 24	7 9	0 19	21 4	0 56	22 28	0 17	17 56	0 41	M15
T 16	2 40	17 53	4 47	10 34	3 17	3 29	1 24	7 24	0 19	21 4	0 57	22 28	0 17	17 56	0 41	T 16
W17	2 17	19 15	4 10	10 54	3 24	2 59	1 24	7 40	0 18	21 5	0 57	22 28	0 17	17 57	0 41	W17
T 18	1 54	19 30	3 20	11 12	3 30	2 29	1 23	7 55	0 17	21 5	0 57	22 28	0 17	17 57	0 41	T 18
F 19	1 31	18 41	2 20	11 27	3 36	1 59	1 23	8 11	0 17	21 5	0 57	22 28	0 17	17 58	0 41	F 19
S 20	1 7	16 55	1 15	11 41	3 41	1 29	1 22	8 26	0 16	21 5	0 57	22 28	0 16	17 58	0 41	S 20
S 21	0 44	14 22	0 7	11 51	3 45	0 59	1 22	8 41	0 16	21 5	0 57	22 28	0 16	17 58	0 41	S 21
M22	0 21	11 12	0n59	11 59	3 49	0 28	1 21	8 57	0 15	21 6	0 57	22 28	0 16	17 59	0 41	M22
T 23	0s 3	7 36	2 2	12 3	3 52	0s 2	1 21	9 12	0 14	21 6	0 57	22 28	0 16	17 59	0 41	T 23
W24	0 26	3 44	2 59	12 5	3 54	0 32	1 20	9 27	0 14	21 6	0 57	22 28	0 16	17 59	0 41	W24
T 25	0 49	0s15	3 48	12 2	3 54	1 2	1 19	9 42	0 13	21 6	0 57	22 28	0 16	18 0	0 41	T 25
F 26	1 12	4 12	4 26	11 56	3 54	1 33	1 18	9 57	0 12	21 6	0 57	22 28	0 16	18 0	0 41	F 26
S 27	1 36	7 59	4 52	11 46	3 51	2 3	1 17	10 12	0 12	21 6	0 57	22 28	0 16	18 0	0 41	S 27
S 28	1 59	11 27	5 6	11 32	3 48	2 33	1 16	10 27	0 11	21 6	0 58	22 28	0 16	18 1	0 41	S 28
M29	2 22	14 28	5 7	11 13	3 43	3 4	1 15	10 42	0 11	21 6	0 58	22 28	0 16	18 1	0 41	M29
T 30	2s46	16s55	4n54	10s50	3s36	3s34	1n14	10s57	0n10	21n 6	0s58	22s28	0n15	18s 1	0s41	T 30

Julian Day Number = 2512418.5, Delta T = 133.84 sec  
 Ecliptic obliquity = 23°24'57", Nutation = - 0°00'10", out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 27°04'09", Lahiri = 26°11'10"

ASTRODIENST EPHEMERIS for the year 2166  
geocentric

OCTOBER 2166

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
W 1	0 39 20	7♌56°33	21♊3	18°R22	13♋9	29♌39	10°R49	13♎33	11°R19	8°R49	10♏6	21°R28	19♏59	28♌6	24°R40	W 1
T 2	0 43 16	8°55'27	3♋24	17♌26	14°23	0♍19	10♎49	13°34	11♏18	8°49	10°6	21°D26	19°55	28°13	24♋38	T 2
F 3	0 47 13	9°54'24	16°2	16°25	15°38	1°0	10°48	13°36	11°17	8°48	10°6	21♏26	19°52	28°20	24°35	F 3
S 4	0 51 9	10°53'22	29°3	15°19	16°53	1°40	10°47	13°37	11°16	8°48	10°6	21°27	19°49	28°26	24°32	S 4
S 5	0 55 6	11°52'22	12♋29	14°11	18°8	2°21	10°46	13°39	11°15	8°47	10°6	21°28	19°46	28°33	24°30	S 5
M 6	0 59 3	12°51'23	26°24	13°2	19°22	3°1	10°45	13°41	11°15	8°46	10°6	21°R28	19°43	28°40	24°27	M 6
T 7	1 2 59	13°50'27	10♋47	11°54	20°37	3°42	10°44	13°43	11°14	8°46	10°7	21°27	19°40	28°47	24°24	T 7
W 8	1 6 56	14°49'32	25°35	10°49	21°52	4°22	10°42	13°45	11°13	8°46	10°7	21°23	19°36	28°53	24°22	W 8
T 9	1 10 52	15°48'39	10♋43	9°48	23°7	5°3	10°40	13°47	11°13	8°45	10°7	21°17	19°33	29°0	24°19	T 9
F 10	1 14 49	16°47'48	26°1	8°53	24°22	5°44	10°38	13°49	11°12	8°45	10°R7	21°9	19°30	29°7	24°17	F 10
S 11	1 18 45	17°46'59	11♋17	8°6	25°37	6°24	10°36	13°51	11°12	8°44	10°7	21°1	19°27	29°13	24°14	S 11
S 12	1 22 42	18°46'12	26°22	7°29	26°51	7°5	10°34	13°54	11°11	8°44	10°7	20°52	19°24	29°20	24°12	S 12
M13	1 26 38	19°45'28	11♋6	7°1	28°6	7°46	10°31	13°56	11°11	8°44	10°7	20°45	19°20	29°27	24°9	M13
T 14	1 30 35	20°44'46	25°23	6°44	29°21	8°27	10°28	13°58	11°10	8°44	10°7	20°40	19°17	29°34	24°7	T 14
W15	1 34 32	21°44'06	9♋11	6°D38	0♍36	9°8	10°25	14°1	11°10	8°43	10°6	20°38	19°14	29°40	24°4	W15
T 16	1 38 28	22°43'29	22°33	6°42	1°51	9°49	10°22	14°4	11°10	8°43	10°6	20°D37	19°11	29°47	24°2	T 16
F 17	1 42 25	23°42'54	5♏29	6°58	3°6	10°30	10°19	14°7	11°9	8°43	10°6	20°37	19°8	29°54	24°0	F 17
S 18	1 46 21	24°42'21	18°5	7°23	4°20	11°11	10°15	14°9	11°9	8°43	10°6	20°R38	19°5	0♍0	23°57	S 18
S 19	1 50 18	25°41'50	0♎25	7°58	5°35	11°52	10°11	14°12	11°9	8°43	10°6	20°37	19°1	0°7	23°55	S 19
M20	1 54 14	26°41'22	12°33	8°42	6°50	12°34	10°7	14°15	11°9	8°43	10°6	20°35	18°58	0°14	23°53	M20
T 21	1 58 11	27°40'56	24°33	9°35	8°5	13°15	10°3	14°19	11°D9	8°D43	10°5	20°30	18°55	0°21	23°51	T 21
W22	2 2 7	28°40'32	6♌28	10°34	9°20	13°56	9°59	14°22	11°9	8°43	10°5	20°22	18°52	0°27	23°48	W22
T 23	2 6 4	29°40'10	18°20	11°40	10°35	14°38	9°54	14°25	11°9	8°43	10°5	20°12	18°49	0°34	23°46	T 23
F 24	2 10 1	0♍39°50	0♍11	12°52	11°50	15°19	9°50	14°29	11°9	8°43	10°5	19°59	18°46	0°41	23°44	F 24
S 25	2 13 57	1°39'32	12°3	14°8	13°5	16°1	9°45	14°32	11°9	8°43	10°4	19°45	18°42	0°47	23°42	S 25
S 26	2 17 54	2°39'17	23°57	15°29	14°20	16°43	9°40	14°36	11°10	8°43	10°4	19°32	18°39	0°54	23°40	S 26
M27	2 21 50	3°39'03	5♊55	16°54	15°34	17°24	9°34	14°39	11°10	8°44	10°4	19°19	18°36	1°1	23°38	M27
T 28	2 25 47	4°38'51	17°57	18°21	16°49	18°6	9°29	14°43	11°10	8°44	10°3	19°9	18°33	1°8	23°36	T 28
W29	2 29 43	5°38'40	0♋8	19°51	18°4	18°48	9°23	14°47	11°11	8°44	10°3	19°1	18°30	1°14	23°34	W29
T 30	2 33 40	6°38'32	12°29	21°23	19°19	19°30	9°18	14°51	11°11	8°44	10°2	18°56	18°26	1°21	23°32	T 30
F 31	2 37 36	7♍38°25	25♋5	22♌57	20♍34	20♍12	9♎12	14♋55	11♏12	8°45	10♏2	18♏54	18♏23	1♍28	23♋31	F 31

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	
W 1	3s 9	18s39 4n28	10s23 3s27	4s 4 1n13	11s12 0n 9	21n 6 0s58	22s28 0n15	18s 1 0s41	17s56 0n 6	18n51 4s12	14n20 14n48	6s19 1n50	4n18 4n18		
T 2	3 32	19 33 3 50	9 51 3 16	4 34 1 11	11 26 0 9	21 5 0 58	22 28 0 15	18 2 0 41	17 57 0 6	18 51 4 12	14 21 14 49	6 21 1 48	4 17 4 17		
F 3	3 55	19 29 2 59	9 16 3 3	5 4 1 10	11 41 0 8	21 5 0 58	22 28 0 15	18 2 0 41	17 57 0 6	18 51 4 12	14 21 14 50	6 24 1 47	4 17 4 17		
S 4	4 18	18 24 1 58	8 37 2 49	5 34 1 9	11 55 0 8	21 5 0 58	22 28 0 15	18 2 0 41	17 57 0 6	18 51 4 12	14 20 14 51	6 26 1 46	4 17 4 17		
S 5	4 41	16 16 0 48	7 56 2 33	6 4 1 7	12 10 0 7	21 5 0 58	22 28 0 15	18 2 0 41	17 57 0 6	18 51 4 12	14 20 14 52	6 28 1 45	4 17 4 17		
M 6	5 4	13 7 0s26	7 13 2 15	6 34 1 6	12 24 0 6	21 5 0 58	22 28 0 15	18 2 0 41	17 57 0 6	18 51 4 12	14 20 14 53	6 30 1 44	4 17 4 17		
T 7	5 27	9 5 1 42	6 29 1 56	7 3 1 4	12 39 0 6	21 4 0 58	22 28 0 15	18 3 0 41	17 57 0 6	18 51 4 12	14 20 14 54	6 32 1 43	4 17 4 17		
W 8	5 50	4 23 2 52	5 45 1 36	7 33 1 3	12 53 0 5	21 4 0 58	22 28 0 15	18 3 0 41	17 58 0 6	18 51 4 12	14 22 14 55	6 34 1 41	4 17 4 17		
T 9	6 13	0n40 3 52	5 2 1 16	8 2 1 1	13 7 0 4	21 4 0 58	22 28 0 14	18 3 0 41	17 58 0 6	18 51 4 12	14 24 14 56	6 36 1 40	4 16 4 16		
F 10	6 36	5 44 4 36	4 22 0 55	8 31 0 59	13 21 0 4	21 3 0 58	22 28 0 14	18 3 0 41	17 58 0 6	18 51 4 12	14 26 14 57	6 38 1 39	4 16 4 16		
S 11	6 58	10 26 5 1	3 45 0 35	9 0 0 58	13 35 0 3	21 3 0 58	22 28 0 14	18 3 0 41	17 58 0 6	18 50 4 12	14 29 14 58	6 40 1 38	4 16 4 16		
S 12	7 21	14 24 5 4	3 12 0 15	9 28 0 56	13 49 0 3	21 3 0 59	22 27 0 14	18 3 0 41	17 58 0 6	18 50 4 12	14 31 14 59	6 42 1 37	4 16 4 16		
M13	7 43	17 22 4 46	2 43 0n 4	9 57 0 54	14 3 0 2	21 2 0 59	22 27 0 14	18 3 0 41	17 58 0 6	18 50 4 12	14 34 15 0	6 44 1 36	4 16 4 16		
T 14	8 6	19 9 4 11	2 20 0 22	10 25 0 52	14 17 0 1	21 2 0 59	22 27 0 14	18 3 0 41	17 58 0 6	18 50 4 12	14 35 15 1	6 46 1 35	4 16 4 16		
W15	8 28	19 44 3 22	2 2 0 38	10 53 0 50	14 31 0 1	21 1 0 59	22 27 0 14	18 3 0 41	17 58 0 6	18 50 4 12	14 36 15 2	6 48 1 33	4 15 4 15		
T 16	8 50	19 10 2 24	1 50 0 54	11 21 0 48	14 44 0 0	21 1 0 59	22 27 0 14	18 4 0 41	17 58 0 6	18 50 4 12	14 36 15 3	6 50 1 32	4 15 4 15		
F 17	9 12	17 35 1 20	1 44 1 7	11 48 0 46	14 58 0s 0	21 0 0 59	22 27 0 14	18 4 0 41	17 58 0 6	18 50 4 12	14 36 15 4	6 52 1 31	4 15 4 15		
S 18	9 34	15 11 0 14	1 43 1 19	12 15 0 44	15 11 0 1	21 0 0 59	22 26 0 14	18 4 0 41	17 58 0 6	18 50 4 12	14 36 15 5	6 54 1 30	4 15 4 15		
S 19	9 55	12 7 0n52	1 47 1 30	12 42 0 42	15 25 0 2	20 59 0 59	22 26 0 13	18 4 0 40	17 58 0 6	18 50 4 12	14 36 15 6	6 56 1 29	4 15 4 15		
M20	10 17	8 36 1 54	1 56 1 39	13 9 0 40	15 38 0 2	20 58 0 59	22 26 0 13	18 4 0 40	17 58 0 6	18 50 4 12	14 37 15 7	6 58 1 28	4 14 4 14		
T 21	10 38	4 46 2 50	2 9 1 47	13 35 0 38	15 51 0 3	20 58 0 59	22 26 0 13	18 4 0 40	17 58 0 6	18 50 4 12	14 39 15 8	7 0 1 27	4 14 4 14		
W22	11 0	0 46 3 38	2 27 1 53	14 1 0 36	16 4 0 3	20 57 0 59	22 25 0 13	18 4 0 40	17 58 0 6	18 50 4 13	14 41 15 9	7 2 1 26	4 14 4 14		
T 23	11 21	3s14 4 16	2 48 1 57	14 27 0 34	16 17 0 4	20 56 0 59	22 25 0 13	18 3 0 40	17 58 0 6	18 50 4 13	14 44 15 10	7 5 1 25	4 14 4 14		
F 24	11 42	7 6 4 43	3 13 2 1	14 52 0 31	16 29 0 5	20 56 0 59	22 25 0 13	18 3 0 40	17 58 0 6	18 50 4 13	14 48 15 11	7 7 1 24	4 14 4 14		
S 25	12 2	10 42 4 58	3 41 2 3	15 17 0 29	16 42 0 5	20 55 0 59	22 25 0 13	18 3 0 40	17 58 0 6	18 50 4 13	14 53 15 12	7 9 1 23	4 13 4 13		
S 26	12 23	13 54 5 0	4 11 2 5	15 42 0 27	16 54 0 6	20 54 0 59	22 24 0 13	18 3 0 40	17 58 0 6	18 50 4 13	14 57 15 13	7 11 1 22	4 13 4 13		
M27	12 43	16 32 4 48	4 43 2 5	16 6 0 25	17 7 0 6	20 53 0 59	22 24 0 13	18 3 0 40	17 58 0 6	18 50 4 13	15 1 15 14	7 13 1 21	4 13 4 13		
T 28	13 3	18 29 4 24	5 16 2 4	16 29 0 22	17 19 0 7	20 53 0 59	22 24 0 13	18 3 0 40	17 58 0 6	18 50 4 13	15 4 15 15	7 15 1 20	4 13 4 13		
W29	13 23	19 37 3 48	5 52 2 3	16 53 0 20	17 31 0 8	20 52 0 59	22 23 0 13	18 3 0 40	17 58 0 6	18 50 4 13	15 6 15 16	7 17 1 19	4 12 4 12		
T 30	13 43	19 51 3 0	6 28 2 1	17 16 0 18	17 43 0 8	20 51 0 59	22 23 0 12	18 3 0 40	17 58 0 6	18 50 4 13	15 8 15 17	7 19 1 18	4 12 4 12		
F 31	14s 3	19s 5 2n 2	7s 5 1n58	17s38 0n15	17s55 0s 9	20n50 0s59	22s23 0n12	18s 3 0s40	17s58 0n 6	18n50 4s13	15n 9 15n18	7s21 1n17	4n12 4n12		

Julian Day Number = 2512448.5, Delta T = 133.90 sec  
Ecliptic obliquity = 23°24'57, Nutation = - 0°00'12, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 27°04'13, Lahiri = 26°11'14

ASTRODIENST EPHEMERIS for the year 2166  
geocentric

NOVEMBER 2166

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	2 41 33	8♑38'20	8♑0	24♊32	21♑49	20♑54	9°R 6	14♊59	11♑12	8♑45	10°R 1	18°D54	18♑20	1♑35	23°R29	S 1
S 2	2 45 30	9°38'16	21°18	26° 9	23° 4	21°36	9♑0	15° 3	11°13	8°45	10♑1	18°R54	18°17	1°41	23♑27	S 2
M 3	2 49 26	10°38'14	5♑1	27°46	24°19	22°18	8°53	15° 7	11°13	8°46	10° 0	18♑53	18°14	1°48	23°25	M 3
T 4	2 53 23	11°38'14	19°12	29°23	25°34	23° 0	8°47	15°12	11°14	8°46	10° 0	18°50	18°11	1°55	23°24	T 4
W 5	2 57 19	12°38'15	3♑51	1♑1	26°49	23°42	8°40	15°16	11°15	8°47	9°59	18°45	18° 7	2° 1	23°22	W 5
T 6	3 1 16	13°38'18	18°52	2°39	28° 4	24°24	8°34	15°20	11°16	8°47	9°59	18°37	18° 4	2° 8	23°21	T 6
F 7	3 5 12	14°38'22	4♑8	4°18	29°18	25° 6	8°27	15°25	11°16	8°48	9°58	18°27	18° 1	2°15	23°19	F 7
S 8	3 9 9	15°38'28	19°28	5°56	0♑33	25°49	8°20	15°30	11°17	8°49	9°57	18°15	17°58	2°22	23°18	S 8
S 9	3 13 5	16°38'37	4♑41	7°35	1°48	26°31	8°13	15°34	11°18	8°49	9°57	18° 4	17°55	2°28	23°16	S 9
M10	3 17 2	17°38'47	19°35	9°13	3° 3	27°13	8° 6	15°39	11°19	8°50	9°56	17°54	17°52	2°35	23°15	M10
T 11	3 20 59	18°38'59	4♑4	10°51	4°18	27°56	7°59	15°44	11°20	8°51	9°55	17°47	17°48	2°42	23°14	T 11
W12	3 24 55	19°39'13	18° 3	12°29	5°33	28°38	7°51	15°49	11°21	8°51	9°55	17°42	17°45	2°48	23°12	W12
T 13	3 28 52	20°39'29	1♑31	14° 7	6°48	29°21	7°44	15°54	11°23	8°52	9°54	17°40	17°42	2°55	23°11	T 13
F 14	3 32 48	21°39'47	14°32	15°44	8° 3	0♑4	7°36	15°59	11°24	8°53	9°53	17°39	17°39	3° 2	23°10	F 14
S 15	3 36 45	22°40'07	27° 9	17°22	9°18	0°46	7°29	16° 4	11°25	8°54	9°53	17°39	17°36	3° 9	23° 9	S 15
S 16	3 40 41	23°40'29	9♑27	18°59	10°32	1°29	7°21	16° 9	11°26	8°54	9°52	17°39	17°32	3°15	23° 8	S 16
M17	3 44 38	24°40'53	21°32	20°36	11°47	2°12	7°13	16°14	11°28	8°55	9°51	17°36	17°29	3°22	23° 7	M17
T 18	3 48 34	25°41'18	3♑28	22°12	13° 2	2°55	7° 5	16°20	11°29	8°56	9°50	17°31	17°26	3°29	23° 6	T 18
W19	3 52 31	26°41'46	15°19	23°48	14°17	3°38	6°57	16°25	11°30	8°57	9°49	17°23	17°23	3°35	23° 5	W19
T 20	3 56 27	27°42'15	27° 9	25°24	15°32	4°21	6°49	16°30	11°32	8°58	9°48	17°12	17°20	3°42	23° 4	T 20
F 21	4 0 24	28°42'46	9♑1	27° 0	16°47	5° 4	6°41	16°36	11°34	8°59	9°48	16°59	17°17	3°49	23° 4	F 21
S 22	4 4 21	29°43'19	20°56	28°35	18° 2	5°47	6°33	16°41	11°35	9° 0	9°47	16°44	17°13	3°56	23° 3	S 22
S 23	4 8 17	0♑43'53	2♑56	0♑10	19°17	6°30	6°25	16°47	11°37	9° 1	9°46	16°30	17°10	4° 2	23° 2	S 23
M24	4 12 14	1°44'29	15° 2	1°45	20°32	7°13	6°17	16°53	11°38	9° 3	9°45	16°16	17° 7	4° 9	23° 2	M24
T25	4 16 10	2°45'06	27°15	3°20	21°47	7°57	6° 9	16°58	11°40	9° 4	9°44	16° 5	17° 4	4°16	23° 1	T25
W26	4 20 7	3°45'44	9♑36	4°55	23° 1	8°40	6° 1	17° 4	11°42	9° 5	9°43	15°57	17° 1	4°22	23° 1	W26
T27	4 24 3	4°46'24	22° 7	6°29	24°16	9°23	5°52	17°10	11°44	9° 6	9°42	15°52	16°58	4°29	23° 0	T27
F 28	4 28 0	5°47'05	4♑50	8° 4	25°31	10° 7	5°44	17°16	11°46	9° 7	9°41	15°49	16°54	4°36	23° 0	F 28
S 29	4 31 57	6°47'47	17°47	9°38	26°46	10°50	5°36	17°22	11°47	9° 9	9°40	15°D49	16°51	4°43	23° 0	S 29
S 30	4 35 53	7♑48'30	1♑2	11♑12	28♑1	11♑34	5♑28	17♑28	11♑49	9♑10	9♑39	15°R49	16♑48	4♑49	22♑59	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
S 1	14s22	17s20	0n57	7s43	1n54	18s 0	0n13	18s 7	0s 9	20n49	0s59	22s22	0n12	18s 2	0s40	17s58	0n 5	18n50	4s13	15n 9	15n19	7s23	1n16	4n12			
S 2	14 41	14 35	0s13	8 22	1 51	18 21	0 10	18 18	0 10	20 48	0 59	22 22	0 12	18 2	0 40	17 58	0 5	18 50	4 13	15 9	15 20	7 25	1 15	4 11			
M 3	15 0	10 58	1 24	9 1	1 46	18 42	0 8	18 30	0 11	20 47	0 59	22 22	0 12	18 2	0 40	17 58	0 5	18 50	4 13	15 9	15 21	7 27	1 14	4 11			
T 4	15 19	6 37	2 33	9 40	1 42	19 3	0 5	18 41	0 11	20 46	0 59	22 21	0 12	18 2	0 40	17 58	0 5	18 50	4 13	15 10	15 22	7 29	1 13	4 11			
W 5	15 37	1 44	3 34	10 19	1 36	19 23	0 3	18 52	0 12	20 45	0 59	22 21	0 12	18 2	0 40	17 58	0 5	18 50	4 13	15 11	15 23	7 31	1 13	4 11			
T 6	15 55	3n21	4 21	10 57	1 31	19 42	0 0	19 3	0 12	20 44	0 59	22 20	0 12	18 1	0 40	17 57	0 5	18 50	4 13	15 14	15 24	7 33	1 12	4 10			
F 7	16 13	8 19	4 51	11 36	1 25	20 1	0s 2	19 14	0 13	20 43	0 59	22 20	0 12	18 1	0 40	17 57	0 5	18 50	4 13	15 17	15 25	7 35	1 11	4 10			
S 8	16 30	12 46	5 0	12 14	1 19	20 19	0 5	19 25	0 14	20 42	0 59	22 19	0 12	18 1	0 40	17 57	0 5	18 50	4 13	15 21	15 26	7 37	1 10	4 10			
S 9	16 48	16 20	4 48	12 52	1 13	20 37	0 7	19 35	0 14	20 41	0 59	22 19	0 12	18 0	0 40	17 57	0 5	18 50	4 13	15 24	15 27	7 39	1 9	4 10			
M10	17 5	18 45	4 16	13 30	1 7	20 54	0 10	19 46	0 15	20 40	0 59	22 19	0 11	18 0	0 40	17 57	0 5	18 50	4 13	15 27	15 28	7 41	1 9	4 9			
T 11	17 21	19 53	3 28	14 6	1 1	21 11	0 12	19 56	0 15	20 39	0 59	22 18	0 11	18 0	0 40	17 57	0 5	18 50	4 13	15 29	15 29	7 43	1 8	4 9			
W12	17 38	19 44	2 30	14 43	0 54	21 27	0 15	20 6	0 16	20 38	0 59	22 18	0 11	18 0	0 40	17 57	0 5	18 50	4 13	15 31	15 30	7 45	1 7	4 9			
T 13	17 54	18 26	1 24	15 18	0 47	21 42	0 17	20 16	0 17	20 37	0 59	22 17	0 11	17 59	0 40	17 56	0 5	18 50	4 13	15 31	15 31	7 47	1 6	4 9			
F 14	18 10	16 12	0 17	15 53	0 41	21 57	0 20	20 25	0 17	20 35	0 59	22 17	0 11	17 59	0 40	17 56	0 5	18 50	4 13	15 32	15 32	7 49	1 6	4 8			
S 15	18 25	13 14	0n50	16 27	0 34	22 11	0 22	20 35	0 18	20 34	0 59	22 16	0 11	17 58	0 40	17 56	0 5	18 50	4 13	15 32	15 33	7 52	1 5	4 8			
S 16	18 40	9 45	1 53	17 1	0 27	22 25	0 25	20 44	0 18	20 33	0 59	22 16	0 11	17 58	0 40	17 56	0 5	18 50	4 13	15 32	15 34	7 54	1 4	4 8			
M17	18 55	5 56	2 49	17 33	0 20	22 38	0 27	20 53	0 19	20 32	0 59	22 15	0 11	17 58	0 40	17 55	0 5	18 50	4 13	15 33	15 35	7 56	1 4	4 8			
T 18	19 10	1 57	3 37	18 5	0 13	22 50	0 30	21 2	0 19	20 31	0 58	22 15	0 11	17 57	0 40	17 55	0 5	18 50	4 13	15 34	15 36	7 58	1 3	4 7			
W19	19 24	2s 6	4 15	18 36	0 7	23 1	0 32	21 11	0 20	20 29	0 58	22 14	0 11	17 57	0 40	17 55	0 5	18 50	4 13	15 37	15 37	8 0	1 2	4 7			
T 20	19 38	6 3	4 42	19 6	0s 0	23 12	0 35	21 20	0 21	20 28	0 58	22 13	0 11	17 56	0 40	17 55	0 5	18 51	4 13	15 40	15 38	8 2	1 2	4 7			
F 21	19 51	9 47	4 57	19 35	0 7	23 22	0 37	21 28	0 21	20 27	0 58	22 13	0 10	17 56	0 40	17 55	0 5	18 51	4 13	15 44	15 39	8 4	1 1	4 6			
S 22	20 4	13 9	4 59	20 3	0 14	23 32	0 39	21 36	0 22	20 26	0 58	22 12	0 10	17 55	0 39	17 54	0 5	18 51	4 13	15 48	15 39	8 6	1 1	4 6			
S 23	20 17	16 1	4 48	20 30	0 20	23 41	0 42	21 44	0 22	20 24	0 58	22 12	0 10	17 55	0 39	17 54	0 5	18 51	4 13	15 53	15 40	8 8	1 0	4 6			
M24	20 29	18 13	4 24	20 56	0 27	23 49	0 44	21 52	0 23	20 23	0 58	22 11	0 10	17 55	0 39	17 54	0 5	18 51	4 13	15 57	15 41	8 10	1 0	4 6			
T 25	20 41	19 36	3 47	21 21	0 33	23 56	0 47	22 0	0 24	20 22	0 58	22 10	0 10	17 54	0 39	17 53	0 5	18 51	4 13	16 0	15 42	8 12	0 59	4 5			
W26	20 53	20 5	2 59	21 45	0 40	24 3	0 49	22 7	0 24	20 21	0 58	22 10	0 10	17 53	0 39	17 53	0 5	18 51	4 13	16 2	15 43	8 14	0 59	4 5			
T 27	21 4	19 35	2 2	22 8	0 46	24 9	0 51	22 15	0 25	20 19	0 58	22 9	0 10	17 53	0 39	17 53	0 5	18 51	4 13	16 4	15 44	8 16	0 58	4 5			
F 28	21 15	18 6	0 58	22 29	0 52	24 14	0 54	22 22	0 25	20 18	0 57	22 8	0 10	17 52	0 39	17 52	0 5	18 51	4 13	16 5	15 45	8 18	0 58	4 4			
S 29	21 25	15 39	0s10	22 50	0 58	24 18	0 56	22 28	0 26	20 17	0 57	22 8	0 10	17 52	0 39	17 52	0 5	18 51	4 13	16 5	15 46	8 20	0 58	4 4			
S 30	21s35	12s21	1s20	23s 9	1s 4	24s22	0s58	22s35	0s26	20n15	0s57	22s 7	0n10	17s51	0s39	17s52	0n 5	18n51	4s13	16n 5	15n47	8s22	0n57	4n			

