



# Astrodienst Ephemeris Tables for the year 2282

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 2282  
geocentric

JANUARY 2282

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	6 42 38	10°32'48	22°36'36	22°36'36	28°31'17	11°38'08	6°23'23	24°16'16	19°R 9	26°58'58	18°44'44	12°R 0	10°II54	7°M46	7°R37	S 1
M 2	6 46 35	11°25'55	4°49'49	24°2'2	29°32'32	11°55'55	6°36'36	24°23'23	19°II 7	26°59'59	18°46'46	11°II59	10°51'51	7°53'53	7°II35	M 2
T 3	6 50 32	12°27'03	16°48'48	25°29'29	0°44'47	12°42'42	6°50'50	24°30'30	19°4'4	27°0'0	18°47'47	11°D59	10°48'48	7°59'59	7°32'32	T 3
W 4	6 54 28	13°28'12	28°39'39	26°56'56	2°2'2	13°29'29	7°3'3	24°36'36	19°2'2	27°0'0	18°49'49	12°0'0	10°44'44	8°6'6	7°29'29	W 4
T 5	6 58 25	14°29'20	10°M28	28°24'24	3°17'17	14°16'16	7°17'17	24°43'43	19°0'0	27°1'1	18°50'50	12°2'2	10°41'41	8°13'13	7°27'27	T 5
F 6	7 2 21	15°30'30	22°18'18	29°52'52	4°32'32	15°4'4	7°30'30	24°50'50	18°58'58	27°2'2	18°52'52	12°3'3	10°38'38	8°19'19	7°24'24	F 6
S 7	7 6 18	16°31'39	4°X15	1°32'21	5°47'47	15°51'51	7°44'44	24°57'57	18°55'55	27°3'3	18°54'54	12°5'5	10°35'35	8°26'26	7°22'22	S 7
S 8	7 10 14	17°32'49	16°23'23	2°50'50	7°2'2	16°38'38	7°58'58	25°4'4	18°53'53	27°3'3	18°55'55	12°R 5	10°32'32	8°33'33	7°19'19	S 8
M 9	7 14 11	18°33'59	28°44'44	4°20'20	8°17'17	17°25'25	8°12'12	25°10'10	18°51'51	27°4'4	18°57'57	12°4'4	10°28'28	8°39'39	7°17'17	M 9
T 10	7 18 7	19°35'09	11°32'20	5°50'50	9°32'32	18°13'13	8°26'26	25°17'17	18°49'49	27°5'5	18°58'58	12°0'0	10°25'25	8°46'46	7°15'15	T 10
W11	7 22 4	20°36'20	24°12'12	7°21'21	10°48'48	19°0'0	8°39'39	25°24'24	18°47'47	27°5'5	19°0'0	11°55'55	10°22'22	8°53'53	7°12'12	W11
T 12	7 26 1	21°37'30	7°32'20	8°52'52	12°3'3	19°47'47	8°53'53	25°30'30	18°45'45	27°6'6	19°2'2	11°49'49	10°19'19	8°59'59	7°10'10	T 12
F 13	7 29 57	22°38'39	20°43'43	10°24'24	13°18'18	20°34'34	9°7'7	25°37'37	18°43'43	27°6'6	19°3'3	11°41'41	10°16'16	9°6'6	7°8'8	F 13
S 14	7 33 54	23°39'49	4°X18	11°56'56	14°33'33	21°22'22	9°21'21	25°43'43	18°41'41	27°7'7	19°5'5	11°34'34	10°13'13	9°13'13	7°6'6	S 14
S 15	7 37 50	24°40'58	18°4'4	13°28'28	15°48'48	22°9'9	9°35'35	25°50'50	18°39'39	27°7'7	19°7'7	11°28'28	10°9'9	9°19'19	7°4'4	S 15
M16	7 41 47	25°42'06	1°Y57	15°1'1	17°2'2	22°56'56	9°49'49	25°56'56	18°37'37	27°8'8	19°8'8	11°23'23	10°6'6	9°26'26	7°2'2	M16
T 17	7 45 43	26°43'14	15°57'57	16°34'34	18°17'17	23°44'44	10°3'3	26°3'3	18°35'35	27°8'8	19°10'10	11°21'21	10°3'3	9°33'33	7°0'0	T 17
W18	7 49 40	27°44'21	0°X2	18°8'8	19°32'32	24°31'31	10°17'17	26°9'9	18°33'33	27°9'9	19°12'12	11°D20	10°0'0	9°39'39	6°58'58	W18
T 19	7 53 36	28°45'28	14°11'11	19°42'42	20°47'47	25°18'18	10°31'31	26°16'16	18°32'32	27°9'9	19°13'13	11°21'21	9°57'57	9°46'46	6°56'56	T 19
F 20	7 57 33	29°46'33	28°21'21	21°17'17	22°2'2	26°6'6	10°45'45	26°22'22	18°30'30	27°9'9	19°15'15	11°22'22	9°54'54	9°53'53	6°55'55	F 20
S 21	8 1 30	0°47'39	12°II33	22°52'52	23°17'17	26°53'53	11°0'0	26°28'28	18°28'28	27°9'9	19°17'17	11°R23	9°50'50	9°59'59	6°53'53	S 21
S 22	8 5 26	1°48'43	26°43'43	24°28'28	24°32'32	27°41'41	11°14'14	26°35'35	18°26'26	27°10'10	19°19'19	11°22'22	9°47'47	10°6'6	6°52'52	S 22
M23	8 9 23	2°49'47	10°32'47	26°5'5	25°47'47	28°28'28	11°28'28	26°41'41	18°25'25	27°10'10	19°20'20	11°19'19	9°44'44	10°13'13	6°50'50	M23
T 24	8 13 19	3°50'50	24°43'43	27°41'41	27°1'1	29°15'15	11°42'42	26°47'47	18°23'23	27°10'10	19°22'22	11°13'13	9°41'41	10°19'19	6°49'49	T 24
W25	8 17 16	4°51'53	8°J27	29°19'19	28°16'16	0°X3	11°56'56	26°53'53	18°22'22	27°10'10	19°24'24	11°4'4	9°38'38	10°26'26	6°47'47	W25
T 26	8 21 12	5°52'55	21°54'54	0°57'57	29°31'31	0°50'50	12°10'10	26°59'59	18°20'20	27°10'10	19°26'26	10°55'55	9°34'34	10°33'33	6°46'46	T 26
F 27	8 25 9	6°53'56	5°M3	2°35'35	0°X45	1°37'37	12°25'25	27°5'5	18°19'19	27°10'10	19°27'27	10°44'44	9°31'31	10°39'39	6°45'45	F 27
S 28	8 29 6	7°54'56	17°52'52	4°14'14	2°0'0	2°25'25	12°39'39	27°11'11	18°17'17	27°R10	19°29'29	10°35'35	9°28'28	10°46'46	6°43'43	S 28
S 29	8 33 2	8°55'56	0°J22	5°54'54	3°15'15	3°12'12	12°53'53	27°17'17	18°16'16	27°10'10	19°31'31	10°26'26	9°25'25	10°53'53	6°42'42	S 29
M30	8 36 59	9°56'56	12°35'35	7°34'34	4°29'29	3°59'59	13°7'7	27°23'23	18°15'15	27°10'10	19°33'33	10°20'20	9°22'22	10°59'59	6°41'41	M30
T 31	8 40 55	10°57'55	24°J36	9°15'15	5°X44	4°X47	13°21'21	27°X29	18°II13	27°J10	19°35'35	10°II16	9°II19	11°M6	6°II40	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
S 1	23s 0	7n39	5n 9	22s40	0n32	21s50	1s23	18s32	1s11	19s 9	0s31	22s 2	1n15	23n 2	0n 4	8s58
M 2	22 55	2 31	4 49	22 52	0 24	21 36	1 24	18 19	1 10	19 6	0 31	22 2	1 15	23 2	0 4	8 52
T 3	22 49	2s37	4 18	23 3	0 17	21 21	1 26	18 6	1 10	19 2	0 31	22 3	1 15	23 1	0 4	8 52
W 4	22 43	7 37	3 36	23 13	0 9	21 5	1 27	17 52	1 10	18 59	0 31	22 3	1 15	23 1	0 4	8 52
T 5	22 37	12 20	2 44	23 22	0 1	20 49	1 28	17 38	1 9	18 55	0 31	22 3	1 15	23 1	0 4	8 52
F 6	22 30	16 37	1 46	23 30	0s 6	20 32	1 29	17 24	1 9	18 52	0 31	22 3	1 15	23 1	0 4	8 53
S 7	22 23	20 16	0 43	23 37	0 13	20 15	1 30	17 10	1 9	18 49	0 31	22 4	1 15	23 1	0 4	8 53
S 8	22 15	23 6	0s23	23 43	0 20	19 57	1 31	16 55	1 9	18 45	0 31	22 4	1 15	23 1	0 4	8 53
M 9	22 7	24 53	1 30	23 47	0 27	19 38	1 32	16 40	1 8	18 42	0 31	22 4	1 15	23 0	0 4	8 53
T 10	21 59	25 27	2 33	23 51	0 34	19 19	1 32	16 26	1 8	18 38	0 31	22 5	1 15	23 0	0 4	8 53
W11	21 50	24 40	3 29	23 53	0 41	19 0	1 33	16 11	1 8	18 34	0 31	22 5	1 15	23 0	0 4	8 54
T 12	21 40	22 31	4 15	23 54	0 47	18 39	1 34	15 55	1 7	18 31	0 31	22 5	1 15	23 0	0 4	8 54
F 13	21 30	19 7	4 49	23 53	0 54	18 19	1 34	15 40	1 7	18 27	0 32	22 5	1 15	23 0	0 4	8 54
S 14	21 20	14 40	5 7	23 52	1 0	17 57	1 35	15 25	1 7	18 24	0 32	22 5	1 15	23 0	0 4	8 54
S 15	21 9	9 25	5 7	23 49	1 6	17 36	1 35	15 9	1 6	18 20	0 32	22 6	1 15	22 59	0 4	8 54
M16	20 58	3 39	4 50	23 44	1 11	17 13	1 36	14 53	1 6	18 16	0 32	22 6	1 15	22 59	0 4	8 54
T 17	20 47	2n21	4 15	23 39	1 17	16 51	1 36	14 37	1 6	18 13	0 32	22 6	1 15	22 59	0 4	8 54
W18	20 35	8 16	3 24	23 32	1 22	16 28	1 36	14 21	1 5	18 9	0 32	22 6	1 15	22 59	0 4	8 54
T 19	20 23	13 49	2 22	23 23	1 27	16 4	1 36	14 5	1 5	18 5	0 32	22 6	1 15	22 59	0 4	8 54
F 20	20 10	18 38	1 10	23 13	1 31	15 40	1 36	13 49	1 4	18 1	0 32	22 7	1 15	22 59	0 4	8 54
S 21	19 57	22 22	0n 6	23 3	1 36	15 15	1 36	13 32	1 4	17 58	0 32	22 7	1 15	22 58	0 4	8 54
S 22	19 44	24 43	1 22	22 50	1 40	14 50	1 36	13 15	1 4	17 54	0 32	22 7	1 15	22 58	0 4	8 55
M23	19 30	25 29	2 31	22 36	1 44	14 25	1 36	12 59	1 3	17 50	0 32	22 7	1 15	22 58	0 4	8 55
T 24	19 16	24 37	3 31	22 21	1 48	13 59	1 36	12 42	1 3	17 46	0 32	22 7	1 15	22 58	0 4	8 55
W25	19 1	22 16	4 18	22 4	1 51	13 33	1 36	12 25	1 2	17 42	0 32	22 7	1 15	22 58	0 4	8 55
T 26	18 46	18 44	4 49	21 46	1 54	13 7	1 35	12 8	1 2	17 38	0 32	22 8	1 15	22 58	0 4	8 54
F 27	18 31	14 21	5 4	21 27	1 57	12 40	1 35	11 50	1 2	17 34	0 32	22 8	1 15	22 58	0 4	8 54
S 28	18 16	9 26	5 3	21 6	1 59	12 13	1 34	11 33	1 1	17 30	0 33	22 8	1 15	22 58	0 4	8 54
S 29	18 0	4 15	4 47	20 43	2 1	11 46	1 34	11 16	1 1	17 27	0 33	22 8	1 15	22 58	0 4	8 54
M30	17 44	1s 0	4 19	20 20	2 3	11 18	1 33	10 58	1 0	17 23	0 33	22 8	1 15	22 57	0 4	8 54
T 31	17s27	6s 7	3n39	19s54	2s 4	10s50	1s33	10s40	1s 0	17s19	0s33	22s 8	1n15	22n57	0n 4	8s54

Julian Day Number = 2554543.5, Delta T = 267.04 sec  
Ecliptic obliquity = 23°24'12, Nutation = - 0°00'16, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 28°40'55, Lahiri = 27°47'55



# ASTRODIENST EPHEMERIS for the year 2282

## geocentric

MARCH 2282

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	10 35 15	10♈18'31	14♉17	28♈17	11♈31	27♈34	20♈11	29♈49	17♈58	26♈54	20♈27	7♈15	7♈46	14♉19	6♉44	W 1
T 2	10 39 12	11°18'52	26° 5	29°23	12°44	28°21	20°25	29°52	17°59	26°53	20°28	7°13	7°43	14°26	6°45	T 2
F 3	10 43 8	12°19'11	7♈54	0♈22	13°58	29° 8	20°39	29°56	17°59	26°52	20°30	7°13	7°40	14°33	6°46	F 3
S 4	10 47 5	13°19'29	19°51	1°13	15°11	29°55	20°53	29°59	17°59	26°51	20°32	7°13	7°37	14°39	6°47	S 4
S 5	10 51 1	14°19'46	2♈ 1	1°56	16°24	0♈41	21° 6	0♈ 3	18° 0	26°50	20°33	7°12	7°34	14°46	6°49	S 5
M 6	10 54 58	15°20'01	14°29	2°31	17°37	1°28	21°20	0° 6	18° 0	26°48	20°35	7° 9	7°31	14°52	6°50	M 6
T 7	10 58 55	16°20'14	27°20	2°56	18°50	2°15	21°34	0°10	18° 1	26°47	20°37	7° 3	7°27	14°59	6°52	T 7
W 8	11 2 51	17°20'26	10♈36	3°12	20° 3	3° 1	21°47	0°13	18° 1	26°46	20°39	6°55	7°24	15° 6	6°53	W 8
T 9	11 6 48	18°20'37	24°18	3°R18	21°16	3°48	22° 1	0°16	18° 2	26°45	20°40	6°45	7°21	15°12	6°55	T 9
F 10	11 10 44	19°20'45	8♈24	3°15	22°29	4°35	22°14	0°19	18° 3	26°44	20°42	6°33	7°18	15°19	6°57	F 10
S 11	11 14 41	20°20'52	22°51	3° 3	23°42	5°21	22°28	0°22	18° 3	26°42	20°43	6°21	7°15	15°26	6°59	S 11
S 12	11 18 37	21°20'57	7♈30	2°43	24°54	6° 8	22°41	0°25	18° 4	26°41	20°45	6°10	7°11	15°32	7° 1	S 12
M13	11 22 34	22°21'00	22°14	2°14	26° 7	6°54	22°54	0°27	18° 5	26°40	20°47	6° 2	7° 8	15°39	7° 2	M13
T 14	11 26 30	23°21'01	6♈57	1°38	27°19	7°41	23° 8	0°30	18° 6	26°39	20°48	5°56	7° 5	15°46	7° 5	T 14
W15	11 30 27	24°21'00	21°30	0°55	28°32	8°27	23°21	0°33	18° 7	26°37	20°50	5°54	7° 2	15°52	7° 7	W15
T 16	11 34 24	25°20'57	5♈50	0° 6	29°44	9°14	23°34	0°35	18° 8	26°36	20°51	5°D53	6°59	15°59	7° 9	T 16
F 17	11 38 20	26°20'51	19°56	29♈14	0♈57	10° 0	23°47	0°37	18° 9	26°35	20°53	5°R53	6°56	16° 6	7°11	F 17
S 18	11 42 17	27°20'44	3♈46	28°18	2° 9	10°46	24° 1	0°40	18°10	26°33	20°54	5°53	6°52	16°12	7°13	S 18
S 19	11 46 13	28°20'34	17°21	27°21	3°21	11°33	24°14	0°42	18°11	26°32	20°56	5°52	6°49	16°19	7°16	S 19
M20	11 50 10	29°20'22	0♈43	26°23	4°33	12°19	24°27	0°44	18°12	26°30	20°57	5°48	6°46	16°26	7°18	M20
T 21	11 54 6	0♈20'07	13°51	25°27	5°45	13° 5	24°39	0°46	18°14	26°29	20°59	5°41	6°43	16°32	7°20	T 21
W22	11 58 3	1°19'51	26°48	24°32	6°57	13°51	24°52	0°48	18°15	26°28	21° 0	5°32	6°40	16°39	7°23	W22
T 23	12 1 59	2°19'32	9♈33	23°40	8° 9	14°37	25° 5	0°50	18°16	26°26	21° 2	5°21	6°37	16°46	7°25	T 23
F 24	12 5 56	3°19'11	22° 7	22°52	9°21	15°23	25°18	0°51	18°18	26°25	21° 3	5°10	6°33	16°52	7°28	F 24
S 25	12 9 53	4°18'48	4♈30	22° 8	10°32	16° 9	25°31	0°53	18°19	26°23	21° 5	4°58	6°30	16°59	7°31	S 25
S 26	12 13 49	5°18'23	16°42	21°30	11°44	16°55	25°43	0°55	18°21	26°22	21° 6	4°48	6°27	17° 6	7°33	S 26
M27	12 17 46	6°17'56	28°44	20°58	12°55	17°41	25°56	0°56	18°22	26°20	21° 7	4°40	6°24	17°12	7°36	M27
T 28	12 21 42	7°17'27	10♈38	20°31	14° 7	18°27	26° 8	0°57	18°24	26°19	21° 9	4°35	6°21	17°19	7°39	T 28
W29	12 25 39	8°16'57	22°27	20°10	15°18	19°13	26°21	0°58	18°25	26°17	21°10	4°32	6°17	17°26	7°42	W29
T 30	12 29 35	9°16'24	4♈14	19°55	16°29	19°59	26°33	1° 0	18°27	26°16	21°11	4°D31	6°14	17°32	7°45	T 30
F 31	12 33 32	10°15'50	16♈ 3	19♈46	17♈40	20°45	26°45	1° 1	18°29	26°14	21°13	4°I31	6°11	17°39	7°48	F 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
W 1	7s41	14s13	1n58	0n22	1n 8	3n55	0s42	1s39	0s45	15s18	0s36	22s 8	1n16	22n56	0n 5	8s47
T 2	7 19	18 18	0 59	1 1	1 23	4 26	0 39	1 20	0 44	15 13	0 36	22 8	1 16	22 56	0 5	8 46
F 3	6 56	21 39	0s 4	1 38	1 38	4 57	0 36	1 1	0 44	15 9	0 36	22 8	1 16	22 56	0 5	8 46
S 4	6 33	24 7	1 6	2 12	1 52	5 27	0 33	0 42	0 43	15 5	0 36	22 8	1 16	22 56	0 5	8 46
S 5	6 10	25 31	2 7	2 42	2 7	5 58	0 31	0 23	0 43	15 1	0 36	22 8	1 16	22 56	0 5	8 45
M 6	5 46	25 40	3 4	3 9	2 20	6 29	0 28	0 3	0 42	14 56	0 36	22 8	1 16	22 56	0 5	8 45
T 7	5 23	24 28	3 52	3 31	2 34	6 59	0 25	0n16	0 41	14 52	0 36	22 8	1 16	22 56	0 5	8 44
W 8	5 0	21 53	4 30	3 49	2 46	7 29	0 22	0 35	0 41	14 48	0 36	22 8	1 16	22 56	0 5	8 44
T 9	4 36	18 1	4 54	4 2	2 58	8 0	0 19	0 54	0 40	14 44	0 37	22 8	1 16	22 56	0 5	8 43
F 10	4 13	13 3	5 1	4 10	3 8	8 30	0 16	1 13	0 40	14 39	0 37	22 8	1 16	22 57	0 5	8 43
S 11	3 49	7 15	4 49	4 14	3 17	8 59	0 13	1 32	0 39	14 35	0 37	22 8	1 16	22 57	0 5	8 42
S 12	3 26	0 59	4 18	4 13	3 25	9 29	0 9	1 51	0 38	14 31	0 37	22 8	1 16	22 57	0 5	8 42
M13	3 2	5n24	3 29	4 6	3 31	9 58	0 6	2 10	0 38	14 27	0 37	22 8	1 16	22 57	0 5	8 41
T 14	2 38	11 30	2 27	3 56	3 35	10 27	0 3	2 28	0 37	14 22	0 37	22 8	1 17	22 57	0 5	8 41
W15	2 14	16 54	1 16	3 41	3 37	10 56	0n 0	2 47	0 37	14 18	0 37	22 8	1 17	22 57	0 5	8 40
T 16	1 51	21 15	0 0	3 21	3 37	11 25	0 3	3 6	0 36	14 14	0 37	22 8	1 17	22 57	0 5	8 40
F 17	1 27	24 15	1n14	2 59	3 35	11 53	0 7	3 25	0 35	14 10	0 38	22 7	1 17	22 57	0 5	8 39
S 18	1 3	25 43	2 22	2 33	3 31	12 21	0 10	3 44	0 35	14 6	0 38	22 7	1 17	22 57	0 5	8 39
S 19	0 39	25 37	3 22	2 5	3 25	12 49	0 13	4 2	0 34	14 1	0 38	22 7	1 17	22 57	0 5	8 38
M20	0 16	24 1	4 9	1 35	3 17	13 17	0 17	4 21	0 33	13 57	0 38	22 7	1 17	22 57	0 5	8 38
T 21	0n 8	21 8	4 42	1 4	3 8	13 44	0 20	4 39	0 33	13 53	0 38	22 7	1 17	22 58	0 5	8 37
W22	0 32	17 15	5 0	0 32	2 57	14 11	0 23	4 58	0 32	13 49	0 38	22 7	1 17	22 58	0 5	8 37
T 23	0 55	12 38	5 2	0 0	2 45	14 38	0 27	5 16	0 32	13 45	0 38	22 7	1 17	22 58	0 5	8 36
F 24	1 19	7 34	4 50	0s31	2 31	15 4	0 30	5 34	0 31	13 41	0 39	22 7	1 17	22 58	0 5	8 36
S 25	1 43	2 16	4 24	1 1	2 17	15 30	0 34	5 53	0 30	13 36	0 39	22 7	1 17	22 58	0 5	8 35
S 26	2 6	3s 4	3 47	1 29	2 2	15 55	0 37	6 11	0 30	13 32	0 39	22 7	1 17	22 58	0 5	8 34
M27	2 30	8 13	2 59	1 56	1 47	16 20	0 41	6 29	0 29	13 28	0 39	22 7	1 17	22 58	0 5	8 34
T 28	2 53	13 1	2 4	2 21	1 32	16 45	0 44	6 47	0 28	13 24	0 39	22 7	1 17	22 59	0 5	8 33
W29	3 17	17 19	1 4	2 43	1 16	17 9	0 47	7 5	0 28	13 20	0 39	22 7	1 17	22 59	0 5	8 33
T 30	3 40	20 56	0 1	3 3	1 1	17 33	0 51	7 23	0 27	13 16	0 39	22 7	1 17	22 59	0 5	8 32
F 31	4n 4	23s42	1s 2	3s20	0n46	17n57	0n54	7n41	0s26	13s12	0s40	22s 6	1n18	22n59	0n 5	8s32

Julian Day Number = 2554602.5, Delta T = 267.29 sec  
 Ecliptic obliquity = 23°24'13, Nutation = - 0°00'15, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 28°41'03, Lahiri = 27°48'03

ASTRODIENST EPHEMERIS for the year 2282  
geocentric

APRIL 2282

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	12 37 28	11°15'14	27♌59	19°D44	18♍51	21♎30	26♏57	1♐ 2	18♑31	26°R12	21♒14	4♓32	6♓ 8	17♓45	7♓51	S 1
S 2	12 41 25	12°14'37	10♈ 8	19♉47	20° 2	22°16	27° 9	1° 2	18°33	26♈11	21°15	4°R33	6° 5	17°52	7°54	S 2
M 3	12 45 22	13°13'57	22°33	19°55	21°13	23° 2	27°21	1° 3	18°34	26° 9	21°17	4°33	6° 2	17°59	7°57	M 3
T 4	12 49 18	14°13'16	5♈21	20° 9	22°24	23°47	27°33	1° 4	18°36	26° 8	21°18	4°30	5°58	18° 5	8° 1	T 4
W 5	12 53 15	15°12'33	18°35	20°27	23°34	24°33	27°45	1° 4	18°38	26° 6	21°19	4°26	5°55	18°12	8° 4	W 5
T 6	12 57 11	16°11'48	2♈17	20°51	24°45	25°18	27°57	1° 5	18°40	26° 4	21°20	4°20	5°52	18°19	8° 7	T 6
F 7	13 1 8	17°11'02	16°28	21°19	25°55	26° 4	28° 9	1° 5	18°42	26° 3	21°21	4°13	5°49	18°25	8°11	F 7
S 8	13 5 4	18°10'13	1♎ 3	21°52	27° 5	26°49	28°20	1° 5	18°44	26° 1	21°23	4° 5	5°46	18°32	8°14	S 8
S 9	13 9 1	19° 9'22	15°56	22°29	28°16	27°35	28°32	1° 5	18°47	26° 0	21°24	3°59	5°43	18°39	8°18	S 9
M10	13 12 57	20° 8'30	0♈59	23° 9	29°26	28°20	28°43	1°R 5	18°49	25°58	21°25	3°53	5°39	18°45	8°21	M10
T 11	13 16 54	21° 7'35	16° 3	23°54	0♓36	29° 5	28°55	1° 5	18°51	25°56	21°26	3°50	5°36	18°52	8°25	T 11
W12	13 20 50	22° 6'39	0♓59	24°42	1°45	29°50	29° 6	1° 5	18°53	25°55	21°27	3°D49	5°33	18°59	8°28	W12
T 13	13 24 47	23° 5'40	15°39	25°33	2°55	0♈36	29°17	1° 5	18°56	25°53	21°28	3°49	5°30	19° 5	8°32	T 13
F 14	13 28 44	24° 4'39	29°59	26°27	4° 5	1°21	29°28	1° 4	18°58	25°51	21°29	3°51	5°27	19°12	8°36	F 14
S 15	13 32 40	25° 3'35	13♈58	27°24	5°14	2° 6	29°39	1° 4	19° 0	25°50	21°30	3°52	5°23	19°19	8°39	S 15
S 16	13 36 37	26° 2'30	27°35	28°24	6°24	2°51	29°50	1° 3	19° 3	25°48	21°31	3°R52	5°20	19°25	8°43	S 16
M17	13 40 33	27° 1'22	10♌52	29°27	7°33	3°36	0♈ 1	1° 3	19° 5	25°46	21°32	3°51	5°17	19°32	8°47	M17
T 18	13 44 30	28° 0'11	23°51	0♎33	8°42	4°21	0°11	1° 2	19° 8	25°45	21°33	3°49	5°14	19°39	8°51	T 18
W19	13 48 26	28°58'59	6♎34	1°41	9°51	5° 6	0°22	1° 1	19°10	25°43	21°34	3°45	5°11	19°45	8°55	W19
T 20	13 52 23	29°57'44	19° 3	2°51	10°59	5°51	0°32	1° 0	19°13	25°42	21°34	3°39	5° 8	19°52	8°59	T 20
F 21	13 56 19	0♈56'27	1♌21	4° 4	12° 8	6°35	0°43	0°59	19°15	25°40	21°35	3°34	5° 4	19°58	9° 3	F 21
S 22	14 0 16	1°55'08	13°30	5°18	13°16	7°20	0°53	0°58	19°18	25°38	21°36	3°28	5° 1	20° 5	9° 7	S 22
S 23	14 4 13	2°53'46	25°30	6°35	14°25	8° 5	1° 3	0°57	19°21	25°37	21°37	3°23	4°58	20°12	9°11	S 23
M24	14 8 9	3°52'23	7♓24	7°55	15°33	8°49	1°13	0°55	19°23	25°35	21°38	3°19	4°55	20°18	9°15	M24
T 25	14 12 6	4°50'58	19°14	9°16	16°41	9°34	1°23	0°54	19°26	25°33	21°38	3°17	4°52	20°25	9°19	T 25
W26	14 16 2	5°49'32	1♌ 1	10°39	17°49	10°18	1°33	0°52	19°29	25°32	21°39	3°D16	4°48	20°32	9°23	W26
T 27	14 19 59	6°48'03	12°49	12° 4	18°56	11° 3	1°43	0°51	19°32	25°30	21°40	3°16	4°45	20°38	9°27	T 27
F 28	14 23 55	7°46'33	24°41	13°31	20° 4	11°47	1°52	0°49	19°34	25°29	21°41	3°18	4°42	20°45	9°32	F 28
S 29	14 27 52	8°45'01	6♈40	15° 0	21°11	12°32	2° 2	0°47	19°37	25°27	21°41	3°19	4°39	20°52	9°36	S 29
S 30	14 31 48	9♌43'27	18♈49	16♎30	22♓18	13♌16	2♈11	0♈45	19♓40	25♌25	21♒42	3♓21	4♓36	20♓58	9♓40	S 30

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	4n27	25s26	2s 3	3s35	0n31	18n20	0n58	7n58	0s26	13s 8	0s40	22s 6	1n18	22n59	0n 5	S 1
S 2	4 50	26 0	3 0	3 48	0 16	18 42	1 1	8 16	0 25	13 4	0 40	22 6	1 18	22 59	0 5	S 2
M 3	5 13	25 18	3 50	3 57	0 2	19 5	1 5	8 34	0 24	13 0	0 40	22 6	1 18	22 59	0 5	M 3
T 4	5 36	23 15	4 29	4 5	0s12	19 26	1 8	8 51	0 24	12 56	0 40	22 6	1 18	23 0	0 5	T 4
W 5	5 59	19 56	4 56	4 9	0 25	19 48	1 12	9 8	0 23	12 52	0 40	22 6	1 18	23 0	0 5	W 5
T 6	6 22	15 26	5 8	4 12	0 37	20 8	1 15	9 25	0 23	12 48	0 41	22 6	1 18	23 0	0 5	T 6
F 7	6 44	9 57	5 1	4 12	0 49	20 29	1 18	9 43	0 22	12 44	0 41	22 6	1 18	23 0	0 5	F 7
S 8	7 7	3 47	4 35	4 9	1 1	20 48	1 22	10 0	0 21	12 40	0 41	22 6	1 18	23 0	0 5	S 8
S 9	7 29	2n43	3 50	4 5	1 12	21 7	1 25	10 16	0 21	12 37	0 41	22 6	1 18	23 1	0 5	S 9
M10	7 52	9 10	2 48	3 58	1 22	21 26	1 28	10 33	0 20	12 33	0 41	22 6	1 18	23 1	0 5	M10
T 11	8 14	15 6	1 35	3 49	1 32	21 44	1 32	10 50	0 19	12 29	0 41	22 6	1 18	23 1	0 5	T 11
W12	8 36	20 4	0 15	3 39	1 41	22 2	1 35	11 6	0 19	12 25	0 42	22 6	1 18	23 1	0 5	W12
T 13	8 58	23 41	1n 4	3 26	1 49	22 19	1 38	11 23	0 18	12 22	0 42	22 6	1 18	23 1	0 5	T 13
F 14	9 20	25 42	2 18	3 12	1 57	22 35	1 41	11 39	0 17	12 18	0 42	22 6	1 18	23 2	0 5	F 14
S 15	9 41	26 0	3 21	2 56	2 4	22 51	1 44	11 55	0 17	12 14	0 42	22 6	1 18	23 2	0 5	S 15
S 16	10 3	24 43	4 11	2 38	2 11	23 7	1 48	12 11	0 16	12 11	0 42	22 5	1 18	23 2	0 5	S 16
M17	10 24	22 4	4 47	2 18	2 17	23 21	1 51	12 27	0 15	12 7	0 43	22 5	1 19	23 2	0 5	M17
T 18	10 45	18 22	5 7	1 57	2 22	23 35	1 54	12 43	0 15	12 3	0 43	22 5	1 19	23 2	0 5	T 18
W19	11 6	13 54	5 11	1 35	2 27	23 49	1 57	12 59	0 14	12 0	0 43	22 5	1 19	23 3	0 5	W19
T 20	11 27	8 56	5 0	1 11	2 31	24 2	2 0	13 14	0 13	11 56	0 43	22 5	1 19	23 3	0 5	T 20
F 21	11 47	3 41	4 36	0 45	2 35	24 14	2 2	13 30	0 13	11 53	0 43	22 5	1 19	23 3	0 5	F 21
S 22	12 7	1s38	3 59	0 19	2 38	24 26	2 5	13 45	0 12	11 49	0 43	22 5	1 19	23 3	0 5	S 22
S 23	12 28	6 52	3 12	0n 9	2 40	24 37	2 8	14 0	0 11	11 46	0 44	22 5	1 19	23 3	0 5	S 23
M24	12 47	11 48	2 17	0 39	2 42	24 47	2 11	14 15	0 11	11 43	0 44	22 5	1 19	23 4	0 5	M24
T 25	13 7	16 17	1 16	1 9	2 44	24 57	2 13	14 30	0 10	11 39	0 44	22 5	1 19	23 4	0 5	T 25
W26	13 27	20 8	0 12	1 41	2 45	25 6	2 16	14 44	0 9	11 36	0 44	22 5	1 19	23 4	0 5	W26
T 27	13 46	23 10	0s52	2 14	2 45	25 15	2 19	14 59	0 9	11 33	0 44	22 5	1 19	23 4	0 5	T 27
F 28	14 5	25 13	1 55	2 48	2 44	25 23	2 21	15 13	0 8	11 29	0 45	22 5	1 19	23 5	0 5	F 28
S 29	14 24	26 8	2 54	3 23	2 44	25 30	2 23	15 27	0 8	11 26	0 45	22 5	1 19	23 5	0 5	S 29
S 30	14n42	25s48	3s45	3n59	2s42	25n36	2n26	15n41	0s 7	11s23	0s45	22s 5	1n19	23n 5	0n 5	S 30

Julian Day Number = 2554633.5, Delta T = 267.43 sec  
Ecliptic obliquity = 23°24'13, Nutation = - 0°00'16, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 28°41'07, Lahiri = 27°48'08

ASTRODIENST EPHEMERIS for the year 2282  
geocentric

MAY 2282

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	14 35 45	10♈41'52	1♈15	18♍ 3	23♊25	14♈ 0	2♈20	0°R43	19♊43	25°R24	21♈42	3♊22	4♊33	21♈ 5	9♊45	M 1
T 2	14 39 42	11°40'16	14° 0	19°37	24°32	14°45	2°29	0°341	19°46	25°22	21°43	3°R22	4°29	21°12	9°49	T 2
W 3	14 43 38	12°38'37	27° 9	21°14	25°38	15°29	2°38	0°39	19°49	25°21	21°43	3°22	4°26	21°18	9°53	W 3
T 4	14 47 35	13°36'57	10♈44	22°52	26°45	16°13	2°47	0°37	19°52	25°19	21°44	3°20	4°23	21°25	9°58	T 4
F 5	14 51 31	14°35'16	24°47	24°32	27°51	16°57	2°56	0°35	19°55	25°18	21°44	3°18	4°20	21°32	10° 2	F 5
S 6	14 55 28	15°33'33	9♍16	26°13	28°57	17°41	3° 4	0°32	19°58	25°16	21°45	3°16	4°17	21°38	10° 7	S 6
S 7	14 59 24	16°31'48	24° 7	27°57	0♈ 3	18°25	3°13	0°30	20° 1	25°14	21°45	3°13	4°14	21°45	10°11	S 7
M 8	15 3 21	17°30'02	9♈13	29°42	1° 8	19° 9	3°21	0°27	20° 4	25°13	21°46	3°12	4°10	21°52	10°16	M 8
T 9	15 7 17	18°28'15	24°26	1♈29	2°14	19°53	3°29	0°25	20° 7	25°12	21°46	3°11	4° 7	21°58	10°20	T 9
W10	15 11 14	19°26'25	9♊34	3°18	3°19	20°37	3°37	0°22	20°10	25°10	21°46	3°D11	4° 4	22° 5	10°25	W10
T 11	15 15 11	20°24'34	24°30	5° 9	4°24	21°21	3°45	0°19	20°14	25° 9	21°47	3°11	4° 1	22°11	10°29	T 11
F 12	15 19 7	21°22'41	9♈ 7	7° 2	5°29	22° 4	3°53	0°16	20°17	25° 7	21°47	3°12	3°58	22°18	10°34	F 12
S 13	15 23 4	22°20'46	23°19	8°56	6°33	22°48	4° 1	0°13	20°20	25° 6	21°47	3°13	3°54	22°25	10°38	S 13
S 14	15 27 0	23°18'50	7♈ 6	10°52	7°37	23°32	4° 8	0°10	20°23	25° 4	21°48	3°14	3°51	22°31	10°43	S 14
M15	15 30 57	24°16'51	20°28	12°50	8°41	24°15	4°16	0° 7	20°27	25° 3	21°48	3°R14	3°48	22°38	10°48	M15
T 16	15 34 53	25°14'50	3♈26	14°50	9°45	24°59	4°23	0° 4	20°30	25° 2	21°48	3°14	3°45	22°45	10°52	T 16
W17	15 38 50	26°12'48	16° 4	16°52	10°48	25°42	4°30	0° 1	20°33	25° 0	21°48	3°14	3°42	22°51	10°57	W17
T 18	15 42 47	27°10'43	28°25	18°55	11°51	26°26	4°37	29♍57	20°36	24°59	21°48	3°13	3°39	22°58	11° 2	T 18
F 19	15 46 43	28° 8'37	10♈34	21° 0	12°54	27° 9	4°43	29°54	20°40	24°57	21°48	3°13	3°35	23° 5	11° 6	F 19
S 20	15 50 40	29° 6'29	22°33	23° 6	13°57	27°52	4°50	29°51	20°43	24°56	21°49	3°12	3°32	23°11	11°11	S 20
S 21	15 54 36	0♊ 4'20	4♈25	25°14	14°59	28°35	4°57	29°47	20°46	24°55	21°49	3°11	3°29	23°18	11°16	S 21
M22	15 58 33	1° 2'09	16°14	27°23	16° 1	29°19	5° 3	29°44	20°50	24°54	21°49	3°11	3°26	23°25	11°21	M22
T 23	16 2 29	1°59'56	28° 2	29°32	17° 3	0♊ 2	5° 9	29°40	20°53	24°52	21°R49	3°D11	3°23	23°31	11°25	T 23
W24	16 6 26	2°57'43	9♍51	1♊43	18° 4	0°45	5°15	29°36	20°57	24°51	21°49	3°R11	3°20	23°38	11°30	W24
T 25	16 10 22	3°55'27	21°43	3°54	19° 5	1°28	5°21	29°33	21° 0	24°50	21°49	3°11	3°16	23°45	11°35	T 25
F 26	16 14 19	4°53'11	3♈41	6° 6	20° 5	2°11	5°26	29°29	21° 4	24°49	21°49	3°11	3°13	23°51	11°40	F 26
S 27	16 18 16	5°50'54	15°48	8°17	21° 5	2°54	5°32	29°25	21° 7	24°48	21°48	3°11	3°10	23°58	11°44	S 27
S 28	16 22 12	6°48'35	28° 5	10°29	22° 5	3°37	5°37	29°21	21°10	24°47	21°48	3°10	3° 7	24° 4	11°49	S 28
M29	16 26 9	7°46'15	10♈36	12°40	23° 5	4°20	5°42	29°17	21°14	24°45	21°48	3°10	3° 4	24°11	11°54	M29
T 30	16 30 5	8°43'54	23°24	14°50	24° 4	5° 2	5°47	29°13	21°17	24°44	21°48	3°10	3° 0	24°18	11°59	T 30
W31	16 34 2	9♊41'32	6♈31	16♊59	25°25	5♊45	5♈52	29♍ 9	21♊21	24°43	21°48	3°D 9	2♊57	24♈24	12♊ 4	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	15n 1	24s12	4s28	4n36	2s40	25n42	2n28	15n55	0s 6	11s20	0s45	22s 5	1n19	23n 5	0n 5	8s13
T 2	15 19	21 21	4 58	5 14	2 38	25 47	2 30	16 9	0 6	11 17	0 46	22 5	1 19	23 5	0 5	8 13
W 3	15 37	17 21	5 14	5 52	2 35	25 52	2 32	16 22	0 5	11 14	0 46	22 5	1 19	23 6	0 5	8 12
T 4	15 54	12 21	5 13	6 32	2 31	25 56	2 34	16 36	0 4	11 11	0 46	22 5	1 19	23 6	0 5	8 12
F 5	16 11	6 34	4 54	7 12	2 27	25 59	2 36	16 49	0 4	11 8	0 46	22 5	1 19	23 6	0 5	8 11
S 6	16 28	0 15	4 16	7 53	2 23	26 2	2 38	17 2	0 3	11 5	0 46	22 5	1 19	23 6	0 5	8 11
S 7	16 45	6n15	3 20	8 35	2 18	26 4	2 40	17 15	0 2	11 2	0 47	22 5	1 19	23 7	0 5	8 10
M 8	17 2 12	31	2 9	9 17	2 12	26 5	2 41	17 28	0 2	10 59	0 47	22 5	1 19	23 7	0 5	8 9
T 9	17 18	18 4	0 48	10 0	2 6	26 6	2 43	17 40	0 1	10 57	0 47	22 5	1 19	23 7	0 5	8 9
W10	17 34	22 26	0n35	10 43	2 0	26 6	2 44	17 52	0 0	10 54	0 47	22 5	1 19	23 7	0 5	8 8
T 11	17 49	25 13	1 56	11 27	1 53	26 5	2 46	18 4	0n 0	10 51	0 47	22 5	1 19	23 8	0 5	8 8
F 12	18 5	26 11	3 6	12 11	1 45	26 4	2 47	18 16	0 1	10 49	0 48	22 5	1 19	23 8	0 5	8 7
S 13	18 20	25 24	4 4	12 55	1 37	26 2	2 48	18 28	0 2	10 46	0 48	22 5	1 19	23 8	0 5	8 7
S 14	18 34	23 4	4 45	13 39	1 29	26 0	2 49	18 40	0 2	10 44	0 48	22 5	1 19	23 8	0 5	8 6
M15	18 49	19 32	5 10	14 24	1 20	25 57	2 50	18 51	0 3	10 41	0 48	22 5	1 20	23 9	0 5	8 6
T 16	19 3 15	10	5 17	15 8	1 11	25 53	2 51	19 2	0 4	10 39	0 49	22 5	1 20	23 9	0 5	8 5
W17	19 17	10 14	5 9	15 52	1 2	25 49	2 51	19 13	0 4	10 36	0 49	22 5	1 20	23 9	0 5	8 5
T 18	19 30	5 1	4 47	16 35	0 52	25 44	2 52	19 24	0 5	10 34	0 49	22 5	1 20	23 9	0 5	8 5
F 19	19 43	0s18	4 13	17 18	0 42	25 38	2 52	19 35	0 5	10 32	0 49	22 5	1 20	23 10	0 5	8 4
S 20	19 56	5 33	3 27	18 1	0 32	25 32	2 53	19 45	0 6	10 30	0 50	22 5	1 20	23 10	0 5	8 4
S 21	20 8	10 34	2 33	18 42	0 21	25 25	2 53	19 56	0 7	10 27	0 50	22 5	1 20	23 10	0 5	8 3
M22	20 20	15 11	1 33	19 22	0 11	25 18	2 53	20 6	0 7	10 25	0 50	22 5	1 20	23 10	0 5	8 3
T 23	20 32	19 14	0 29	20 1	0 0	25 10	2 53	20 15	0 8	10 23	0 50	22 5	1 20	23 10	0 5	8 2
W24	20 43	22 30	0s37	20 39	0n10	25 2	2 52	20 25	0 9	10 21	0 51	22 5	1 20	23 11	0 5	8 2
T 25	20 54	24 50	1 41	21 14	0 21	24 53	2 52	20 34	0 9	10 20	0 51	22 5	1 20	23 11	0 5	8 1
F 26	21 5	26 3	2 42	21 48	0 31	24 44	2 51	20 44	0 10	10 18	0 51	22 5	1 19	23 11	0 5	8 1
S 27	21 15	26 2	3 35	22 20	0 41	24 34	2 51	20 53	0 11	10 16	0 51	22 5	1 19	23 11	0 5	8 1
S 28	21 25	24 46	4 20	22 50	0 51	24 23	2 50	21 2	0 11	10 14	0 52	22 5	1 19	23 12	0 5	8 0
M29	21 34	22 15	4 53	23 17	1 0	24 13	2 49	21 10	0 12	10 13	0 52	22 5	1 19	23 12	0 5	8 0
T 30	21 44	18 37	5 13	23 41	1 9	24 1	2 48	21 19	0 12	10 11	0 52	22 5	1 19	23 12	0 5	8 0
W31	21n52	14s 1	5s17	24n 3	1n18	23n49	2n47	21n27	0n13	10s 9	0s52	22s 5	1n19	23n12	0n 5	7s59

Julian Day Number = 2554663.5, Delta T = 267.56 sec  
Ecliptic obliquity = 23°24'13, Nutation = - 0°00'16, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 28°41'11, Lahiri = 27°48'12



# ASTRODIENST EPHEMERIS for the year 2282

## geocentric

JUNE 2282

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	16 37 58	10 <sup>II</sup> 39'09	20 <sup>♂</sup> 0	19 <sup>II</sup> 7	26 <sup>♂</sup> 1	6 <sup>II</sup> 28	5 <sup>♂</sup> 57	29°R 5	21 <sup>II</sup> 24	24°R42	21°R48	3 <sup>II</sup> 9	2 <sup>II</sup> 54	24 <sup>♂</sup> 31	12 <sup>II</sup> 9	T 1
F 2	16 41 55	11°36'46	3 <sup>♂</sup> 52	21°14	26°58	7°10	6°1	29°R 1	21°28	24°R41	21°R47	3°10	2°51	24°38	12°13	F 2
S 3	16 45 51	12°34'21	18°8	23°18	27°56	7°53	6°6	28°57	21°31	24°40	21°47	3°11	2°48	24°44	12°18	S 3
S 4	16 49 48	13°31'55	2 <sup>♂</sup> 45	25°21	28°53	8°36	6°10	28°53	21°35	24°39	21°47	3°11	2°45	24°51	12°23	S 4
M 5	16 53 45	14°29'29	17°39	27°22	29°49	9°18	6°14	28°49	21°38	24°38	21°46	3°12	2°41	24°58	12°28	M 5
T 6	16 57 41	15°27'02	2 <sup>II</sup> 43	29°20	0 <sup>♂</sup> 45	10°0	6°17	28°44	21°42	24°37	21°46	3°R12	2°38	25°4	12°33	T 6
W 7	17 1 38	16°24'34	17°50	1 <sup>♂</sup> 16	1°41	10°43	6°21	28°40	21°46	24°37	21°46	3°12	2°35	25°11	12°37	W 7
T 8	17 5 34	17°22'05	2 <sup>♂</sup> 49	3°10	2°36	11°25	6°24	28°36	21°49	24°36	21°45	3°11	2°32	25°18	12°42	T 8
F 9	17 9 31	18°19'35	17°32	5°2	3°30	12°7	6°28	28°32	21°53	24°35	21°45	3°9	2°29	25°24	12°47	F 9
S 10	17 13 27	19°17'04	1 <sup>♂</sup> 54	6°50	4°24	12°50	6°31	28°27	21°56	24°34	21°44	3°7	2°26	25°31	12°52	S 10
S 11	17 17 24	20°14'31	15°50	8°36	5°17	13°32	6°34	28°23	22°0	24°33	21°44	3°5	2°22	25°38	12°57	S 11
M12	17 21 20	21°11'58	29°18	10°20	6°10	14°14	6°36	28°19	22°3	24°33	21°43	3°4	2°19	25°44	13°2	M12
T 13	17 25 17	22°9'23	12 <sup>♂</sup> 21	12°1	7°2	14°56	6°39	28°14	22°7	24°32	21°43	3°3	2°16	25°51	13°6	T 13
W14	17 29 14	23°6'47	25°0	13°39	7°53	15°38	6°41	28°10	22°10	24°31	21°42	3°D 2	2°13	25°57	13°11	W14
T 15	17 33 10	24°4'10	7 <sup>♂</sup> 20	15°15	8°44	16°20	6°43	28°5	22°14	24°30	21°42	3°3	2°10	26°4	13°16	T 15
F 16	17 37 7	25°1'32	19°26	16°47	9°34	17°2	6°45	28°1	22°18	24°30	21°41	3°4	2°6	26°11	13°21	F 16
S 17	17 41 3	25°58'53	1 <sup>♂</sup> 20	18°17	10°23	17°44	6°47	27°57	22°21	24°29	21°41	3°6	2°3	26°17	13°25	S 17
S 18	17 45 0	26°56'13	13°9	19°45	11°11	18°26	6°48	27°52	22°25	24°29	21°40	3°7	2°0	26°24	13°30	S 18
M19	17 48 56	27°53'32	24°57	21°9	11°59	19°7	6°50	27°48	22°28	24°28	21°39	3°8	1°57	26°31	13°35	M19
T 20	17 52 53	28°50'50	6 <sup>♂</sup> 45	22°31	12°46	19°49	6°51	27°43	22°32	24°28	21°39	3°R 9	1°54	26°37	13°40	T 20
W21	17 56 49	29°48'08	18°39	23°49	13°32	20°31	6°52	27°39	22°35	24°27	21°38	3°8	1°51	26°44	13°44	W21
T 22	18 0 46	0 <sup>♂</sup> 45'25	0 <sup>♂</sup> 39	25°5	14°17	21°12	6°53	27°34	22°39	24°27	21°37	3°5	1°47	26°51	13°49	T 22
F 23	18 4 43	1°42'42	12°48	26°18	15°1	21°54	6°53	27°30	22°42	24°26	21°36	3°2	1°44	26°57	13°54	F 23
S 24	18 8 39	2°39'58	25°8	27°28	15°45	22°35	6°54	27°26	22°46	24°26	21°36	2°57	1°41	27°4	13°58	S 24
S 25	18 12 36	3°37'13	7 <sup>♂</sup> 40	28°35	16°27	23°17	6°54	27°21	22°49	24°25	21°35	2°52	1°38	27°11	14°3	S 25
M26	18 16 32	4°34'28	20°24	29°38	17°8	23°58	6°R54	27°17	22°53	24°25	21°34	2°47	1°35	27°17	14°8	M26
T 27	18 20 29	5°31'43	3 <sup>♂</sup> 22	0 <sup>♂</sup> 39	17°49	24°40	6°54	27°13	22°56	24°25	21°33	2°43	1°32	27°24	14°12	T 27
W28	18 24 25	6°28'58	16°35	1°36	18°28	25°21	6°54	27°8	23°0	24°25	21°32	2°40	1°28	27°30	14°17	W28
T 29	18 28 22	7°26'13	0 <sup>♂</sup> 4	2°29	19°6	26°2	6°53	27°4	23°3	24°24	21°32	2°39	1°25	27°37	14°21	T 29
F 30	18 32 18	8°23'27	13°51	3 <sup>♂</sup> 20	19°43	26°II44	6 <sup>♂</sup> 52	27°R 0	23°II 7	24°R24	21°R31	2°D38	1°II22	27°M44	14°II26	F 30

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	
T 1	22n 1	8s37	5s 4	24n23	1n26	23n37	2n45	21n35	0n14	10s 8	0s53	22s 5	1n19	23n13	0n 5	7s59
F 2	22 9	2 39	4 33	24 39	1 33	23 24	2 43	21 43	0 14	10 7	0 53	22 5	1 19	23 13	0 5	7 59
S 3	22 16	3n38	3 45	24 53	1 39	23 11	2 42	21 50	0 15	10 5	0 53	22 5	1 19	23 13	0 5	7 58
S 4	22 23	9 53	2 41	25 5	1 45	22 58	2 40	21 58	0 15	10 4	0 53	22 5	1 19	23 13	0 5	7 58
M 5	22 30	15 42	1 25	25 13	1 51	22 44	2 38	22 5	0 16	10 3	0 54	22 5	1 19	23 14	0 5	7 58
T 6	22 37	20 38	0 3	25 19	1 55	22 29	2 35	22 12	0 17	10 2	0 54	22 5	1 19	23 14	0 5	7 57
W 7	22 43	24 11	1n20	25 23	1 59	22 14	2 33	22 18	0 17	10 0	0 54	22 5	1 19	23 14	0 5	7 57
T 8	22 48	25 59	2 37	25 23	2 2	21 59	2 30	22 25	0 18	9 59	0 54	22 5	1 19	23 14	0 5	7 57
F 9	22 54	25 55	3 42	25 22	2 4	21 44	2 27	22 31	0 19	9 58	0 55	22 5	1 19	23 14	0 5	7 57
S 10	22 58	24 6	4 31	25 19	2 5	21 28	2 24	22 37	0 19	9 58	0 55	22 5	1 19	23 15	0 5	7 56
S 11	23 3	20 52	5 2	25 13	2 6	21 12	2 21	22 43	0 20	9 57	0 55	22 5	1 19	23 15	0 5	7 56
M12	23 7	16 37	5 15	25 5	2 5	20 56	2 18	22 49	0 20	9 56	0 56	22 5	1 19	23 15	0 5	7 56
T 13	23 10	11 43	5 12	24 56	2 4	20 39	2 14	22 54	0 21	9 55	0 56	22 5	1 19	23 15	0 5	7 56
W14	23 14	6 28	4 53	24 44	2 3	20 22	2 10	22 59	0 22	9 55	0 56	22 5	1 19	23 16	0 5	7 55
T 15	23 16	1 6	4 21	24 32	2 0	20 5	2 6	23 4	0 22	9 54	0 56	22 5	1 19	23 16	0 5	7 55
F 16	23 19	4s13	3 38	24 17	1 57	19 47	2 2	23 9	0 23	9 54	0 57	22 5	1 19	23 16	0 5	7 55
S 17	23 21	9 19	2 47	24 1	1 53	19 30	1 57	23 14	0 23	9 53	0 57	22 5	1 19	23 16	0 5	7 55
S 18	23 22	14 3	1 48	23 45	1 48	19 12	1 53	23 18	0 24	9 53	0 57	22 5	1 18	23 16	0 5	7 55
M19	23 23	18 15	0 45	23 26	1 43	18 54	1 48	23 22	0 25	9 53	0 57	22 5	1 18	23 17	0 5	7 54
T 20	23 24	21 44	0s20	23 7	1 37	18 36	1 43	23 26	0 25	9 53	0 58	22 5	1 18	23 17	0 5	7 54
W21	23 24	24 19	1 24	22 47	1 30	18 17	1 37	23 30	0 26	9 53	0 58	22 5	1 18	23 17	0 5	7 54
T 22	23 24	25 50	2 25	22 27	1 23	17 59	1 32	23 33	0 26	9 53	0 58	22 5	1 18	23 17	0 5	7 54
F 23	23 24	26 7	3 21	22 5	1 15	17 40	1 26	23 36	0 27	9 53	0 59	22 5	1 18	23 17	0 5	7 54
S 24	23 23	25 8	4 7	21 43	1 6	17 22	1 20	23 39	0 28	9 53	0 59	22 5	1 18	23 18	0 5	7 54
S 25	23 21	22 53	4 43	21 21	0 57	17 3	1 14	23 42	0 28	9 53	0 59	22 5	1 18	23 18	0 5	7 54
M26	23 19	19 29	5 5	20 58	0 47	16 44	1 7	23 45	0 29	9 53	0 59	22 5	1 18	23 18	0 5	7 54
T 27	23 17	15 6	5 12	20 34	0 36	16 25	1 0	23 47	0 29	9 53	1 0	22 5	1 18	23 18	0 5	7 54
W28	23 15	9 56	5 3	20 11	0 25	16 7	0 53	23 49	0 30	9 54	1 0	22 5	1 18	23 18	0 5	7 54
T 29	23 12	4 13	4 37	19 48	0 14	15 48	0 46	23 51	0 30	9 54	1 0	22 5	1 18	23 19	0 5	7 54
F 30	23n 8	1n50	3s55	19n24	0n 1	15n29	0n38	23n53	0n31	9s55	1s 1	22s 5	1n17	23n19	0n 5	7s54

Julian Day Number = 2554694.5, Delta T = 267.69 sec

Ecliptic obliquity = 23°24'13, Nutation = - 0°00'16, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 28°41'16, Lahiri = 27°48'16

# ASTRODIENST EPHEMERIS for the year 2282

## geocentric

JULY 2282

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	18 36 15	9 <sup>50</sup> 20'42	27 <sup>17</sup> 54	4 <sup>0</sup> 6	20 <sup>0</sup> 18	27 <sup>11</sup> 25	6 <sup>0</sup> R51	26 <sup>0</sup> R55	23 <sup>11</sup> 10	24 <sup>0</sup> R24	21 <sup>0</sup> R30	2 <sup>11</sup> 39	1 <sup>11</sup> 19	27 <sup>11</sup> 50	14 <sup>11</sup> 30	S 1
S 2	18 40 12	10 <sup>0</sup> 17'56	12 <sup>8</sup> 15	4 <sup>0</sup> 49	20 <sup>0</sup> 53	28 <sup>0</sup> 6	6 <sup>0</sup> 50	26 <sup>0</sup> 51	23 <sup>0</sup> 14	24 <sup>0</sup> 24	21 <sup>0</sup> 29	2 <sup>0</sup> 41	1 <sup>0</sup> 16	27 <sup>0</sup> 57	14 <sup>0</sup> 35	S 2
M 3	18 44 8	11 <sup>0</sup> 15'11	26 <sup>0</sup> 49	5 <sup>0</sup> 28	21 <sup>0</sup> 26	28 <sup>0</sup> 47	6 <sup>0</sup> 49	26 <sup>0</sup> 47	23 <sup>0</sup> 17	24 <sup>0</sup> 24	21 <sup>0</sup> 28	2 <sup>0</sup> R42	1 <sup>0</sup> 12	28 <sup>0</sup> 4	14 <sup>0</sup> 39	M 3
T 4	18 48 5	12 <sup>0</sup> 12'26	11 <sup>0</sup> 11	6 <sup>0</sup> 3	21 <sup>0</sup> 58	29 <sup>0</sup> 28	6 <sup>0</sup> 47	26 <sup>0</sup> 43	23 <sup>0</sup> 20	24 <sup>0</sup> 24	21 <sup>0</sup> 27	2 <sup>0</sup> 42	1 <sup>0</sup> 9	28 <sup>0</sup> 10	14 <sup>0</sup> 44	T 4
W 5	18 52 1	13 <sup>0</sup> 9'41	26 <sup>0</sup> 24	6 <sup>0</sup> 34	22 <sup>0</sup> 28	0 <sup>0</sup> 5 9	6 <sup>0</sup> 46	26 <sup>0</sup> 38	23 <sup>0</sup> 24	24 <sup>0</sup> 24	21 <sup>0</sup> 26	2 <sup>0</sup> 40	1 <sup>0</sup> 6	28 <sup>0</sup> 17	14 <sup>0</sup> 48	W 5
T 6	18 55 58	14 <sup>0</sup> 6'56	11 <sup>0</sup> 11	7 <sup>0</sup> 0	22 <sup>0</sup> 57	0 <sup>0</sup> 50	6 <sup>0</sup> 44	26 <sup>0</sup> 34	23 <sup>0</sup> 27	24 <sup>0</sup> D24	21 <sup>0</sup> 25	2 <sup>0</sup> 36	1 <sup>0</sup> 3	28 <sup>0</sup> 24	14 <sup>0</sup> 53	T 6
F 7	18 59 54	15 <sup>0</sup> 4'10	25 <sup>0</sup> 47	7 <sup>0</sup> 23	23 <sup>0</sup> 24	1 <sup>0</sup> 31	6 <sup>0</sup> 42	26 <sup>0</sup> 30	23 <sup>0</sup> 31	24 <sup>0</sup> 24	21 <sup>0</sup> 24	2 <sup>0</sup> 30	1 <sup>0</sup> 0	28 <sup>0</sup> 30	14 <sup>0</sup> 57	F 7
S 8	19 3 51	16 <sup>0</sup> 1'25	10 <sup>0</sup> 0 7	7 <sup>0</sup> 41	23 <sup>0</sup> 50	2 <sup>0</sup> 12	6 <sup>0</sup> 39	26 <sup>0</sup> 26	23 <sup>0</sup> 34	24 <sup>0</sup> 24	21 <sup>0</sup> 23	2 <sup>0</sup> 24	0 <sup>0</sup> 57	28 <sup>0</sup> 37	15 <sup>0</sup> 1	S 8
S 9	19 7 48	16 <sup>0</sup> 58'39	24 <sup>0</sup> 4	7 <sup>0</sup> 54	24 <sup>0</sup> 14	2 <sup>0</sup> 53	6 <sup>0</sup> 37	26 <sup>0</sup> 22	23 <sup>0</sup> 37	24 <sup>0</sup> 24	21 <sup>0</sup> 22	2 <sup>0</sup> 17	0 <sup>0</sup> 53	28 <sup>0</sup> 44	15 <sup>0</sup> 6	S 9
M10	19 11 44	17 <sup>0</sup> 55'53	7 <sup>0</sup> 11	8 <sup>0</sup> 3	24 <sup>0</sup> 36	3 <sup>0</sup> 33	6 <sup>0</sup> 34	26 <sup>0</sup> 18	23 <sup>0</sup> 41	24 <sup>0</sup> 24	21 <sup>0</sup> 21	2 <sup>0</sup> 11	0 <sup>0</sup> 50	28 <sup>0</sup> 50	15 <sup>0</sup> 10	M10
T 11	19 15 41	18 <sup>0</sup> 53'06	20 <sup>0</sup> 41	8 <sup>0</sup> R 7	24 <sup>0</sup> 57	4 <sup>0</sup> 14	6 <sup>0</sup> 31	26 <sup>0</sup> 14	23 <sup>0</sup> 44	24 <sup>0</sup> 24	21 <sup>0</sup> 20	2 <sup>0</sup> 6	0 <sup>0</sup> 47	28 <sup>0</sup> 57	15 <sup>0</sup> 14	T 11
W12	19 19 37	19 <sup>0</sup> 50'20	3 <sup>0</sup> 23	8 <sup>0</sup> 6	25 <sup>0</sup> 16	4 <sup>0</sup> 55	6 <sup>0</sup> 28	26 <sup>0</sup> 10	23 <sup>0</sup> 47	24 <sup>0</sup> 24	21 <sup>0</sup> 19	2 <sup>0</sup> 2	0 <sup>0</sup> 44	29 <sup>0</sup> 4	15 <sup>0</sup> 19	W12
T 13	19 23 34	20 <sup>0</sup> 47'33	15 <sup>0</sup> 44	8 <sup>0</sup> 1	25 <sup>0</sup> 33	5 <sup>0</sup> 35	6 <sup>0</sup> 25	26 <sup>0</sup> 7	23 <sup>0</sup> 51	24 <sup>0</sup> 24	21 <sup>0</sup> 17	2 <sup>0</sup> D 1	0 <sup>0</sup> 41	29 <sup>0</sup> 10	15 <sup>0</sup> 23	T 13
F 14	19 27 30	21 <sup>0</sup> 44'46	27 <sup>0</sup> 49	7 <sup>0</sup> 51	25 <sup>0</sup> 48	6 <sup>0</sup> 16	6 <sup>0</sup> 22	26 <sup>0</sup> 3	23 <sup>0</sup> 54	24 <sup>0</sup> 25	21 <sup>0</sup> 16	2 <sup>0</sup> 1	0 <sup>0</sup> 38	29 <sup>0</sup> 17	15 <sup>0</sup> 27	F 14
S 15	19 31 27	22 <sup>0</sup> 41'59	9 <sup>0</sup> 14	7 <sup>0</sup> 37	26 <sup>0</sup> 1	6 <sup>0</sup> 56	6 <sup>0</sup> 18	25 <sup>0</sup> 59	23 <sup>0</sup> 57	24 <sup>0</sup> 25	21 <sup>0</sup> 15	2 <sup>0</sup> 2	0 <sup>0</sup> 34	29 <sup>0</sup> 23	15 <sup>0</sup> 31	S 15
S 16	19 35 23	23 <sup>0</sup> 39'12	21 <sup>0</sup> 32	7 <sup>0</sup> 18	26 <sup>0</sup> 12	7 <sup>0</sup> 37	6 <sup>0</sup> 14	25 <sup>0</sup> 55	24 <sup>0</sup> 0	24 <sup>0</sup> 25	21 <sup>0</sup> 14	2 <sup>0</sup> 3	0 <sup>0</sup> 31	29 <sup>0</sup> 30	15 <sup>0</sup> 35	S 16
M17	19 39 20	24 <sup>0</sup> 36'25	3 <sup>0</sup> 20	6 <sup>0</sup> 54	26 <sup>0</sup> 21	8 <sup>0</sup> 17	6 <sup>0</sup> 11	25 <sup>0</sup> 52	24 <sup>0</sup> 3	24 <sup>0</sup> 26	21 <sup>0</sup> 13	2 <sup>0</sup> R 3	0 <sup>0</sup> 28	29 <sup>0</sup> 37	15 <sup>0</sup> 39	M17
T 18	19 43 17	25 <sup>0</sup> 33'38	15 <sup>0</sup> 12	6 <sup>0</sup> 27	26 <sup>0</sup> 27	8 <sup>0</sup> 58	6 <sup>0</sup> 6	25 <sup>0</sup> 48	24 <sup>0</sup> 7	24 <sup>0</sup> 26	21 <sup>0</sup> 12	2 <sup>0</sup> 2	0 <sup>0</sup> 25	29 <sup>0</sup> 43	15 <sup>0</sup> 43	T 18
W19	19 47 13	26 <sup>0</sup> 30'51	27 <sup>0</sup> 11	5 <sup>0</sup> 57	26 <sup>0</sup> 32	9 <sup>0</sup> 38	6 <sup>0</sup> 2	25 <sup>0</sup> 45	24 <sup>0</sup> 10	24 <sup>0</sup> 26	21 <sup>0</sup> 11	1 <sup>0</sup> 59	0 <sup>0</sup> 22	29 <sup>0</sup> 50	15 <sup>0</sup> 47	W19
T 20	19 51 10	27 <sup>0</sup> 28'04	9 <sup>0</sup> 21	5 <sup>0</sup> 23	26 <sup>0</sup> R34	10 <sup>0</sup> 18	5 <sup>0</sup> 58	25 <sup>0</sup> 41	24 <sup>0</sup> 13	24 <sup>0</sup> 27	21 <sup>0</sup> 9	1 <sup>0</sup> 54	0 <sup>0</sup> 18	29 <sup>0</sup> 57	15 <sup>0</sup> 51	T 20
F 21	19 55 6	28 <sup>0</sup> 25'18	21 <sup>0</sup> 44	4 <sup>0</sup> 47	26 <sup>0</sup> 34	10 <sup>0</sup> 59	5 <sup>0</sup> 53	25 <sup>0</sup> 38	24 <sup>0</sup> 16	24 <sup>0</sup> 27	21 <sup>0</sup> 8	1 <sup>0</sup> 47	0 <sup>0</sup> 15	0 <sup>0</sup> 27 3	15 <sup>0</sup> 55	F 21
S 22	19 59 3	29 <sup>0</sup> 22'31	4 <sup>0</sup> 20	4 <sup>0</sup> 8	26 <sup>0</sup> 31	11 <sup>0</sup> 39	5 <sup>0</sup> 48	25 <sup>0</sup> 35	24 <sup>0</sup> 19	24 <sup>0</sup> 28	21 <sup>0</sup> 7	1 <sup>0</sup> 38	0 <sup>0</sup> 12	0 <sup>0</sup> 10	15 <sup>0</sup> 59	S 22
S 23	20 2 59	0 <sup>0</sup> 19'46	17 <sup>0</sup> 11	3 <sup>0</sup> 28	26 <sup>0</sup> 26	12 <sup>0</sup> 19	5 <sup>0</sup> 44	25 <sup>0</sup> 31	24 <sup>0</sup> 22	24 <sup>0</sup> 28	21 <sup>0</sup> 6	1 <sup>0</sup> 27	0 <sup>0</sup> 9	0 <sup>0</sup> 17	16 <sup>0</sup> 3	S 23
M24	20 6 56	1 <sup>0</sup> 17'00	0 <sup>0</sup> 15	2 <sup>0</sup> 47	26 <sup>0</sup> 19	12 <sup>0</sup> 59	5 <sup>0</sup> 38	25 <sup>0</sup> 28	24 <sup>0</sup> 25	24 <sup>0</sup> 29	21 <sup>0</sup> 4	1 <sup>0</sup> 18	0 <sup>0</sup> 6	0 <sup>0</sup> 23	16 <sup>0</sup> 7	M24
T 25	20 10 52	2 <sup>0</sup> 14'15	13 <sup>0</sup> 32	2 <sup>0</sup> 6	26 <sup>0</sup> 9	13 <sup>0</sup> 39	5 <sup>0</sup> 33	25 <sup>0</sup> 25	24 <sup>0</sup> 28	24 <sup>0</sup> 30	21 <sup>0</sup> 3	1 <sup>0</sup> 9	0 <sup>0</sup> 3	0 <sup>0</sup> 30	16 <sup>0</sup> 11	T 25
W26	20 14 49	3 <sup>0</sup> 11'31	27 <sup>0</sup> 1	1 <sup>0</sup> 26	25 <sup>0</sup> 57	14 <sup>0</sup> 19	5 <sup>0</sup> 28	25 <sup>0</sup> 22	24 <sup>0</sup> 31	24 <sup>0</sup> 30	21 <sup>0</sup> 2	1 <sup>0</sup> 2	29 <sup>0</sup> 59	0 <sup>0</sup> 37	16 <sup>0</sup> 14	W26
T 27	20 18 46	4 <sup>0</sup> 8'48	10 <sup>0</sup> 40	0 <sup>0</sup> 47	25 <sup>0</sup> 43	14 <sup>0</sup> 59	5 <sup>0</sup> 22	25 <sup>0</sup> 19	24 <sup>0</sup> 34	24 <sup>0</sup> 31	21 <sup>0</sup> 1	0 <sup>0</sup> 57	29 <sup>0</sup> 56	0 <sup>0</sup> 43	16 <sup>0</sup> 18	T 27
F 28	20 22 42	5 <sup>0</sup> 6'05	24 <sup>0</sup> 30	0 <sup>0</sup> 10	25 <sup>0</sup> 26	15 <sup>0</sup> 39	5 <sup>0</sup> 17	25 <sup>0</sup> 16	24 <sup>0</sup> 37	24 <sup>0</sup> 32	20 <sup>0</sup> 59	0 <sup>0</sup> 55	29 <sup>0</sup> 53	0 <sup>0</sup> 50	16 <sup>0</sup> 22	F 28
S 29	20 26 39	6 <sup>0</sup> 3'23	8 <sup>0</sup> 29	29 <sup>0</sup> 35	25 <sup>0</sup> 7	16 <sup>0</sup> 19	5 <sup>0</sup> 11	25 <sup>0</sup> 13	24 <sup>0</sup> 40	24 <sup>0</sup> 32	20 <sup>0</sup> 58	0 <sup>0</sup> D55	29 <sup>0</sup> 50	0 <sup>0</sup> 56	16 <sup>0</sup> 25	S 29
S 30	20 30 35	7 <sup>0</sup> 0'43	22 <sup>0</sup> 37	29 <sup>0</sup> 4	24 <sup>0</sup> 46	16 <sup>0</sup> 59	5 <sup>0</sup> 5	25 <sup>0</sup> 11	24 <sup>0</sup> 43	24 <sup>0</sup> 33	20 <sup>0</sup> 57	0 <sup>0</sup> 55	29 <sup>0</sup> 47	1 <sup>0</sup> 3	16 <sup>0</sup> 29	S 30
M31	20 34 32	7 <sup>0</sup> 58'03	6 <sup>0</sup> 15	28 <sup>0</sup> 37	24 <sup>0</sup> 23	17 <sup>0</sup> 39	4 <sup>0</sup> 59	25 <sup>0</sup> 8	24 <sup>0</sup> 45	24 <sup>0</sup> 34	20 <sup>0</sup> 55	0 <sup>0</sup> R55	29 <sup>0</sup> 44	1 <sup>0</sup> 10	16 <sup>0</sup> 32	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
S 1	23n 5	7n56	2s58	19n 1	0s11	15n10	0n30	23n54	0n32	9s55	1 s 1	22s 5	1n17	23n19	0n 5	7s54	1n40	21s49	7s56	20n40	20n24	19s21	17n53	4 s39			
S 2	23 0	13 45	1 49	18 38	0 24	14 52	0 22	23 56	0 32	9 56	1 1	22 5	1 17	23 19	0 5	7 54	1 40	21 50	7 57	20 40	20 23	19 23	17 53	4 39			
M 3	22 56	18 54	0 32	18 16	0 38	14 33	0 13	23 57	0 33	9 57	1 1	22 5	1 17	23 19	0 5	7 54	1 40	21 50	7 57	20 40	20 22	19 25	17 54	4 39			
T 4	22 51	22 56	0n48	17 54	0 52	14 15	0 5	23 57	0 33	9 58	1 2	22 5	1 17	23 20	0 5	7 54	1 40	21 51	7 57	20 40	20 22	19 28	17 54	4 40			
W 5	22 45	25 26	2 5	17 32	1 6	13 56	0s 4	23 58	0 34	9 59	1 2	22 5	1 17	23 20	0 5	7 54	1 40	21 51	7 57	20 40	20 21	19 30	17 54	4 40			
T 6	22 39	26 9	3 14	17 11	1 21	13 38	0 14	23 58	0 34	9 59	1 2	22 5	1 17	23 20	0 5	7 54	1 40	21 52	7 57	20 39	20 20	19 32	17 54	4 40			
F 7	22 33	25 1	4 8	16 51	1 36	13 20	0 23	23 59	0 35	10 0	1 2	22 5	1 17	23 20	0 5	7 54	1 40	21 52	7 58	20 38	20 20	19 35	17 55	4 40			
S 8	22 27	22 16	4 46	16 32	1 51	13 2	0 33	23 59	0 35	10 2	1 3	22 5	1 17	23 20	0 5	7 54	1 40	21 53	7 58	20 37	20 19	19 37	17 55	4 41			
S 9	22 20	18 17	5 6	16 14	2 6	12 45	0 43	23 58	0 36	10 3	1 3	22 5	1 16	23 20	0 5	7 54	1 40	21 53	7 58	20 35	20 18	19 39	17 55	4 41			
M10	22 12	13 28	5 8	15 57	2 22	12 27	0 54	23 58	0 37	10 4	1 3	22 5	1 16	23 21	0 5	7 54	1 40	21 54	7 58	20 34	20 18	19 42	17 55	4 41			
T 11	22 5	8 11	4 53	15 41	2 37	12 10	1 5	23 57	0 37	10 5	1 4	22 5	1 16	23 21	0 5	7 54	1 40	21 54	7 58	20 33	20 17	19 44	17 56	4 41			
W12	21 56	2 42	4 24	15 26	2 52	11 54	1 16	23 56	0 38	10 7	1 4	22 5	1 16	23 21	0 5	7 54	1 40	21 55	7 59	20 32	20 16	19 46	17 56	4 42			
T 13	21 48	2s44	3 44	15 13	3 7	11 37	1 27	23 55	0 38	10 8	1 4	22 5	1 16	23 21	0 5	7 54	1 39	21 55	7 59	20 32	20 16	19 49	17 56	4 42			
F 14	21 39	7 58	2 54	15 2	3 22	11 21	1 38	23 54	0 39	10 10	1 4	22 5	1 16	23 21	0 6	7 54	1 39	21 56	7 59	20 32	20 15	19 51	17 56	4 42			
S 15	21 30	12 51	1 58	14 52	3 36	11 6	1 50	23 53	0 39	10 11	1 5	22 5	1 16	23 21	0 6	7 55	1 39	21 57	7 59	20 32	20 14	19 53	17 56	4 42			
S 16	21 20	17 13	0 56	14 44	3 49	10 51	2 3	23 51	0 40	10 13	1 5	22 5	1 15	23 22	0 6	7 55	1 39	21 57	7 59	20 32	20 14	19 55	17 56	4 43			
M17	21 10	20 54	0s 7	14 37	4 2	10 36	2 15	23 49	0 40	10 14	1 5	22 5	1 15	23 22	0 6	7 55	1 39	21 58	7 59	20 33	20 13	19 58	17 57	4 43			
T 18	21 0	23 45	1 10	14 32	4 14	10 22	2 28	23 47	0 41	10 16	1 5	22 5	1 15	23 22	0 6	7 55	1 39	21 58	8 0	20 32	20 12	20 0	17 57	4 43			
W19	20 49	25 33	2 11	14 29	4 24	10 8	2 40	23 45	0 41	10 18	1 6	22 5	1 15	23 22	0 6	7 55	1 39	21 59	8 0	20 32	20 12	20 2	17 57	4 44			
T 20	20 38	26 10	3 6	14 28	4 34	9 55	2 54	23 42	0 42	10 20	1 6	22 5	1 15	23 22	0 6	7 55	1 39	21 59	8 0	20 31	20 11	20 5	17 57	4 44			
F 21	20 27	25 30	3 54	14 28	4 42	9 43	3 7	23 39	0 43	10 22	1 6	22 5	1 15	23 22	0 6	7 56	1 39	22 0	8 0	20 29	20 10	20 7	17 57	4 44			
S 22	20 15	23 32	4 31	14 31	4 49	9 31	3 20	23 37	0 43	10 24	1 6	22 5	1 15	23 23	0 6	7 56	1 39	22 0	8 0	20 27	20 10	20 9	17 57	4 44			
S 23	20 3	20 21	4 55	14 35	4 54	9 20	3 34	23 33	0 44	10 26	1 7	22 5	1 14	23 23	0 6	7 56	1 39	22 1	8 0	20 25	20 9	20 11	17 57	4 45			
M24	19 51	16 6	5 4	14 40	4 58	9 9	3 48	23 30	0 44	10 28	1 7	22 5	1 14	23 23	0 6	7 56	1 39	22 1	8 1	20 23	20 8	20 14	17 57	4 45			
T 25	19 38	11 2	4 57	14 48	5 0	8 59	4 1	23 27	0 45	10 30	1 7	22 5	1 14	23 23	0 6	7 57	1 39	22 2	8 1	20 22	20 8	20 16	17 57	4 45			
W26	19 25	5 23	4 34	14 56	5 0	8 50	4 15	23 23	0 45	10 32	1 7	22 5	1 14	23 23	0 6	7 57	1 39	22 3	8 1	20 20	20 7	20 18	17 57	4 46			
T 27	19 12	0n37	3 55	15 6	4 58	8 42	4 29	23 19	0 46	10 35	1 8	22 5	1 14	23 23	0 6	7 57	1 39	22 3	8 1	20 19	20 6	20 20	17 57	4 46			
F 28	18 58	6 40	3 1	15 17	4 55	8 35	4 43	23 15	0 46	10 37	1 8	22 6	1 14	23 23	0 6	7 58	1 39	22 4	8 1	20 19	20 6	20 23	17 57	4 46			
S 29	18 44	12 28	1 57	15 29	4 50	8 28	4 56	23 11	0 47	10 39	1 8	22 6	1 14	23 23	0 6	7 58	1 39	22 4	8 1	20 19	20 5	20 25	17 57	4 47			
S 30	18 30	17 41	0 44	15 41	4 43	8 22	5 10	23 6	0 47	10 42	1 8	22 6	1 13	23 24	0 6	7 58	1 39	22 5	8 1	20 19	20 4	20 27	17 57	4 47			
M31	18n15	21n57	0n32	15n55	4s35	8n17	5s23	23n 2	0n48	10s44	1 s 8	22s 6	1n13	23n24	0n 6	7s59	1n39	22s 5	8s 1	20n19	20n 4	20s29	17n57	4s47			



ASTRODIENST EPHEMERIS for the year 2282  
geocentric

AUGUST 2282

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	20 38 28	8♂55'24	21♂17	28°R15	23°R57	18♂18	4°R53	25°R 5	24♂48	24♂35	20°R54	0°R54	29♂40	1♂16	16♂36	T 1
W 2	20 42 25	9°52'46	5♂43	27♂58	23♂30	18°58	4♂46	25♂3	24°51	24°35	20♂53	0♂50	29°37	1°23	16°39	W 2
T 3	20 46 21	10°50'09	20° 7	27°45	23° 1	19°38	4°40	25° 1	24°54	24°36	20°51	0°43	29°34	1°30	16°42	T 3
F 4	20 50 18	11°47'33	4♂25	27°39	22°30	20°18	4°33	24°58	24°56	24°37	20°50	0°34	29°31	1°36	16°46	F 4
S 5	20 54 15	12°44'58	18°29	27°D39	21°57	20°57	4°27	24°56	24°59	24°38	20°49	0°24	29°28	1°43	16°49	S 5
S 6	20 58 11	13°42'23	2♂16	27°44	21°23	21°37	4°20	24°54	25° 2	24°39	20°47	0°12	29°24	1°50	16°52	S 6
M 7	21 2 8	14°39'50	15°41	27°57	20°49	22°16	4°13	24°52	25° 4	24°40	20°46	0° 2	29°21	1°56	16°55	M 7
T 8	21 6 4	15°37'16	28°44	28°15	20°13	22°56	4° 6	24°50	25° 7	24°41	20°45	29♂52	29°18	2° 3	16°59	T 8
W 9	21 10 1	16°34'44	11♂24	28°40	19°36	23°35	3°59	24°48	25° 9	24°42	20°43	29°46	29°15	2°10	17° 2	W 9
T 10	21 13 57	17°32'12	23°45	29°11	18°59	24°14	3°52	24°46	25°12	24°43	20°42	29°41	29°12	2°16	17° 5	T 10
F 11	21 17 54	18°29'41	5♂50	29°49	18°22	24°54	3°44	24°44	25°14	24°44	20°41	29°39	29° 9	2°23	17° 8	F 11
S 12	21 21 50	19°27'11	17°45	0♂34	17°44	25°33	3°37	24°42	25°17	24°46	20°39	29°D39	29° 5	2°30	17°11	S 12
S 13	21 25 47	20°24'42	29°34	1°25	17° 7	26°12	3°29	24°41	25°19	24°47	20°38	29°R39	29° 2	2°36	17°13	S 13
M14	21 29 44	21°22'13	11♂23	2°22	16°30	26°52	3°22	24°39	25°21	24°48	20°37	29°38	28°59	2°43	17°16	M14
T 15	21 33 40	22°19'45	23°17	3°25	15°54	27°31	3°14	24°38	25°24	24°49	20°35	29°36	28°56	2°49	17°19	T 15
W16	21 37 37	23°17'18	5♂21	4°34	15°19	28°10	3° 7	24°37	25°26	24°50	20°34	29°32	28°53	2°56	17°22	W16
T 17	21 41 33	24°14'52	17°40	5°48	14°45	28°49	2°59	24°36	25°28	24°52	20°33	29°26	28°50	3° 3	17°24	T 17
F 18	21 45 30	25°12'27	0♂14	7° 9	14°13	29°28	2°51	24°35	25°30	24°53	20°31	29°16	28°46	3° 9	17°27	F 18
S 19	21 49 26	26°10'03	13° 7	8°34	13°41	0♂ 7	2°44	24°34	25°32	24°54	20°30	29° 5	28°43	3°16	17°29	S 19
S 20	21 53 23	27° 7'41	26°18	10° 4	13°12	0°46	2°36	24°33	25°35	24°56	20°29	28°53	28°40	3°23	17°32	S 20
M21	21 57 19	28° 5'19	9♂45	11°39	12°44	1°25	2°28	24°32	25°37	24°57	20°27	28°40	28°37	3°29	17°34	M21
T 22	22 1 16	29° 2'59	23°26	13°18	12°19	2° 4	2°20	24°31	25°39	24°58	20°26	28°29	28°34	3°36	17°36	T 22
W23	22 5 13	0♂ 0'40	7♂18	15° 1	11°55	2°42	2°12	24°30	25°41	25° 0	20°25	28°20	28°30	3°43	17°39	W23
T 24	22 9 9	0°58'22	21°17	16°47	11°34	3°21	2° 5	24°30	25°43	25° 1	20°23	28°14	28°27	3°49	17°41	T 24
F 25	22 13 6	1°56'06	5♂20	18°37	11°15	4° 0	1°57	24°29	25°44	25° 3	20°22	28°11	28°24	3°56	17°43	F 25
S 26	22 17 2	2°53'52	19°26	20°29	10°58	4°39	1°49	24°29	25°46	25° 4	20°21	28°10	28°21	4° 3	17°45	S 26
S 27	22 20 59	3°51'40	3♂33	22°23	10°44	5°17	1°41	24°29	25°48	25° 6	20°19	28°10	28°18	4° 9	17°47	S 27
M28	22 24 55	4°49'29	17°40	24°18	10°32	5°56	1°33	24°29	25°50	25° 7	20°18	28°10	28°15	4°16	17°49	M28
T 29	22 28 52	5°47'20	1♂46	26°15	10°22	6°35	1°25	24°D29	25°52	25° 9	20°17	28° 8	28°11	4°22	17°51	T 29
W30	22 32 48	6°45'13	15°50	28°14	10°15	7°13	1°17	24°29	25°53	25°11	20°15	28° 4	28° 8	4°29	17°53	W30
T 31	22 36 45	7♂43'08	29♂49	0♂12	10♂10	7♂52	1♂10	24♂29	25♂55	25♂12	20♂14	27♂57	28♂ 5	4♂36	17♂55	T 31

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	18n 0	24n53	1n46	16n 8	4s26	8n13	5s37	22n57	0n48	10s46	1 s 9	22s 6	1n13	23n24	0n 6	7s59	1n38	22s 6	8s 2	20n18	20n 3	20s32	17n57	4s48			
W 2	17 45	26 10	2 54	16 22	4 15	8 10	5 49	22 52	0 49	10 49	1 9	22 6	1 13	23 24	0 6	7 59	1 38	22 6	8 2	20 18	20 2	20 34	17 57	4 48			
T 3	17 29	25 41	3 50	16 36	4 3	8 7	6 2	22 47	0 49	10 52	1 9	22 6	1 13	23 24	0 6	8 0	1 38	22 7	8 2	20 16	20 2	20 36	17 57	4 48			
F 4	17 14	23 31	4 31	16 50	3 50	8 6	6 14	22 42	0 50	10 54	1 9	22 6	1 13	23 24	0 6	8 0	1 38	22 7	8 2	20 14	20 1	20 38	17 57	4 49			
S 5	16 58	19 57	4 55	17 4	3 36	8 5	6 26	22 36	0 50	10 57	1 9	22 6	1 12	23 24	0 6	8 0	1 38	22 8	8 2	20 12	20 0	20 40	17 57	4 49			
S 6	16 41	15 21	5 2	17 17	3 22	8 5	6 37	22 30	0 51	10 59	1 10	22 6	1 12	23 24	0 6	8 1	1 38	22 9	8 2	20 10	20 0	20 43	17 57	4 49			
M 7	16 25	10 6	4 51	17 30	3 7	8 6	6 47	22 25	0 51	11 2	1 10	22 6	1 12	23 25	0 6	8 1	1 38	22 9	8 2	20 8	19 59	20 45	17 57	4 50			
T 8	16 8	4 33	4 25	17 41	2 51	8 7	6 57	22 19	0 52	11 5	1 10	22 6	1 12	23 25	0 6	8 2	1 38	22 10	8 2	20 6	19 58	20 47	17 57	4 50			
W 9	15 51	1s 2	3 46	17 52	2 35	8 10	7 6	22 12	0 52	11 8	1 10	22 6	1 12	23 25	0 6	8 2	1 38	22 10	8 2	20 4	19 58	20 49	17 57	4 51			
T 10	15 33	6 27	2 58	18 1	2 19	8 13	7 15	22 6	0 53	11 10	1 10	22 7	1 12	23 25	0 6	8 2	1 38	22 11	8 2	20 3	19 57	20 51	17 57	4 51			
F 11	15 16	11 31	2 3	18 10	2 3	8 17	7 22	22 0	0 53	11 13	1 11	22 7	1 11	23 25	0 6	8 3	1 38	22 11	8 2	20 3	19 56	20 54	17 57	4 51			
S 12	14 58	16 6	1 3	18 16	1 46	8 21	7 29	21 53	0 54	11 16	1 11	22 7	1 11	23 25	0 6	8 3	1 38	22 12	8 3	20 3	19 56	20 56	17 57	4 52			
S 13	14 40	20 1	0 0	18 21	1 30	8 26	7 35	21 46	0 54	11 19	1 11	22 7	1 11	23 25	0 6	8 4	1 38	22 12	8 3	20 3	19 55	20 58	17 57	4 52			
M14	14 21	23 8	1s 2	18 24	1 14	8 32	7 40	21 39	0 55	11 22	1 11	22 7	1 11	23 25	0 6	8 4	1 38	22 13	8 3	20 3	19 54	21 0	17 56	4 53			
T 15	14 3	25 16	2 2	18 25	0 58	8 38	7 45	21 32	0 55	11 25	1 11	22 7	1 11	23 25	0 6	8 5	1 38	22 13	8 3	20 2	19 53	21 2	17 56	4 53			
W16	13 44	26 15	2 57	18 24	0 43	8 45	7 48	21 24	0 56	11 27	1 11	22 7	1 10	23 25	0 6	8 5	1 38	22 14	8 3	20 1	19 53	21 4	17 56	4 53			
T 17	13 25	25 58	3 45	18 21	0 28	8 52	7 51	21 17	0 56	11 30	1 12	22 7	1 10	23 26	0 6	8 6	1 38	22 14	8 3	20 0	19 52	21 7	17 56	4 54			
F 18	13 6	24 21	4 23	18 15	0 13	8 59	7 53	21 9	0 57	11 33	1 12	22 8	1 10	23 26	0 6	8 6	1 38	22 15	8 3	19 58	19 51	21 9	17 56	4 54			
S 19	12 47	21 28	4 49	18 6	0n 0	9 7	7 54	21 2	0 57	11 36	1 12	22 8	1 10	23 26	0 6	8 7	1 38	22 15	8 3	19 55	19 51	21 11	17 56	4 55			
S 20	12 27	17 26	5 0	17 55	0 13	9 15	7 54	20 54	0 58	11 39	1 12	22 8	1 10	23 26	0 6	8 7	1 38	22 16	8 3	19 53	19 50	21 13	17 55	4 55			
M21	12 7	12 27	4 55	17 41	0 26	9 23	7 53	20 46	0 58	11 42	1 12	22 8	1 10	23 26	0 6	8 8	1 38	22 16	8 3	19 50	19 49	21 15	17 55	4 55			
T 22	11 47	6 47	4 33	17 24	0 37	9 31	7 52	20 37	0 59	11 45	1 12	22 8	1 9	23 26	0 6	8 8	1 38	22 17	8 3	19 48	19 49	21 17	17 55	4 56			
W23	11 27	0 42	3 54	17 4	0 48	9 39	7 50	20 29	0 59	11 48	1 12	22 8	1 9	23 26	0 6	8 9	1 37	22 17	8 3	19 46	19 48	21 19	17 55	4 56			
T 24	11 7	5n29	3 2	16 42	0 58	9 48	7 47	20 21	1 0	11 51	1 12	22 8	1 9	23 26	0 6	8 10	1 37	22 17	8 3	19 44	19 47	21 21	17 55	4 57			
F 25	10 46	11 26	1 58	16 17	1 7	9 56	7 44	20 12	1 0	11 54	1 12	22 9	1 9	23 26	0 6	8 10	1 37	22 18	8 3	19 44	19 46	21 24	17 54	4 57			
S 26	10 26	16 49	0 46	15 49	1 15	10 4	7 40	20 3	1 0	11 57	1 13	22 9	1 9	23 26	0 6	8 11	1 37	22 18	8 3	19 43	19 46	21 26	17 54	4 57			
S 27	10 5	21 18	0n28	15 19	1 22	10 12	7 35	19 54	1 1	12 0	1 13	22 9	1 8	23 26	0 6	8 11	1 37	22 19	8 3	19 43	19 45	21 28	17 54	4 58			
M28	9 44	24 31	1 41	14 47	1 28	10 20	7 30	19 45	1 1	12 2	1 13	22 9	1 8	23 26	0 6	8 12	1 37	22 19	8 3	19 43	19 44	21 30	17 54	4 58			
T 29	9 23	26 11	2 48	14 12	1 33	10 28	7 25	19 36	1 2	12 5	1 13	22 9	1 8	23 26	0 6	8 13	1 37	22 20	8 3	19 43	19 44	21 32	17 53	4 59			
W30	9 1	26 10	3 44	13 36	1 37	10 35	7 19	19 27	1 2	12 8	1 13	22 9	1 8	23 27	0 6	8 13	1 37	22 20	8 3	19 42	19 43	21 34	17 53	4 59			
T 31	8n40	24n29	4n26	12n57	1n41	10n43	7s13	19n17	1n 3	12s11	1s13	22s10	1n 8	23n27	0n 6	8s14	1n37	22s21	8s 3	19n40	19n42	21s36	17n53	5s 0			

ASTRODIENST EPHEMERIS for the year 2282  
geocentric

SEPTEMBER 2282

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	22 40 42	8♍41'04	13♌41	2♍11	10°D 8	8♌30	1°R 2	24♌29	25♌56	25♌14	20°R13	27°R47	28♌2	4♌42	17♌56	F 1
S 2	22 44 38	9°39'02	27°22	4°10	10♌8	9°9	0♌54	24°29	25°58	25°16	20°12	27°36	27°59	4°49	17°58	S 2
S 3	22 48 35	10°37'01	10♍49	6°9	10°11	9°47	0°46	24°30	26°0	25°17	20°10	27°23	27°56	4°56	18°0	S 3
M 4	22 52 31	11°35'02	23°59	8°8	10°15	10°25	0°39	24°30	26°1	25°19	20°9	27°12	27°52	5°2	18°1	M 4
T 5	22 56 28	12°33'04	6♌51	10°6	10°22	11°4	0°31	24°31	26°2	25°21	20°8	27°2	27°49	5°9	18°3	T 5
W 6	23 0 24	13°31'08	19°25	12°3	10°31	11°42	0°24	24°32	26°4	25°22	20°7	26°54	27°46	5°16	18°4	W 6
T 7	23 4 21	14°29'14	1♌41	14°0	10°42	12°20	0°16	24°33	26°5	25°24	20°6	26°49	27°43	5°22	18°5	T 7
F 8	23 8 17	15°27'20	13°45	15°55	10°55	12°58	0°9	24°34	26°6	25°26	20°4	26°46	27°40	5°29	18°6	F 8
S 9	23 12 14	16°25'29	25°38	17°50	11°10	13°37	0°2	24°35	26°7	25°28	20°3	26°D45	27°36	5°36	18°8	S 9
S 10	23 16 11	17°23'39	7♌27	19°43	11°28	14°15	29°55	24°36	26°9	25°30	20°2	26°45	27°33	5°42	18°9	S 10
M11	23 20 7	18°21'50	19°15	21°36	11°47	14°53	29°47	24°37	26°10	25°31	20°1	26°R46	27°30	5°49	18°10	M11
T 12	23 24 4	19°20'03	1♌10	23°27	12°8	15°31	29°40	24°38	26°11	25°33	20°0	26°45	27°27	5°56	18°11	T 12
W13	23 28 0	20°18'17	13°16	25°17	12°30	16°9	29°34	24°40	26°12	25°35	19°59	26°42	27°24	6°2	18°12	W13
T 14	23 31 57	21°16'33	25°38	27°6	12°55	16°47	29°27	24°41	26°13	25°37	19°57	26°38	27°21	6°9	18°12	T 14
F 15	23 35 53	22°14'50	8♌19	28°54	13°21	17°25	29°20	24°43	26°14	25°39	19°56	26°30	27°17	6°15	18°13	F 15
S 16	23 39 50	23°13'09	21°22	0♌41	13°48	18°2	29°13	24°44	26°14	25°41	19°55	26°21	27°14	6°22	18°14	S 16
S 17	23 43 46	24°11'29	4♌48	2°26	14°17	18°40	29°7	24°46	26°15	25°43	19°54	26°11	27°11	6°29	18°14	S 17
M18	23 47 43	25°9'51	18°35	4°11	14°48	19°18	29°1	24°48	26°16	25°45	19°53	26°1	27°8	6°35	18°15	M18
T 19	23 51 39	26°8'15	2♌39	5°54	15°20	19°56	28°54	24°50	26°17	25°47	19°52	25°52	27°5	6°42	18°15	T 19
W20	23 55 36	27°6'41	16°57	7°37	15°54	20°33	28°48	24°52	26°17	25°49	19°51	25°45	27°1	6°49	18°16	W20
T 21	23 59 33	28°5'09	1♌21	9°18	16°29	21°11	28°42	24°54	26°18	25°51	19°50	25°40	26°58	6°55	18°16	T 21
F 22	0 3 29	29°3'39	15°47	10°58	17°5	21°49	28°37	24°56	26°18	25°53	19°49	25°38	26°55	7°2	18°16	F 22
S 23	0 7 26	0♌21'11	0♌11	12°37	17°43	22°26	28°31	24°59	26°19	25°55	19°48	25°D37	26°52	7°9	18°17	S 23
S 24	0 11 22	1°0'45	14°28	14°15	18°21	23°4	28°26	25°1	26°19	25°57	19°47	25°38	26°49	7°15	18°17	S 24
M25	0 15 19	1°59'22	28°37	15°52	19°1	23°41	28°20	25°4	26°20	25°59	19°46	25°R39	26°46	7°22	18°17	M25
T 26	0 19 15	2°58'00	12♌37	17°29	19°42	24°19	28°15	25°6	26°20	26°1	19°45	25°39	26°42	7°29	18°17	T 26
W27	0 23 12	3°56'41	26°27	19°4	20°24	24°56	28°10	25°9	26°20	26°3	19°44	25°36	26°39	7°35	18°17	W27
T 28	0 27 8	4°55'25	10♌7	20°38	21°7	25°33	28°5	25°12	26°21	26°5	19°44	25°32	26°36	7°42	18°16	T 28
F 29	0 31 5	5°54'10	23°35	22°11	21°52	26°11	28°0	25°15	26°21	26°8	19°43	25°26	26°33	7°49	18°16	F 29
S 30	0 35 2	6♌52'57	6♌51	23♌43	22♌37	26♌48	27°56	25♌18	26♌21	26♌10	19°42	25♌18	26♌30	7♌55	18♌16	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	8n18	21n21	4n52	12n17	1n43	10n50	7s 6	19n 8	1n 3	12s14	1s13	22s10	1n 8	23n27	0n 6	8s14	1n37	22s21	8s 3	19n38	19n42	21s38	17n53	5s 0	
S 2	7 56	17 4	5 1	11 36	1 45	10 56	6 59	18 58	1 4	12 17	1 13	22 10	1 7	23 27	0 6	8 15	1 37	22 21	8 3	19 36	19 41	21 40	17 52	5 1	
S 3	7 35	12 1	4 53	10 53	1 46	11 3	6 52	18 48	1 4	12 19	1 13	22 10	1 7	23 27	0 6	8 16	1 37	22 22	8 3	19 33	19 40	21 42	17 52	5 1	
M 4	7 13	6 30	4 29	10 9	1 46	11 9	6 44	18 38	1 5	12 22	1 13	22 10	1 7	23 27	0 6	8 16	1 37	22 22	8 3	19 30	19 39	21 44	17 52	5 1	
T 5	6 50	0 50	3 52	9 24	1 46	11 15	6 37	18 28	1 5	12 25	1 13	22 11	1 7	23 27	0 6	8 17	1 37	22 23	8 3	19 28	19 39	21 46	17 51	5 2	
W 6	6 28	4s44	3 5	8 39	1 45	11 20	6 29	18 18	1 5	12 27	1 13	22 11	1 7	23 27	0 6	8 18	1 37	22 23	8 3	19 26	19 38	21 49	17 51	5 2	
T 7	6 6	10 1	2 9	7 52	1 43	11 25	6 21	18 8	1 6	12 30	1 13	22 11	1 6	23 27	0 6	8 18	1 37	22 23	8 3	19 25	19 37	21 51	17 51	5 3	
F 8	5 43	14 51	1 9	7 6	1 41	11 29	6 12	17 57	1 6	12 33	1 13	22 11	1 6	23 27	0 6	8 19	1 37	22 24	8 3	19 24	19 37	21 53	17 50	5 3	
S 9	5 21	19 3	0 6	6 18	1 38	11 33	6 4	17 47	1 7	12 35	1 13	22 12	1 6	23 27	0 6	8 20	1 37	22 24	8 3	19 24	19 36	21 55	17 50	5 4	
S 10	4 58	22 27	0s57	5 31	1 35	11 37	5 55	17 36	1 7	12 38	1 13	22 12	1 6	23 27	0 6	8 20	1 37	22 24	8 3	19 24	19 35	21 57	17 50	5 4	
M11	4 36	24 55	1 57	4 43	1 31	11 40	5 47	17 26	1 8	12 40	1 13	22 12	1 6	23 27	0 6	8 21	1 37	22 25	8 3	19 24	19 34	21 59	17 49	5 5	
T 12	4 13	26 17	2 53	3 56	1 27	11 43	5 38	17 15	1 8	12 43	1 13	22 12	1 6	23 27	0 6	8 22	1 37	22 25	8 3	19 24	19 34	22 1	17 49	5 5	
W13	3 50	26 25	3 42	3 8	1 22	11 45	5 29	17 4	1 9	12 45	1 13	22 12	1 5	23 27	0 6	8 22	1 37	22 25	8 3	19 23	19 33	22 3	17 48	5 6	
T 14	3 27	25 16	4 21	2 20	1 17	11 47	5 20	16 53	1 9	12 48	1 13	22 13	1 5	23 27	0 6	8 23	1 37	22 26	8 3	19 22	19 32	22 5	17 48	5 6	
F 15	3 4	22 48	4 49	1 32	1 12	11 48	5 12	16 42	1 9	12 50	1 13	22 13	1 5	23 27	0 6	8 24	1 37	22 26	8 3	19 21	19 32	22 7	17 48	5 6	
S 16	2 41	19 8	5 3	0 45	1 7	11 49	5 3	16 31	1 10	12 52	1 13	22 13	1 5	23 27	0 6	8 25	1 37	22 26	8 3	19 19	19 31	22 9	17 47	5 7	
S 17	2 18	14 24	5 1	0s 2	1 1	11 50	4 54	16 19	1 10	12 54	1 13	22 13	1 5	23 27	0 6	8 25	1 37	22 27	8 3	19 16	19 30	22 11	17 47	5 7	
M18	1 55	8 49	4 41	0 49	0 55	11 49	4 45	16 8	1 11	12 57	1 13	22 14	1 4	23 27	0 6	8 26	1 37	22 27	8 3	19 14	19 29	22 13	17 46	5 8	
T 19	1 32	2 41	4 4	1 36	0 49	11 49	4 36	15 56	1 11	12 59	1 13	22 14	1 4	23 28	0 6	8 27	1 37	22 27	8 3	19 12	19 29	22 15	17 46	5 8	
W20	1 9	3n42	3 12	2 22	0 42	11 47	4 27	15 45	1 12	13 1	1 13	22 14	1 4	23 28	0 6	8 28	1 37	22 27	8 3	19 10	19 28	22 17	17 46	5 9	
T 21	0 46	9 57	2 6	3 8	0 36	11 46	4 18	15 33	1 12	13 3	1 13	22 14	1 4	23 28	0 6	8 28	1 37	22 28	8 2	19 9	19 27	22 19	17 45	5 9	
F 22	0 22	15 42	0 53	3 53	0 29	11 43	4 10	15 22	1 12	13 5	1 13	22 15	1 4	23 28	0 6	8 29	1 37	22 28	8 2	19 8	19 26	22 21	17 45	5 10	
S 23	0s 1	20 33	0n24	4 38	0 22	11 41	4 1	15 10	1 13	13 7	1 13	22 15	1 4	23 28	0 6	8 30	1 37	22 28	8 2	19 8	19 26	22 23	17 44	5 10	
S 24	0 24	24 9	1 39	5 23	0 15	11 37	3 52	14 58	1 13	13 9	1 13	22 15	1 3	23 28	0 6	8 31	1 37	22 28	8 2	19 8	19 25	22 25	17 44	5 11	
M25	0 47	26 12	2 48	6 7	0 8	11 33	3 43	14 46	1 14	13 10	1 13	22 16	1 3	23 28	0 6	8 31	1 37	22 29	8 2	19 9	19 24	22 27	17 43	5 11	
T 26	1 11	26 32	3 45	6 50	0 1	11 29	3 35	14 34	1 14	13 12	1 13	22 16	1 3	23 28	0 7	8 32	1 37	22 29	8 2	19 9	19 23	22 29	17 43	5 12	
W27	1 34	25 14	4 29	7 33	0s 7	11 24	3 26	14 22	1 15	13 14	1 13	22 16	1 3	23 28	0 7	8 33	1 36	22 29	8 2	19 8	19 23	22 31	17 42	5 12	
T 28	1 57	22 26	4 56	8 16	0 14	11 19	3 18	14 10	1 15	13 15	1 13	22 16	1 3	23 28	0 7	8 34	1 36	22 29	8 2	19 7	19 22	22 32	17 42	5 12	
F 29	2 20	18 28	5 7	8 57	0 21	11 13	3 9	13 57	1 15	13 17	1 13	22 17	1 3	23 28	0 7	8 34	1 36	22 29	8 2	19 5	19 21	22 34	17 41	5 13	
S 30	2s44	13n38	5n 1	9s38	0s29	11n 6	3s 1	13n45	1n16	13s19	1s12	22s17	1n 2	23n28	0n 7	8s35	1n36	22s30	8s 2	19n 4	19n21	22s36	17n41	5s13	

# ASTRODIENST EPHEMERIS for the year 2282

## geocentric

OCTOBER 2282

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	0 38 58	7♂51'47	19♂55	25♂15	23♂23	27♂25	27°R51	25♂21	26♂21	26♂12	19°R41	25°R 9	26♂27	8♂2	18°R15	S 1
M 2	0 42 55	8°50'38	2♂44	26°45	24°10	28° 2	27°47	25°24	26°R21	26°14	19°40	25♂1	26°23	8° 8	18♂15	M 2
T 3	0 46 51	9°49'32	15°20	28°15	24°57	28°39	27°43	25°27	26°21	26°16	19°39	24°54	26°20	8°15	18°14	T 3
W 4	0 50 48	10°48'28	27°41	29°43	25°46	29°17	27°39	25°30	26°21	26°18	19°39	24°48	26°17	8°22	18°14	W 4
T 5	0 54 44	11°47'25	9♂50	1♂11	26°35	29°54	27°36	25°34	26°21	26°20	19°38	24°45	26°14	8°28	18°13	T 5
F 6	0 58 41	12°46'25	21°49	2°37	27°26	0♂31	27°32	25°37	26°21	26°23	19°37	24°D44	26°11	8°35	18°12	F 6
S 7	1 2 37	13°45'26	3♂39	4° 3	28°16	1° 8	27°29	25°41	26°20	26°25	19°37	24°44	26° 7	8°42	18°11	S 7
S 8	1 6 34	14°44'29	15°27	5°28	29° 8	1°44	27°26	25°45	26°20	26°27	19°36	24°46	26° 4	8°48	18°11	S 8
M 9	1 10 31	15°43'34	27°15	6°51	0♂0	2°21	27°23	25°48	26°20	26°29	19°35	24°47	26° 1	8°55	18°10	M 9
T 10	1 14 27	16°42'41	9♂8	8°14	0°53	2°58	27°20	25°52	26°19	26°31	19°35	24°48	25°58	9° 2	18° 9	T 10
W11	1 18 24	17°41'49	21°13	9°36	1°47	3°35	27°18	25°56	26°19	26°34	19°34	24°R49	25°55	9° 8	18° 7	W11
T 12	1 22 20	18°41'00	3♂33	10°56	2°41	4°12	27°15	26° 0	26°18	26°36	19°34	24°47	25°52	9°15	18° 6	T 12
F 13	1 26 17	19°40'12	16°13	12°15	3°36	4°48	27°13	26° 4	26°18	26°38	19°33	24°45	25°48	9°22	18° 5	F 13
S 14	1 30 13	20°39'25	29°18	13°33	4°32	5°25	27°11	26° 8	26°17	26°40	19°32	24°41	25°45	9°28	18° 4	S 14
S 15	1 34 10	21°38'41	12♂48	14°50	5°28	6° 2	27° 9	26°12	26°17	26°43	19°32	24°36	25°42	9°35	18° 2	S 15
M16	1 38 6	22°37'58	26°44	16° 5	6°24	6°38	27° 8	26°17	26°16	26°45	19°32	24°31	25°39	9°42	18° 1	M16
T 17	1 42 3	23°37'17	11♂3	17°19	7°21	7°15	27° 7	26°21	26°15	26°47	19°31	24°26	25°36	9°48	17°59	T 17
W18	1 46 0	24°36'38	25°40	18°31	8°19	7°51	27° 5	26°25	26°14	26°49	19°31	24°23	25°32	9°55	17°58	W18
T 19	1 49 56	25°36'01	10♂28	19°42	9°17	8°27	27° 4	26°30	26°14	26°51	19°30	24°20	25°29	10° 1	17°56	T 19
F 20	1 53 53	26°35'27	25°20	20°50	10°16	9° 4	27° 4	26°35	26°13	26°54	19°30	24°D20	25°26	10° 8	17°54	F 20
S 21	1 57 49	27°34'54	10♂8	21°57	11°15	9°40	27° 3	26°39	26°12	26°56	19°30	24°20	25°23	10°15	17°53	S 21
S 22	2 1 46	28°34'24	24°46	23° 1	12°14	10°16	27° 3	26°44	26°11	26°58	19°29	24°22	25°20	10°21	17°51	S 22
M23	2 5 42	29°33'57	9♂9	24° 4	13°15	10°52	27°D 3	26°49	26°10	27° 0	19°29	24°23	25°17	10°28	17°49	M23
T 24	2 9 39	0♂33'31	23°15	25° 3	14°15	11°29	27° 3	26°54	26° 9	27° 3	19°29	24°24	25°13	10°35	17°47	T 24
W25	2 13 35	1°33'08	7♂3	26° 0	15°16	12° 5	27° 3	26°58	26° 7	27° 5	19°28	24°R24	25°10	10°41	17°45	W25
T 26	2 17 32	2°32'47	20°33	26°53	16°17	12°41	27° 3	27° 3	26° 6	27° 7	19°28	24°23	25° 7	10°48	17°43	T 26
F 27	2 21 29	3°32'28	3♂45	27°43	17°19	13°17	27° 4	27° 8	26° 5	27° 9	19°28	24°21	25° 4	10°55	17°41	F 27
S 28	2 25 25	4°32'11	16°42	28°29	18°21	13°53	27° 5	27°14	26° 4	27°12	19°28	24°19	25° 1	11° 1	17°38	S 28
S 29	2 29 22	5°31'57	29°25	29°10	19°23	14°29	27° 6	27°19	26° 2	27°14	19°28	24°16	24°58	11° 8	17°36	S 29
M30	2 33 18	6°31'45	11♂54	29°47	20°26	15° 4	27° 7	27°24	26° 1	27°16	19°28	24°13	24°54	11°15	17°34	M30
T 31	2 37 15	7♂31'34	24♂13	0♂19	21♂29	15♂40	27°8 9	27♂29	26♂0	27♂18	19°28	24♂10	24♂51	11♂21	17♂31	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
S 1	3s 7	8n16	4n39	10s19	0s36	10n59	2s53	13n33	1n16	13s20	1s12	22s17	1n 2	23n28	0n 7	8s36	1n36	22s30	8s 2	19n 1	19n20	22s38	17n40	5s14	17s34
M 2	3 30	2 39	4 4	10 59	0 44	10 51	2 45	13 20	1 17	13 21	1 12	22 17	1 2	23 28	0 7	8 37	1 36	22 30	8 2	19 0	19 19	22 40	17 40	5 14	17 34
T 3	3 53	3s 0	3 17	11 38	0 51	10 43	2 37	13 8	1 17	13 23	1 12	22 18	1 2	23 28	0 7	8 38	1 36	22 30	8 1	18 58	19 18	22 42	17 39	5 15	17 35
W 4	4 16	8 26	2 21	12 16	0 58	10 35	2 29	12 55	1 17	13 24	1 12	22 18	1 2	23 28	0 7	8 38	1 36	22 30	8 1	18 57	19 18	22 44	17 39	5 15	17 35
T 5	4 39	13 29	1 20	12 54	1 6	10 26	2 21	12 42	1 18	13 25	1 12	22 18	1 2	23 28	0 7	8 39	1 36	22 30	8 1	18 56	19 17	22 46	17 38	5 16	17 36
F 6	5 2	17 56	0 16	13 30	1 13	10 16	2 13	12 30	1 18	13 26	1 12	22 19	1 1	23 28	0 7	8 40	1 36	22 31	8 1	18 55	19 16	22 48	17 38	5 16	17 36
S 7	5 25	21 39	0s48	14 6	1 20	10 6	2 5	12 17	1 19	13 27	1 12	22 19	1 1	23 28	0 7	8 41	1 36	22 31	8 1	18 55	19 15	22 50	17 37	5 17	17 37
S 8	5 48	24 26	1 50	14 42	1 27	9 55	1 58	12 4	1 19	13 28	1 12	22 19	1 1	23 28	0 7	8 42	1 36	22 31	8 1	18 56	19 15	22 52	17 37	5 17	17 37
M 9	6 11	26 10	2 48	15 16	1 34	9 44	1 50	11 51	1 20	13 29	1 12	22 19	1 1	23 28	0 7	8 42	1 36	22 31	8 1	18 56	19 14	22 53	17 36	5 18	17 38
T 10	6 34	26 43	3 39	15 50	1 41	9 32	1 43	11 39	1 20	13 30	1 11	22 20	1 1	23 28	0 7	8 43	1 36	22 31	8 1	18 57	19 13	22 55	17 36	5 18	17 38
W11	6 56	26 1	4 20	16 22	1 48	9 20	1 35	11 26	1 20	13 31	1 11	22 20	1 1	23 28	0 7	8 44	1 36	22 31	8 0	18 57	19 12	22 57	17 35	5 18	17 37
T 12	7 19	24 3	4 51	16 54	1 55	9 8	1 28	11 13	1 21	13 31	1 11	22 20	1 0	23 28	0 7	8 45	1 36	22 31	8 0	18 56	19 12	22 59	17 35	5 19	17 39
F 13	7 41	20 51	5 9	17 25	2 1	8 55	1 21	11 0	1 21	13 32	1 11	22 20	1 0	23 28	0 7	8 46	1 36	22 31	8 0	18 56	19 11	23 1	17 34	5 19	17 40
S 14	8 3	16 33	5 11	17 55	2 8	8 41	1 14	10 47	1 22	13 33	1 11	22 21	1 0	23 28	0 7	8 46	1 36	22 31	8 0	18 55	19 10	23 3	17 34	5 20	17 41
S 15	8 25	11 19	4 57	18 23	2 14	8 27	1 7	10 33	1 22	13 33	1 11	22 21	1 0	23 28	0 7	8 47	1 36	22 31	8 0	18 53	19 9	23 5	17 33	5 20	17 42
M16	8 48	5 21	4 25	18 51	2 20	8 13	1 0	10 20	1 22	13 33	1 11	22 21	1 0	23 28	0 7	8 48	1 36	22 31	8 0	18 52	19 9	23 7	17 33	5 21	17 43
T 17	9 9	1n 4	3 35	19 18	2 25	7 58	0 53	10 7	1 23	13 34	1 11	22 22	1 0	23 28	0 7	8 49	1 36	22 31	8 0	18 51	19 8	23 8	17 32	5 21	17 44
W18	9 31	7 34	2 31	19 44	2 31	7 43	0 47	9 54	1 23	13 34	1 11	22 22	1 0	23 28	0 7	8 50	1 36	22 31	8 0	18 50	19 7	23 10	17 31	5 21	17 45
T 19	9 53	13 45	1 15	20 8	2 36	7 27	0 40	9 41	1 24	13 34	1 10	22 22	0 59	23 28	0 7	8 50	1 36	22 31	7 59	18 50	19 6	23 12	17 31	5 22	17 46
F 20	10 14	19 10	0n 6	20 31	2 41	7 11	0 34	9 27	1 24	13 34	1 10	22 22	0 59	23 28	0 7	8 51	1 36	22 31	7 59	18 50	19 6	23 14	17 30	5 22	17 47
S 21	10 36	23 21	1 26	20 53	2 45	6 55	0 28	9 14	1 24	13 34	1 10	22 23	0 59	23 28	0 7	8 52	1 36	22 31	7 59	18 50	19 5	23 16	17 30	5 23	17 48
S 22	10 57	25 58	2 40	21 14	2 49	6 38	0 22	9 1	1 25	13 34	1 10	22 23	0 59	23 28	0 7	8 53	1 36	22 31	7 59	18 50	19 4	23 18	17 29	5 23	17 49
M23	11 18	26 47	3 42	21 33	2 53	6 20	0 16	8 47	1 25	13 34	1 10	22 23	0 59	23 28	0 7	8 54	1 36	22 31	7 59	18 50	19 3	23 19	17 29	5 23	17 50
T 24	11 39	25 50	4 30	21 51	2 56	6 3	0 10	8 34	1 26	13 34	1 10	22 23	0 59	23 28	0 7	8 54	1 36	22 31	7 59	18 51	19 3	23 21	17 28	5 24	17 51
W25	12 0	23 20	5 1	22 7	2 59	5 44	0 4	8 21	1 26	13 34	1 10	22 24	0 58	23 28	0 7	8 55	1 36	22 31	7 59	18 51	19 2	23 23	17 27	5 24	17 52
T 26	12 20	19 35	5 14	22 22	3 1	5 26	0n 2	8 7	1 26	13 34	1 9	22 24	0 58	23 28	0 7	8 56	1 36	22 31	7 58	18 50	19 1	23 25	17 27	5 25	17 53
F 27	12 41	14 56	5 11	22 35	3 3	5 7	0 7	7 54	1 27	13 33	1 9	22 24	0 58	23 28	0 7	8 57	1 36	22 31	7 58	18 50	19 0	23 26	17 26	5 25	17 54
S 28	13 1	9 43	4 52	22 47	3 4	4 48	0 13	7 40	1 27	13 33	1 9	22 24	0 58	23 28	0 7	8 58	1 36	22 31	7 58	18 49	18 59	23 28	17 26	5 25	17 55
S 29	13 21	4 11	4 18	22 56	3 4	4 28	0 18	7 27	1 27	13 32	1 9	22 25	0 58	23 28	0 7	8 58	1 36	22 31	7 58	18 49	18 59	23 30	17 25	5 26	17 56
M30	13 41	1s26	3 33	23 3	3 3	4 9	0 23	7 13	1 28	13 32	1 9	22 25	0 58	23 28	0 7	8 59	1 36	22 31	7 58	18 48	18 58	23 32	17 25	5 26	17 57
T 31	14s 0	6s55	2n38	23s 9	3s 2	3n49	0n29	7n 0	1n28	13s31	1s 9	22s25	0n58	23n28	0n 7	9s 0	1n36	22s31	7s58	18n47	18n57	23s34	17n24	5s27	17 58

ASTRODIENST EPHEMERIS for the year 2282  
geocentric

NOVEMBER 2282

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	2 41 11	8♍31'26	6♍21	0♋45	22♏33	16♏16	27♏10	27♏35	25°R58	27♏20	19°R28	24°R 9	24♋48	11♋28	17°R29	W 1
T 2	2 45 8	9°31'20	18°20	1° 4	23°36	16°52	27°12	27°40	25°II57	27°23	19°D28	24°D 8	24°45	11°35	17°II26	T 2
F 3	2 49 4	10°31'16	0♋13	1°17	24°41	17°27	27°14	27°46	25°55	27°25	19°≈28	24♋8	24°42	11°41	17°24	F 3
S 4	2 53 1	11°31'13	12° 1	1°R22	25°45	18° 3	27°17	27°51	25°54	27°27	19°28	24° 9	24°38	11°48	17°21	S 4
S 5	2 56 58	12°31'13	23°48	1°18	26°50	18°38	27°19	27°57	25°52	27°29	19°28	24°10	24°35	11°55	17°19	S 5
M 6	3 0 54	13°31'14	5♋36	1° 6	27°55	19°14	27°22	28° 2	25°50	27°31	19°28	24°11	24°32	12° 1	17°16	M 6
T 7	3 4 51	14°31'16	17°30	0°45	29° 0	19°49	27°25	28° 8	25°49	27°34	19°28	24°12	24°29	12° 8	17°13	T 7
W 8	3 8 47	15°31'21	29°33	0°14	0♎5	20°24	27°28	28°14	25°47	27°36	19°28	24°13	24°26	12°14	17°10	W 8
T 9	3 12 44	16°31'26	11≈50	29♍33	1°11	20°59	27°31	28°20	25°45	27°38	19°28	24°R13	24°23	12°21	17° 7	T 9
F 10	3 16 40	17°31'34	24°26	28°43	2°17	21°35	27°34	28°26	25°43	27°40	19°28	24°13	24°19	12°28	17° 4	F 10
S 11	3 20 37	18°31'43	7♋24	27°44	3°24	22°10	27°38	28°32	25°41	27°42	19°29	24°13	24°16	12°34	17° 2	S 11
S 12	3 24 33	19°31'53	20°48	26°38	4°30	22°45	27°42	28°38	25°39	27°44	19°29	24°12	24°13	12°41	16°59	S 12
M13	3 28 30	20°32'05	4♏40	25°25	5°37	23°20	27°46	28°44	25°38	27°46	19°29	24°12	24°10	12°48	16°56	M13
T 14	3 32 27	21°32'18	18°58	24° 7	6°44	23°55	27°50	28°50	25°36	27°48	19°29	24°11	24° 7	12°54	16°52	T 14
W15	3 36 23	22°32'33	3♋40	22°47	7°51	24°30	27°54	28°56	25°34	27°51	19°30	24°11	24° 4	13° 1	16°49	W15
T 16	3 40 20	23°32'50	18°40	21°28	8°59	25° 4	27°59	29° 2	25°32	27°53	19°30	24°11	24° 0	13° 8	16°46	T 16
F 17	3 44 16	24°33'08	3♎49	20°12	10° 6	25°39	28° 3	29° 8	25°29	27°55	19°31	24°11	23°57	13°14	16°43	F 17
S 18	3 48 13	25°33'28	18°59	19° 1	11°14	26°14	28° 8	29°14	25°27	27°57	19°31	24°11	23°54	13°21	16°40	S 18
S 19	3 52 9	26°33'50	3♎59	17°57	12°22	26°48	28°13	29°21	25°25	27°59	19°31	24°11	23°51	13°28	16°37	S 19
M20	3 56 6	27°34'14	18°43	17° 3	13°31	27°23	28°19	29°27	25°23	28° 1	19°32	24°10	23°48	13°34	16°33	M20
T 21	4 0 2	28°34'40	3♎5	16°20	14°39	27°57	28°24	29°33	25°21	28° 3	19°32	24°10	23°44	13°41	16°30	T 21
W22	4 3 59	29°35'07	17° 2	15°48	15°48	28°32	28°30	29°40	25°19	28° 5	19°33	24°10	23°41	13°48	16°27	W22
T 23	4 7 56	0♋35'36	0♏33	15°28	16°57	29° 6	28°36	29°46	25°16	28° 7	19°34	24°D10	23°38	13°54	16°23	T 23
F 24	4 11 52	1°36'07	13°42	15°D19	18° 6	29°40	28°42	29°53	25°14	28° 9	19°34	24°10	23°35	14° 1	16°20	F 24
S 25	4 15 49	2°36'40	26°29	15°22	19°15	0♎14	28°48	29°59	25°12	28°11	19°35	24°10	23°32	14° 8	16°17	S 25
S 26	4 19 45	3°37'15	8♎58	15°35	20°24	0°48	28°54	0♋6	25°10	28°12	19°35	24°11	23°29	14°14	16°13	S 26
M27	4 23 42	4°37'51	21°14	15°58	21°34	1°22	29° 0	0°12	25° 7	28°14	19°36	24°12	23°25	14°21	16°10	M27
T 28	4 27 38	5°38'29	3♎18	16°30	22°44	1°56	29° 7	0°19	25° 5	28°16	19°37	24°13	23°22	14°28	16° 6	T 28
W29	4 31 35	6°39'08	15°15	17° 9	23°54	2°30	29°14	0°26	25° 3	28°18	19°37	24°14	23°19	14°34	16° 3	W29
T 30	4 35 31	7♋39'49	27♎6	17♎56	25♎4	3♎4	29≈21	0♋32	25°II 0	28♎20	19≈38	24°R14	23♋16	14≈41	15°II59	T 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	14s19	12s 5	1n37	23s12	2s59	3n28	0n34	6n46	1n29	13s30	1s 9	22s25	0n58	23n28	0n 7	9s 1	1n36	22s30	7s58	18n47	18n56	23s35	17n23	5s27	
T 2	14 39	16 45	0 32	23 12	2 55	3 7	0 38	6 33	1 29	13 30	1 8	22 26	0 57	23 28	0 7	9 1	1 36	22 30	7 57	18 47	18 56	23 37	17 23	5 27	
F 3	14 57	20 43	0s34	23 10	2 51	2 46	0 43	6 19	1 29	13 29	1 8	22 26	0 57	23 28	0 7	9 2	1 36	22 30	7 57	18 47	18 55	23 39	17 22	5 28	
S 4	15 16	23 49	1 38	23 5	2 44	2 25	0 48	6 6	1 30	13 28	1 8	22 26	0 57	23 28	0 7	9 3	1 36	22 30	7 57	18 47	18 54	23 41	17 22	5 28	
S 5	15 34	25 53	2 37	22 57	2 37	2 3	0 52	5 52	1 30	13 27	1 8	22 26	0 57	23 27	0 7	9 4	1 37	22 30	7 57	18 47	18 53	23 42	17 21	5 28	
M 6	15 52	26 47	3 30	22 46	2 28	1 42	0 57	5 39	1 31	13 26	1 8	22 27	0 57	23 27	0 7	9 4	1 37	22 30	7 57	18 47	18 53	23 44	17 20	5 29	
T 7	16 10	26 28	4 15	22 31	2 17	1 20	1 1	5 25	1 31	13 25	1 8	22 27	0 57	23 27	0 7	9 5	1 37	22 29	7 57	18 48	18 52	23 46	17 20	5 29	
W 8	16 28	24 55	4 49	22 12	2 5	0 57	1 5	5 12	1 31	13 24	1 7	22 27	0 57	23 27	0 7	9 6	1 37	22 29	7 57	18 48	18 51	23 47	17 19	5 29	
T 9	16 45	22 11	5 10	21 50	1 51	0 35	1 9	4 58	1 32	13 22	1 7	22 27	0 56	23 27	0 7	9 7	1 37	22 29	7 56	18 48	18 50	23 49	17 19	5 30	
F 10	17 2	18 21	5 18	21 24	1 35	0 12	1 13	4 45	1 32	13 21	1 7	22 27	0 56	23 27	0 7	9 7	1 37	22 29	7 56	18 48	18 49	23 51	17 18	5 30	
S 11	17 19	13 34	5 9	20 54	1 18	0s11	1 17	4 31	1 33	13 20	1 7	22 28	0 56	23 27	0 7	9 8	1 37	22 29	7 56	18 48	18 49	23 53	17 18	5 30	
S 12	17 35	8 0	4 44	20 20	0 59	0 34	1 20	4 18	1 33	13 18	1 7	22 28	0 56	23 27	0 7	9 9	1 37	22 28	7 56	18 48	18 48	23 54	17 17	5 31	
M13	17 51	1 51	4 2	19 44	0 40	0 57	1 24	4 4	1 33	13 17	1 7	22 28	0 56	23 27	0 7	9 10	1 37	22 28	7 56	18 48	18 47	23 56	17 16	5 31	
T 14	18 7	4n35	3 4	19 5	0 20	1 20	1 27	3 51	1 34	13 15	1 7	22 28	0 56	23 27	0 7	9 10	1 37	22 28	7 56	18 47	18 46	23 58	17 16	5 31	
W15	18 23	10 58	1 52	18 25	0n 1	1 44	1 30	3 37	1 34	13 13	1 6	22 28	0 56	23 27	0 7	9 11	1 37	22 28	7 56	18 47	18 46	23 59	17 15	5 31	
T 16	18 38	16 52	0 31	17 45	0 22	2 7	1 33	3 24	1 34	13 12	1 6	22 28	0 56	23 27	0 7	9 12	1 37	22 27	7 55	18 47	18 45	24 1	17 15	5 32	
F 17	18 53	21 45	0n53	17 6	0 42	2 31	1 36	3 11	1 35	13 10	1 6	22 29	0 56	23 27	0 7	9 12	1 37	22 27	7 55	18 47	18 44	24 3	17 14	5 32	
S 18	19 7	25 10	2 14	16 29	1 0	2 55	1 39	2 57	1 35	13 8	1 6	22 29	0 55	23 27	0 7	9 13	1 37	22 27	7 55	18 47	18 43	24 4	17 14	5 32	
S 19	19 21	26 44	3 24	15 55	1 18	3 19	1 42	2 44	1 36	13 6	1 6	22 29	0 55	23 27	0 7	9 14	1 37	22 27	7 55	18 47	18 42	24 6	17 13	5 32	
M20	19 35	26 23	4 19	15 25	1 33	3 43	1 45	2 31	1 36	13 4	1 6	22 29	0 55	23 27	0 7	9 15	1 37	22 26	7 55	18 47	18 42	24 8	17 12	5 33	
T 21	19 49	24 15	4 57	14 59	1 47	4 7	1 47	2 17	1 36	13 2	1 6	22 29	0 55	23 27	0 7	9 15	1 37	22 26	7 55	18 47	18 41	24 9	17 12	5 33	
W22	20 2	20 43	5 15	14 39	1 59	4 31	1 50	2 4	1 37	13 0	1 5	22 29	0 55	23 27	0 7	9 16	1 37	22 26	7 54	18 47	18 40	24 11	17 11	5 33	
T 23	20 15	16 11	5 16	14 24	2 8	4 55	1 52	1 51	1 37	12 58	1 5	22 29	0 55	23 27	0 7	9 17	1 37	22 25	7 54	18 47	18 39	24 13	17 11	5 33	
F 24	20 27	11 1	5 0	14 14	2 16	5 20	1 54	1 37	1 37	12 56	1 5	22 29	0 55	23 26	0 7	9 17	1 37	22 25	7 54	18 47	18 38	24 14	17 10	5 34	
S 25	20 39	5 31	4 29	14 9	2 22	5 44	1 56	1 24	1 38	12 54	1 5	22 30	0 55	23 26	0 7	9 18	1 37	22 25	7 54	18 47	18 38	24 16	17 10	5 34	
S 26	20 51	0s 5	3 46	14 9	2 26	6 8	1 58	1 11	1 38	12 51	1 5	22 30	0 55	23 26	0 7	9 19	1 37	22 24	7 54	18 47	18 37	24 17	17 9	5 34	
M27	21 2	5 35	2 53	14 13	2 28	6 33	2 0	0 58	1 39	12 49	1 5	22 30	0 54	23 26	0 7	9 19	1 37	22 24	7 54	18 48	18 36	24 19	17 9	5 34	
T 28	21 13	10 49	1 54	14 22	2 29	6 57	2 2	0 45	1 39	12 46	1 5	22 30	0 54	23 26	0 7	9 20	1 37	22 24	7 54	18 48	18 35	24 21	17 8	5 34	
W29	21 23	15 36	0 50	14 33	2 29	7 21	2 3	0 32	1 39	12 44	1 4	22 30	0 54	23 26	0 7	9 20	1 37	22 23	7 53	18 48	18 35	24 22	17 8	5 35	
T 30	21s33	19s44	0s16	14s47	2n28	7s45	2n 5	0n19	1n40	12s41	1s 4	22s30	0n54	23n26	0n 7	9s21	1n37	22s23	7s53	18n48	18n34	24s24	17n 7	5s35	

ASTRODIENST EPHEMERIS for the year 2282  
geocentric

DECEMBER 2282

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
F 1	4 39 28	8♌40'32	8♌55	18♍49	26♎14	3♏38	29♐28	0♑39	24°R58	28♒22	19♓39	24°R14	23♈13	14♉48	15°R56	F 1
S 2	4 43 25	9°41'15	20°43	19°47	27°24	4°11	29°35	0°46	24♒55	28°24	19°40	24♒12	23°10	14°54	15°II52	S 2
S 3	4 47 21	10°42'00	2♊31	20°51	28°35	4°45	29°43	0°53	24°53	28°25	19°40	24°10	23° 6	15° 1	15°49	S 3
M 4	4 51 18	11°42'47	14°24	21°58	29°45	5°18	29°50	1° 0	24°50	28°27	19°41	24° 7	23° 3	15° 7	15°45	M 4
T 5	4 55 14	12°43'34	26°22	23° 9	0♋56	5°51	29°58	1° 6	24°48	28°29	19°42	24° 4	23° 0	15°14	15°41	T 5
W 6	4 59 11	13°44'22	8♌28	24°23	2° 7	6°25	0♈6	1°13	24°45	28°31	19°43	24° 1	22°57	15°21	15°38	W 6
T 7	5 3 7	14°45'12	20°47	25°39	3°18	6°58	0°14	1°20	24°43	28°32	19°44	23°59	22°54	15°27	15°34	T 7
F 8	5 7 4	15°46'02	3♋20	26°58	4°29	7°31	0°22	1°27	24°40	28°34	19°45	23°57	22°50	15°34	15°31	F 8
S 9	5 11 0	16°46'53	16°12	28°19	5°40	8° 4	0°31	1°34	24°38	28°36	19°46	23°D56	22°47	15°41	15°27	S 9
S 10	5 14 57	17°47'45	29°26	29°42	6°51	8°36	0°39	1°41	24°35	28°37	19°47	23°57	22°44	15°47	15°24	S 10
M 11	5 18 54	18°48'37	13°Y 5	1♌5	8° 2	9° 9	0°48	1°48	24°33	28°39	19°48	23°58	22°41	15°54	15°20	M 11
T 12	5 22 50	19°49'30	27°10	2°31	9°14	9°42	0°56	1°55	24°30	28°40	19°49	24° 0	22°38	16° 1	15°16	T 12
W 13	5 26 47	20°50'24	11♌40	3°57	10°26	10°14	1° 5	2° 2	24°28	28°42	19°50	24° 1	22°35	16° 7	15°13	W 13
T 14	5 30 43	21°51'19	26°33	5°24	11°37	10°47	1°14	2° 9	24°25	28°43	19°51	24°R 1	22°31	16°14	15° 9	T 14
F 15	5 34 40	22°52'15	11♒42	6°51	12°49	11°19	1°24	2°16	24°23	28°45	19°52	24° 0	22°28	16°21	15° 6	F 15
S 16	5 38 36	23°53'12	26°58	8°20	14° 1	11°51	1°33	2°23	24°20	28°46	19°53	23°58	22°25	16°27	15° 2	S 16
S 17	5 42 33	24°54'09	12♊11	9°49	15°13	12°23	1°42	2°30	24°18	28°48	19°54	23°54	22°22	16°34	14°59	S 17
M 18	5 46 30	25°55'07	27°11	11°18	16°25	12°55	1°52	2°37	24°15	28°49	19°56	23°49	22°19	16°41	14°55	M 18
T 19	5 50 26	26°56'07	11♒49	12°48	17°37	13°27	2° 1	2°44	24°12	28°51	19°57	23°44	22°16	16°47	14°52	T 19
W 20	5 54 23	27°57'07	26° 0	14°19	18°49	13°59	2°11	2°51	24°10	28°52	19°58	23°40	22°12	16°54	14°48	W 20
T 21	5 58 19	28°58'08	9♎42	15°49	20° 2	14°31	2°21	2°58	24° 7	28°53	19°59	23°37	22° 9	17° 1	14°45	T 21
F 22	6 2 16	29°59'10	22°55	17°20	21°14	15° 2	2°31	3° 5	24° 5	28°55	20° 1	23°35	22° 6	17° 7	14°42	F 22
S 23	6 6 12	1♊0'13	5♌43	18°51	22°27	15°34	2°41	3°12	24° 2	28°56	20° 2	23°D35	22° 3	17°14	14°38	S 23
S 24	6 10 9	2° 1'17	18° 9	20°23	23°39	16° 5	2°52	3°19	24° 0	28°57	20° 3	23°36	22° 0	17°21	14°35	S 24
M 25	6 14 5	3° 2'22	0♍19	21°55	24°52	16°36	3° 2	3°26	23°57	28°58	20° 4	23°37	21°56	17°27	14°31	M 25
T 26	6 18 2	4° 3'28	12°16	23°27	26° 5	17° 7	3°13	3°33	23°55	29° 0	20° 6	23°39	21°53	17°34	14°28	T 26
W 27	6 21 59	5° 4'34	24° 7	24°59	27°17	17°38	3°23	3°40	23°52	29° 1	20° 7	23°R40	21°50	17°41	14°25	W 27
T 28	6 25 55	6° 5'41	5♌54	26°31	28°30	18° 9	3°34	3°48	23°50	29° 2	20° 8	23°39	21°47	17°47	14°21	T 28
F 29	6 29 52	7° 6'49	17°40	28° 4	29°43	18°39	3°45	3°55	23°47	29° 3	20°10	23°36	21°44	17°54	14°18	F 29
S 30	6 33 48	8° 7'57	29°30	29°37	0♌56	19°10	3°56	4° 2	23°45	29° 4	20°11	23°30	21°41	18° 1	14°15	S 30
S 31	6 37 45	9♊9'05	11♊24	1♊10	2♌9	19♌40	4♈7	4♊9	23♒42	29♒5	20♓13	23♈23	21♉37	18♉7	14°II12	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	21s43	23s 5	1s20	15s 4	2n25	8s 9	2n 6	0n 6	1n40	12s39	1 s 4	22s30	0n54	23n26	0n 7	9s22	1n37	22s23	7s53	18n48	18n33	24s25	17n 7	5s35	
S 2	21 52	25 26	2 21	15 23	2 22	8 33	2 7	0s 7	1 40	12 36	1 4	22 30	0 54	23 26	0 7	9 22	1 37	22 22	7 53	18 48	18 32	24 27	17 6	5 35	
S 3	22 1	26 39	3 16	15 43	2 18	8 57	2 8	0 20	1 41	12 33	1 4	22 30	0 54	23 26	0 7	9 23	1 37	22 22	7 53	18 47	18 31	24 29	17 6	5 35	
M 4	22 9	26 39	4 3	16 5	2 13	9 21	2 9	0 33	1 41	12 30	1 4	22 30	0 54	23 26	0 7	9 23	1 37	22 21	7 53	18 46	18 31	24 30	17 5	5 35	
T 5	22 17	25 25	4 39	16 28	2 8	9 45	2 10	0 46	1 42	12 28	1 4	22 30	0 54	23 26	0 7	9 24	1 37	22 21	7 53	18 46	18 30	24 32	17 5	5 35	
W 6	22 25	23 0	5 4	16 52	2 2	10 9	2 11	0 59	1 42	12 25	1 4	22 30	0 54	23 26	0 8	9 25	1 37	22 21	7 53	18 45	18 29	24 33	17 4	5 36	
T 7	22 32	19 31	5 15	17 16	1 56	10 32	2 11	1 12	1 42	12 22	1 3	22 30	0 54	23 25	0 8	9 25	1 37	22 20	7 52	18 44	18 28	24 35	17 4	5 36	
F 8	22 39	15 6	5 11	17 40	1 50	10 55	2 12	1 24	1 43	12 19	1 3	22 30	0 53	23 25	0 8	9 26	1 38	22 20	7 52	18 44	18 27	24 36	17 3	5 36	
S 9	22 45	9 55	4 52	18 5	1 43	11 18	2 12	1 37	1 43	12 16	1 3	22 30	0 53	23 25	0 8	9 26	1 38	22 19	7 52	18 44	18 27	24 38	17 3	5 36	
S 10	22 51	4 9	4 17	18 29	1 36	11 41	2 13	1 49	1 43	12 13	1 3	22 30	0 53	23 25	0 8	9 27	1 38	22 19	7 52	18 44	18 26	24 39	17 2	5 36	
M 11	22 56	1n59	3 27	18 54	1 29	12 4	2 13	2 2	1 44	12 9	1 3	22 30	0 53	23 25	0 8	9 27	1 38	22 18	7 52	18 44	18 25	24 41	17 2	5 36	
T 12	23 1	8 14	2 22	19 18	1 22	12 27	2 13	2 14	1 44	12 6	1 3	22 30	0 53	23 25	0 8	9 28	1 38	22 18	7 52	18 45	18 24	24 42	17 1	5 36	
W 13	23 5	14 15	1 7	19 41	1 15	12 49	2 13	2 27	1 45	12 3	1 3	22 30	0 53	23 25	0 8	9 28	1 38	22 17	7 52	18 45	18 23	24 44	17 1	5 36	
T 14	23 9	19 35	0n14	20 4	1 7	13 11	2 13	2 39	1 45	12 0	1 3	22 30	0 53	23 25	0 8	9 29	1 38	22 17	7 52	18 45	18 22	24 45	17 1	5 36	
F 15	23 13	23 44	1 36	20 27	1 0	13 33	2 13	2 51	1 45	11 56	1 2	22 30	0 53	23 25	0 8	9 29	1 38	22 17	7 51	18 45	18 22	24 47	17 0	5 36	
S 16	23 16	26 13	2 51	20 48	0 52	13 55	2 12	3 3	1 46	11 53	1 2	22 30	0 53	23 25	0 8	9 30	1 38	22 16	7 51	18 44	18 21	24 48	17 0	5 36	
S 17	23 18	26 44	3 54	21 9	0 45	14 16	2 12	3 16	1 46	11 49	1 2	22 30	0 53	23 24	0 8	9 30	1 38	22 16	7 51	18 43	18 20	24 50	16 59	5 36	
M 18	23 20	25 15	4 39	21 29	0 37	14 37	2 12	3 28	1 46	11 46	1 2	22 30	0 53	23 24	0 8	9 31	1 38	22 15	7 51	18 42	18 19	24 51	16 59	5 36	
T 19	23 22	22 6	5 6	21 49	0 30	14 58	2 11	3 40	1 47	11 42	1 2	22 30	0 53	23 24	0 8	9 31	1 38	22 15	7 51	18 41	18 18	24 53	16 59	5 36	
W 20	23 23	17 43	5 12	22 7	0 22	15 18	2 10	3 52	1 47	11 39	1 2	22 30	0 52	23 24	0 8	9 32	1 38	22 14	7 51	18 40	18 18	24 54	16 58	5 36	
T 21	23 24	12 33	5 0	22 24	0 15	15 38	2 10	4 4	1 48	11 35	1 2	22 30	0 52	23 24	0 8	9 32	1 38	22 14	7 51	18 39	18 17	24 56	16 58	5 36	
F 22	23 24	6 59	4 33	22 41	0 8	15 58	2 9	4 15	1 48	11 31	1 2	22 30	0 52	23 24	0 8	9 32	1 38	22 13	7 51	18 38	18 16	24 57	16 57	5 36	
S 23	23 24	1 17	3 52	22 56	0 0	16 18	2 8	4 27	1 48	11 27	1 2	22 30	0 52	23 24	0 8	9 33	1 38	22 13	7 51	18 38	18 15	24 59	16 57	5 36	
S 24	23 23	4s19	3 1	23 10	0s 7	16 37	2 7	4 39	1 49	11 24	1 1	22 30	0 52	23 24	0 8	9 33	1 38	22 12	7 50	18 39	18 14	25 0	16 57	5 36	
M 25	23 22	9 38	2 4	23 23	0 14	16 55	2 6	4 50	1 49	11 20	1 1	22 29	0 52	23 24	0 8	9 34	1 38	22 12	7 50	18 39	18 14	25 1	16 56	5 36	
T 26	23 21	14 31	1 2	23 35	0 21	17 14	2 4	5 2	1 49	11 16	1 1	22 29	0 52	23 24	0 8	9 34	1 38	22 11	7 50	18 39	18 13	25 3	16 56	5 36	
W 27	23 18	18 49	0s 2	23 46	0 27	17 32	2 3	5 13	1 50	11 12	1 1	22 29	0 52	23 23	0 8	9 34	1 38	22 11	7 50	18 40	18 12	25 4	16 56	5 36	
T 28	23 16	22 20	1 6	23 55	0 34	17 49	2 2	5 25	1 50	11 8	1 1	22 29	0 52	23 23	0 8	9 35	1 39	22 10	7 50	18 39	18 11	25 6	16 56	5 36	
F 29	23 13	24 56	2 7	24 4	0 40	18 6	2 0	5 36	1 50	11 4	1 1	22 29	0 52	23 23	0 8	9 35	1 39	22 10	7 50	18 39	18 10	25 7	16 55	5 36	
S 30	23 9	26 26	3 2	24 11	0 47	18 23	1 59	5 47	1 51	11 0	1 1	22 29	0 52	23 23	0 8	9 35	1 39	22 9	7 50	18 37	18 9	25 9	16 55	5 36	
S 31	23s 5	26s43	3s49	24s17	0s53	18s39	1n57	5s58	1n51	10s56	1 s 1	22s29	0n52	23n23	0n 8	9s36	1n39	22s 8	7s50	18n36	18n 9	25s10	16n55	5s36	