



Astrodienst Ephemeris Tables for the year 1487

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 1487

geocentric

JANUARY 1487 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	7 16 22	19°36'33	24°59	18°33	28°38	11°R58	23°18	18°6	3°55	17°25	21°37	24°54	26°33	0°34	8°18	M 1
T 2	7 20 19	20°37'40	7°52	20°13	29°53	11°II52	23°32	18°12	3°59	17°27	21°38	24°55	26°30	0°41	8°19	T 2
W 3	7 24 15	21°38'46	21°5	21°53	1°8	11°47	23°46	18°18	4°2	17°29	21°38	24°R56	26°26	0°48	8°21	W 3
T 4	7 28 12	22°39'51	4°43	23°34	2°23	11°43	24°0	18°25	4°6	17°31	21°39	24°55	26°23	0°55	8°22	T 4
F 5	7 32 8	23°40'55	18°46	25°15	3°38	11°39	24°14	18°31	4°9	17°33	21°39	24°53	26°20	1°1	8°23	F 5
S 6	7 36 5	24°41'58	3°II15	26°57	4°53	11°37	24°28	18°37	4°12	17°35	21°39	24°50	26°17	1°8	8°25	S 6
S 7	7 40 2	25°43'00	18°4	28°40	6°8	11°35	24°43	18°43	4°16	17°37	21°40	24°46	26°14	1°15	8°27	S 7
M 8	7 43 58	26°44'01	3°8	0°23	7°23	11°34	24°57	18°49	4°19	17°39	21°40	24°42	26°10	1°21	8°28	M 8
T 9	7 47 55	27°45'01	18°18	2°6	8°38	11°D34	25°11	18°55	4°23	17°40	21°40	24°38	26°7	1°28	8°30	T 9
W10	7 51 51	28°46'01	3°II25	3°50	9°53	11°35	25°25	19°1	4°26	17°42	21°40	24°35	26°4	1°35	8°31	W10
T 11	7 55 48	29°46'59	18°18	5°35	11°8	11°36	25°39	19°7	4°29	17°44	21°41	24°D34	26°1	1°41	8°33	T 11
F 12	7 59 44	0°47'56	2°II50	7°19	12°23	11°38	25°54	19°13	4°33	17°46	21°41	24°34	25°58	1°48	8°35	F 12
S 13	8 3 41	1°48'53	16°57	9°5	13°38	11°41	26°8	19°19	4°36	17°48	21°41	24°35	25°55	1°55	8°37	S 13
S 14	8 7 38	2°49'48	0°II36	10°50	14°53	11°44	26°22	19°25	4°39	17°49	21°41	24°37	25°51	2°2	8°39	S 14
M15	8 11 34	3°50'43	13°48	12°36	16°9	11°48	26°36	19°30	4°43	17°51	21°R41	24°38	25°48	2°8	8°41	M15
T 16	8 15 31	4°51'37	26°36	14°22	17°24	11°53	26°50	19°36	4°46	17°53	21°41	24°39	25°45	2°15	8°43	T 16
W17	8 19 27	5°52'30	9°II4	16°8	18°39	11°59	27°4	19°42	4°49	17°55	21°41	24°R39	25°42	2°22	8°45	W17
T 18	8 23 24	6°53'23	21°16	17°54	19°54	12°5	27°18	19°47	4°52	17°56	21°41	24°39	25°39	2°28	8°47	T 18
F 19	8 27 20	7°54'15	3°II16	19°39	21°9	12°12	27°32	19°53	4°55	17°58	21°41	24°37	25°36	2°35	8°49	F 19
S 20	8 31 17	8°55'05	15°10	21°24	22°24	12°20	27°46	19°58	4°58	17°59	21°40	24°35	25°32	2°42	8°51	S 20
S 21	8 35 13	9°55'55	26°59	23°8	23°39	12°28	28°0	20°4	5°2	18°1	21°40	24°33	25°29	2°48	8°53	S 21
M22	8 39 10	10°56'44	8°II49	24°50	24°54	12°37	28°15	20°9	5°5	18°3	21°40	24°30	25°26	2°55	8°56	M22
T 23	8 43 7	11°57'31	20°42	26°31	26°9	12°46	28°29	20°14	5°8	18°4	21°40	24°28	25°23	3°2	8°58	T 23
W24	8 47 3	12°58'17	2°II41	28°11	27°24	12°56	28°43	20°19	5°11	18°6	21°40	24°27	25°20	3°9	9°0	W24
T 25	8 51 0	13°59'02	14°47	29°47	28°39	13°7	28°56	20°24	5°14	18°7	21°39	24°26	25°16	3°15	9°3	T 25
F 26	8 54 56	14°59'45	27°1	1°II21	29°54	13°18	29°10	20°29	5°17	18°9	21°39	24°D26	25°13	3°22	9°5	F 26
S 27	8 58 53	16°0'27	9°II26	2°52	1°II9	13°29	29°24	20°34	5°20	18°10	21°38	24°26	25°10	3°29	9°8	S 27
S 28	9 2 49	17°1'08	22°3	4°18	2°24	13°42	29°38	20°39	5°23	18°11	21°38	24°27	25°7	3°35	9°10	S 28
M29	9 6 46	18°1'46	4°II53	5°40	3°39	13°55	29°52	20°44	5°26	18°13	21°37	24°28	25°4	3°42	9°13	M29
T 30	9 10 42	19°2'23	17°57	6°56	4°54	14°8	0°II6	20°49	5°28	18°14	21°37	24°28	25°1	3°49	9°15	T 30
W31	9 14 39	20°2'58	1°II17	8°II6	6°II9	14°II22	0°II20	20°54	5°31	18°15	21°36	24°II29	24°II57	3°II55	9°II18	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
M 1	22s 4	0n24	2n37	24s 9	1s57	23s10	0n21	25n24	3n 9	21s51	0s22	21s41	1n18	23s43	0s16	21s34	1n21	7n23	17n 4	13s16	12s42	27s46	4n53	1n43			
T 2	21 55	6 24	3 33	23 57	1 59	23 13	0 18	25 23	3 9	21 48	0 22	21 42	1 18	23 43	0 16	21 34	1 21	7 23	17 4	13 15	12 43	27 46	4 53	1 43			
W 3	21 46	12 16	4 20	23 43	2 1	23 15	0 15	25 22	3 8	21 46	0 22	21 42	1 18	23 43	0 16	21 34	1 21	7 24	17 5	13 15	12 44	27 45	4 54	1 43			
T 4	21 36	17 44	4 54	23 28	2 3	23 17	0 13	25 21	3 8	21 44	0 22	21 43	1 18	23 43	0 16	21 35	1 21	7 24	17 5	13 15	12 45	27 45	4 54	1 43			
F 5	21 26	22 26	5 11	23 10	2 4	23 17	0 10	25 20	3 7	21 41	0 22	21 43	1 18	23 43	0 16	21 35	1 21	7 25	17 6	13 16	12 46	27 44	4 54	1 43			
S 6	21 15	25 55	5 9	22 52	2 4	23 18	0 7	25 20	3 7	21 39	0 22	21 44	1 18	23 43	0 16	21 35	1 21	7 25	17 6	13 17	12 48	27 44	4 55	1 42			
S 7	21 4	27 45	4 48	22 31	2 5	23 17	0 5	25 19	3 6	21 36	0 22	21 44	1 18	23 43	0 16	21 35	1 21	7 25	17 7	13 18	12 49	27 43	4 55	1 42			
M 8	20 52	27 34	4 6	22 9	2 5	23 16	0 2	25 18	3 6	21 34	0 22	21 45	1 18	23 43	0 16	21 35	1 21	7 26	17 8	13 20	12 50	27 43	4 56	1 42			
T 9	20 40	25 19	3 6	21 46	2 4	23 14	0s 0	25 18	3 5	21 31	0 22	21 45	1 18	23 43	0 16	21 35	1 21	7 26	17 8	13 21	12 51	27 42	4 56	1 42			
W10	20 28	21 17	1 54	21 20	2 3	23 11	0 3	25 17	3 5	21 29	0 22	21 46	1 18	23 42	0 16	21 35	1 21	7 27	17 9	13 22	12 52	27 41	4 57	1 42			
T 11	20 15	15 56	0 34	20 53	2 1	23 8	0 6	25 17	3 4	21 26	0 22	21 46	1 18	23 42	0 16	21 36	1 21	7 27	17 9	13 22	12 53	27 41	4 57	1 42			
F 12	20 2	9 47	0s45	20 25	1 59	23 4	0 8	25 16	3 4	21 24	0 23	21 47	1 18	23 42	0 16	21 36	1 21	7 28	17 10	13 22	12 54	27 40	4 58	1 41			
S 13	19 49	3 20	2 0	19 54	1 56	22 59	0 11	25 16	3 3	21 21	0 23	21 47	1 18	23 42	0 16	21 36	1 21	7 28	17 10	13 22	12 55	27 40	4 59	1 41			
S 14	19 35	3s 4	3 6	19 22	1 53	22 53	0 13	25 16	3 2	21 19	0 23	21 47	1 18	23 42	0 16	21 36	1 21	7 29	17 11	13 21	12 56	27 39	4 59	1 41			
M15	19 21	9 8	3 59	18 49	1 49	22 47	0 16	25 16	3 2	21 16	0 23	21 48	1 18	23 42	0 16	21 36	1 21	7 29	17 12	13 21	12 57	27 38	5 0	1 41			
T 16	19 6	14 37	4 39	18 14	1 45	22 40	0 18	25 16	3 1	21 14	0 23	21 48	1 18	23 42	0 16	21 36	1 21	7 30	17 12	13 20	12 58	27 38	5 0	1 41			
W17	18 51	19 21	5 4	17 38	1 40	22 33	0 21	25 16	3 0	21 11	0 23	21 49	1 18	23 42	0 17	21 36	1 21	7 30	17 13	13 20	12 59	27 37	5 1	1 41			
T 18	18 36	23 11	5 15	17 0	1 34	22 24	0 23	25 16	2 59	21 8	0 23	21 49	1 18	23 42	0 17	21 37	1 21	7 31	17 13	13 21	13 0	27 36	5 2	1 41			
F 19	18 21	25 58	5 12	16 21	1 27	22 16	0 25	25 16	2 59	21 6	0 23	21 49	1 18	23 41	0 17	21 37	1 21	7 31	17 14	13 21	13 2	27 36	5 2	1 40			
S 20	18 5	27 34	4 56	15 41	1 20	22 6	0 28	25 16	2 58	21 3	0 23	21 50	1 18	23 41	0 17	21 37	1 21	7 32	17 14	13 22	13 3	27 35	5 3	1 40			
S 21	17 49	27 55	4 27	14 59	1 12	21 56	0 30	25 17	2 57	21 0	0 23	21 50	1 18	23 41	0 17	21 37	1 21	7 33	17 15	13 23	13 4	27 34	5 4	1 40			
M22	17 32	26 59	3 46	14 17	1 4	21 45	0 32	25 17	2 56	20 57	0 24	21 51	1 18	23 41	0 17	21 37	1 21	7 33	17 16	13 23	13 5	27 34	5 5	1 40			
T 23	17 15	24 48	2 56	13 34	0 54	21 33	0 35	25 18	2 55	20 55	0 24	21 51	1 18	23 41	0 17	21 37	1 21	7 34	17 16	13 24	13 6	27 33	5 5	1 40			
W24	16 58	21 31	1 58	12 50	0 44	21 21	0 37	25 18	2 55	20 52	0 24	21 51	1 18	23 41	0 17	21 37	1 21	7 34	17 17	13 25	13 7	27 32	5 6	1 40			
T 25	16 41	17 18	0 53	12 6	0 33	21 8	0 39	25 19	2 54	20 49	0 24	21 52	1 18	23 41	0 17	21 37	1 22	7 35	17 17	13 25	13 8	27 32	5 7	1 39			
F 26	16 23	12 19	0n14	11 21	0 21	20 54	0 41	25 19	2 53	20 46	0 24	21 52	1 18	23 41	0 17	21 37	1 22	7 36	17 18	13 25	13 9	27 31	5 8	1 39			
S 27	16 5	6 47	1 22	10 37	0 9	20 40	0 43	25 20	2 52	20 44	0 24	21 52	1 18	23 41	0 17	21 37	1 22	7 36	17 18	13 25	13 10	27 30	5 9	1 39			
S 28	15 47	0 54	2 27	9 54	0n 4	20 25	0 46	25 21	2 51	20 41	0 24	21 53	1 18	23 41	0 17	21 38	1 22	7 37	17 19	13 25	13 11	27 29	5 10	1 39			
M29	15 28	5n 6	3 26	9 11	0 18	20 10	0 48	25 21	2 51	20 38	0 24	21 53	1 18	23 40	0 17	21 38	1 22	7 38	17 19	13 24	13 12	27 29	5 11	1 39			
T 30	15 9	10 59	4 15	8 30	0 32	19 54	0 50	25 22	2 50	20 35	0 24	21 53	1 18	23 40	0 17	21 38	1 22	7 38	17 20	13 24	13 13	27 28	5 11	1 39			
W31	14s50	16n31	4n52	7s50	0n47	19s37	0s52	25n23	2n49	20s32	0s25	21s53	1n18	23s40	0s17	21s38	1n22	7n39	17n20	13s24	13s14	27s27	5n12	1n39			

ASTRODIENST EPHEMERIS for the year 1487

geocentric

FEBRUARY 1487 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	9 18 36	21≈ 3'32	14♂55	9♂10	7≈24	14Ⅲ36	0≈33	20♂58	5♂34	18♂17	21°R36	24≈29	24≈54	4♂2	9♀21	T 1	
F 2	9 22 32	22° 4'04	28°49	10° 6	8°39	14°51	0°47	21° 3	5°37	18°18	21♁35	24°R29	24°51	4° 9	9°23	F 2	
S 3	9 26 29	23° 4'33	13Ⅱ 1	10°53	9°54	15° 7	1° 1	21° 7	5°40	18°19	21°35	24°29	24°48	4°15	9°26	S 3	
S 4	9 30 25	24° 5'01	27°28	11°32	11° 8	15°22	1°15	21°12	5°42	18°20	21°34	24°D29	24°45	4°22	9°29	S 4	
M 5	9 34 22	25° 5'27	12♁ 6	12° 2	12°23	15°39	1°28	21°16	5°45	18°21	21°33	24°29	24°42	4°29	9°32	M 5	
T 6	9 38 18	26° 5'51	26°51	12°22	13°38	15°55	1°42	21°20	5°47	18°23	21°33	24°29	24°38	4°36	9°35	T 6	
W 7	9 42 15	27° 6'14	11♂36	12°32	14°53	16°13	1°55	21°25	5°50	18°24	21°32	24°29	24°35	4°42	9°38	W 7	
T 8	9 46 11	28° 6'34	26°13	12°R32	16° 8	16°30	2° 9	21°29	5°53	18°25	21°31	24°R29	24°32	4°49	9°41	T 8	
F 9	9 50 8	29° 6'52	10♐37	12°23	17°23	16°48	2°22	21°33	5°55	18°26	21°30	24°29	24°29	4°56	9°43	F 9	
S 10	9 54 5	0♂ 7'09	24°42	12° 4	18°38	17° 7	2°36	21°37	5°58	18°27	21°29	24°29	24°26	5° 2	9°46	S 10	
S 11	9 58 1	1° 7'24	8♁24	11°35	19°53	17°25	2°49	21°41	6° 0	18°28	21°28	24°28	24°22	5° 9	9°50	S 11	
M12	10 1 58	2° 7'38	21°42	10°59	21° 8	17°44	3° 2	21°44	6° 2	18°29	21°27	24°27	24°19	5°16	9°53	M12	
T 13	10 5 54	3° 7'50	4♐37	10°15	22°22	18° 4	3°16	21°48	6° 5	18°30	21°27	24°26	24°16	5°22	9°56	T 13	
W14	10 9 51	4° 8'00	17°10	9°24	23°37	18°24	3°29	21°52	6° 7	18°31	21°26	24°25	24°13	5°29	9°59	W14	
T 15	10 13 47	5° 8'09	29°26	8°29	24°52	18°44	3°42	21°55	6° 9	18°31	21°25	24°25	24°10	5°36	10° 2	T 15	
F 16	10 17 44	6° 8'17	11♂29	7°30	26° 7	19° 5	3°55	21°59	6°12	18°32	21°24	24°D25	24° 7	5°42	10° 5	F 16	
S 17	10 21 40	7° 8'23	23°23	6°30	27°22	19°26	4° 8	22° 2	6°14	18°33	21°22	24°25	24° 3	5°49	10° 8	S 17	
S 18	10 25 37	8° 8'27	5♂13	5°28	28°37	19°47	4°21	22° 5	6°16	18°34	21°21	24°26	24° 0	5°56	10°12	S 18	
M19	10 29 34	9° 8'29	17° 3	4°27	29°51	20° 9	4°34	22° 8	6°18	18°35	21°20	24°28	23°57	6° 2	10°15	M19	
T 20	10 33 30	10° 8'30	28°59	3°29	1♂ 6	20°31	4°47	22°12	6°20	18°35	21°19	24°29	23°54	6° 9	10°18	T 20	
W21	10 37 27	11° 8'29	11≈ 3	2°33	2°21	20°53	5° 0	22°15	6°22	18°36	21°18	24°30	23°51	6°16	10°22	W21	
T 22	10 41 23	12° 8'26	23°19	1°42	3°36	21°15	5°13	22°17	6°24	18°37	21°17	24°R31	23°48	6°23	10°25	T 22	
F 23	10 45 20	13° 8'21	5♂48	0°56	4°50	21°38	5°25	22°20	6°26	18°37	21°16	24°30	23°44	6°29	10°28	F 23	
S 24	10 49 16	14° 8'15	18°31	0°15	6° 5	22° 1	5°38	22°23	6°28	18°38	21°14	24°29	23°41	6°36	10°32	S 24	
S 25	10 53 13	15° 8'06	1♀30	29≈40	7°20	22°25	5°50	22°26	6°30	18°38	21°13	24°26	23°38	6°43	10°35	S 25	
M26	10 57 9	16° 7'55	14°43	29°12	8°35	22°49	6° 3	22°28	6°31	18°39	21°12	24°23	23°35	6°49	10°38	M26	
T 27	11 1 6	17° 7'42	28°10	28°50	9°49	23°13	6°15	22°31	6°33	18°39	21°10	24°20	23°32	6°56	10°42	T 27	
W28	11 5 2	18♂ 7'27	11♂49	28≈34	11♂ 4	23Ⅱ37	6≈28	22♂33	6♂35	18♂40	21♁ 9	24≈17	23≈28	7♂3	10♀45	W28	

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	14s31	21n20	5n13	7s12	1n 2	19s20	0s54	25n24	2n48	20s29	0s25	21s54	1n19	23s40	0s17	21s38	1n22
F 2	14 12 25 6	5 17 6 37	1 18 19 3	0 55 25 25	2 47 20 27	0 25 21 54	1 19 23 40	0 17 21 38	1 22 7 40	17 21 13 24	13 17 27 26	5 14 1 38					
S 3	13 52 27 24	5 1 6 4	1 33 18 44	0 57 25 26	2 46 20 24	0 25 21 54	1 19 23 40	0 17 21 38	1 22 7 41	17 22 13 24	13 18 27 25	5 15 1 38					
S 4	13 32 27 55	4 26 5 35	1 49 18 26	0 59 25 26	2 45 20 21	0 25 21 54	1 19 23 40	0 17 21 38	1 22 7 42	17 22 13 24	13 19 27 24	5 16 1 38					
M 5	13 12 26 31	3 34 5 9	2 4 18 6	1 1 25 27	2 44 20 18	0 25 21 55	1 19 23 40	0 17 21 38	1 22 7 42	17 23 13 24	13 20 27 23	5 17 1 38					
T 6	12 51 23 16	2 28 4 47	2 19 17 47	1 3 25 28	2 44 20 15	0 25 21 55	1 19 23 40	0 17 21 38	1 22 7 43	17 23 13 24	13 21 27 22	5 18 1 38					
W 7	12 31 18 29	1 11 4 30	2 34 17 26	1 4 25 29	2 43 20 12	0 25 21 55	1 19 23 40	0 17 21 38	1 22 7 44	17 24 13 24	13 22 27 22	5 19 1 38					
T 8	12 10 12 40	0s10 4 17	2 48 17 5	1 6 25 30	2 42 20 9	0 26 21 55	1 19 23 40	0 17 21 38	1 22 7 45	17 24 13 24	13 23 27 21	5 20 1 38					
F 9	11 49 6 15	1 28 4 9	3 1 16 44	1 7 25 31	2 41 20 6	0 26 21 55	1 19 23 39	0 17 21 38	1 22 7 45	17 25 13 24	13 24 27 20	5 21 1 37					
S 10	11 28 0s20	2 40 4 6	3 12 16 22	1 9 25 32	2 40 20 3	0 26 21 56	1 19 23 39	0 17 21 38	1 22 7 46	17 25 13 24	13 25 27 19	5 22 1 37					
S 11	11 6 6 43	3 40 4 7	3 22 16 0	1 10 25 33	2 39 20 0	0 26 21 56	1 19 23 39	0 17 21 39	1 22 7 47	17 26 13 24	13 26 27 18	5 23 1 37					
M 12	10 45 12 36	4 27 4 14	3 30 15 38	1 12 25 34	2 38 19 57	0 26 21 56	1 19 23 39	0 17 21 39	1 22 7 48	17 26 13 25	13 27 27 17	5 25 1 37					
T 13	10 23 17 46	4 58 4 24	3 37 15 15	1 13 25 35	2 38 19 55	0 26 21 56	1 19 23 39	0 17 21 39	1 22 7 48	17 27 13 25	13 28 27 17	5 26 1 37					
W 14	10 1 22 2	5 14 4 39	3 41 14 51	1 14 25 36	2 37 19 52	0 26 21 56	1 19 23 39	0 17 21 39	1 22 7 49	17 27 13 25	13 29 27 16	5 27 1 37					
T 15	9 39 25 13	5 16 4 57	3 44 14 27	1 15 25 37	2 36 19 49	0 26 21 57	1 19 23 39	0 17 21 39	1 22 7 50	17 28 13 25	13 30 27 15	5 28 1 37					
F 16	9 17 27 13	5 3 5 19	3 44 14 3	1 16 25 38	2 35 19 46	0 27 21 57	1 19 23 39	0 17 21 39	1 22 7 51	17 28 13 25	13 31 27 14	5 29 1 37					
S 17	8 55 27 58	4 37 5 43	3 42 13 38	1 18 25 39	2 34 19 43	0 27 21 57	1 19 23 39	0 17 21 39	1 22 7 51	17 28 13 25	13 32 27 13	5 30 1 36					
S 18	8 32 27 24	4 0 6 9	3 38 13 13	1 19 25 40	2 33 19 40	0 27 21 57	1 19 23 39	0 17 21 39	1 22 7 52	17 29 13 25	13 33 27 12	5 31 1 36					
M 19	8 10 25 36	3 13 6 37	3 32 12 48	1 19 25 41	2 32 19 37	0 27 21 57	1 19 23 39	0 17 21 39	1 22 7 53	17 29 13 24	13 35 27 11	5 33 1 36					
T 20	7 47 22 39	2 17 7 5	3 24 12 22	1 20 25 41	2 32 19 34	0 27 21 57	1 20 23 38	0 17 21 39	1 22 7 54	17 30 13 24	13 36 27 10	5 34 1 36					
W 21	7 24 18 41	1 14 7 34	3 15 11 56	1 21 25 42	2 31 19 31	0 27 21 57	1 20 23 38	0 17 21 39	1 22 7 54	17 30 13 24	13 37 27 9	5 35 1 36					
T 22	7 2 13 53	0 7 8 2	3 4 11 29	1 22 25 43	2 30 19 28	0 27 21 57	1 20 23 38	0 17 21 39	1 23 7 55	17 30 13 23	13 38 27 9	5 36 1 36					
F 23	6 39 8 27	1n 2 8 30	2 52 11 3	1 23 25 43	2 29 19 25	0 28 21 58	1 20 23 38	0 17 21 39	1 23 7 56	17 31 13 24	13 39 27 8	5 37 1 36					
S 24	6 16 2 35	2 9 8 56	2 39 10 36	1 23 25 44	2 28 19 22	0 28 21 58	1 20 23 38	0 17 21 39	1 23 7 57	17 31 13 24	13 40 27 7	5 39 1 36					
S 25	5 52 3n30	3 10 9 21	2 16 10 8	1 24 25 45	2 27 19 19	0 28 21 58	1 20 23 38	0 17 21 39	1 23 7 58	17 32 13 25	13 41 27 6	5 40 1 35					
M 26	5 29 9 32	4 2 9 44	2 12 9 41	1 24 25 45	2 27 19 16	0 28 21 58	1 20 23 38	0 17 21 39	1 23 7 58	17 32 13 26	13 42 27 5	5 41 1 35					
T 27	5 6 15 14	4 42 10 5	1 57 9 13	1 25 25 45	2 26 19 13	0 28 21 58	1 20 23 38	0 17 21 39	1 23 7 59	17 32 13 27	13 43 27 4	5 42 1 35					
W 28	4s42 20n17	5n 7 10s24	1n42 8s45	1s25 25n46	2n25 19s10	0s28 21s58	1n20 23s38	0s17 21s39	1n23 8n 0	17n33 13s28	13s44 27s 3	5n44 1n35					

Julian Day Number = 2264215.5, Delta T = 05m18s

Ecliptic obliquity = 23°30'29", Nutation = 0°00'11", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 17°35'02", Lahiri = 16°42'03" Julian Calendar 1 Feb. 1487 == Greg. Calendar 10 Feb. 1487

ASTRODIENST EPHEMERIS for the year 1487

geocentric

MARCH 1487 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	11 8 59	19° 7'09	25° 3'39	28° R25	12° 1'19	24° 11	6° 40	22° 35	6° 37	18° 40	21° R 8	24° R14	23° 25	7° 9	10° 49	T 1
F 2	11 12 56	20° 6'50	9° 11'38	28° D22	13° 3'33	24° 26	6° 52	22° 38	6° 38	18° 40	21° 6	24° 12	23° 22	7° 16	10° 52	F 2
S 3	11 16 52	21° 6'28	23° 44	28° 25	14° 48	24° 51	7° 4	22° 40	6° 40	18° 41	21° 5	24° D12	23° 19	7° 23	10° 56	S 3
S 4	11 20 49	22° 6'04	7° 56	28° 34	16° 3	25° 16	7° 16	22° 42	6° 41	18° 41	21° 4	24° 13	23° 16	7° 29	10° 59	S 4
M 5	11 24 45	23° 5'37	22° 12	28° 48	17° 17	25° 42	7° 28	22° 44	6° 43	18° 41	21° 2	24° 14	23° 13	7° 36	11° 3	M 5
T 6	11 28 42	24° 5'08	6° 12	29° 7	18° 32	26° 8	7° 40	22° 45	6° 44	18° 42	21° 1	24° 16	23° 9	7° 43	11° 7	T 6
W 7	11 32 38	25° 4'37	20° 46	29° 32	19° 47	26° 34	7° 52	22° 47	6° 45	18° 42	20° 59	24° R16	23° 6	7° 49	11° 10	W 7
T 8	11 36 35	26° 4'03	4° 17	0° 1	21° 1	27° 0	8° 4	22° 49	6° 47	18° 42	20° 58	24° 16	23° 3	7° 56	11° 14	T 8
F 9	11 40 31	27° 3'27	18° 58	0° 34	22° 16	27° 26	8° 16	22° 50	6° 48	18° 42	20° 56	24° 14	23° 0	8° 3	11° 17	F 9
S 10	11 44 28	28° 2'49	2° 46	1° 12	23° 30	27° 53	8° 27	22° 52	6° 49	18° 42	20° 55	24° 10	22° 57	8° 10	11° 21	S 10
S 11	11 48 25	29° 2'09	16° 18	1° 53	24° 45	28° 19	8° 39	22° 53	6° 50	18° 42	20° 53	24° 5	22° 54	8° 16	11° 25	S 11
M12	11 52 21	0° 1'27	29° 31	2° 38	25° 59	28° 46	8° 50	22° 54	6° 52	18° R42	20° 52	23° 59	22° 50	8° 23	11° 28	M12
T 13	11 56 18	1° 0'43	12° 25	3° 27	27° 14	29° 14	9° 1	22° 55	6° 53	18° 42	20° 50	23° 53	22° 47	8° 30	11° 32	T 13
W14	12 0 14	1° 59'58	24° 59	4° 19	28° 28	29° 41	9° 13	22° 56	6° 54	18° 42	20° 49	23° 47	22° 44	8° 36	11° 36	W14
T 15	12 4 11	2° 59'10	7° 17	5° 14	29° 43	0° 8	9° 24	22° 57	6° 55	18° 42	20° 47	23° 43	22° 41	8° 43	11° 39	T 15
F 16	12 8 7	3° 58'21	19° 21	6° 12	0° 57	0° 36	9° 35	22° 58	6° 56	18° 42	20° 45	23° 40	22° 38	8° 50	11° 43	F 16
S 17	12 12 4	4° 57'30	1° 16	7° 12	2° 12	1° 4	9° 46	22° 59	6° 56	18° 42	20° 44	23° D38	22° 34	8° 56	11° 47	S 17
S 18	12 16 0	5° 56'37	13° 7	8° 16	3° 26	1° 32	9° 56	23° 0	6° 57	18° 42	20° 42	23° 39	22° 31	9° 3	11° 50	S 18
M19	12 19 57	6° 55'42	24° 58	9° 22	4° 40	2° 0	10° 7	23° 0	6° 58	18° 41	20° 41	23° 40	22° 28	9° 10	11° 54	M19
T 20	12 23 54	7° 54'45	6° 55	10° 30	5° 55	2° 29	10° 18	23° 0	6° 59	18° 41	20° 39	23° 41	22° 25	9° 16	11° 58	T 20
W21	12 27 50	8° 53'47	19° 2	11° 41	7° 9	2° 57	10° 28	23° 1	6° 59	18° 41	20° 37	23° R42	22° 22	9° 23	12° 1	W21
T 22	12 31 47	9° 52'46	1° 25	12° 53	8° 24	3° 26	10° 39	23° 1	7° 0	18° 41	20° 36	23° 42	22° 19	9° 30	12° 5	T 22
F 23	12 35 43	10° 51'44	14° 5	14° 8	9° 38	3° 55	10° 49	23° 1	7° 1	18° 40	20° 34	23° 40	22° 15	9° 36	12° 9	F 23
S 24	12 39 40	11° 50'40	27° 5	15° 25	10° 52	4° 24	10° 59	23° R 1	7° 1	18° 40	20° 32	23° 36	22° 12	9° 43	12° 13	S 24
S 25	12 43 36	12° 49'34	10° 25	16° 44	12° 7	4° 53	11° 10	23° 1	7° 2	18° 40	20° 31	23° 30	22° 9	9° 50	12° 16	S 25
M26	12 47 33	13° 48'25	24° 4	18° 5	13° 21	5° 22	11° 20	23° 1	7° 2	18° 39	20° 29	23° 22	22° 6	9° 56	12° 20	M26
T 27	12 51 29	14° 47'15	7° 58	19° 28	14° 35	5° 52	11° 29	23° 1	7° 2	18° 39	20° 27	23° 13	22° 3	10° 3	12° 24	T 27
W28	12 55 26	15° 46'03	22° 4	20° 53	15° 50	6° 22	11° 39	23° 0	7° 3	18° 38	20° 26	23° 5	21° 59	10° 10	12° 27	W28
T 29	12 59 23	16° 44'48	6° 11	22° 19	17° 4	6° 51	11° 49	23° 0	7° 3	18° 38	20° 24	22° 58	21° 56	10° 16	12° 31	T 29
F 30	13 3 19	17° 43'32	20° 32	23° 47	18° 18	7° 21	11° 58	22° 59	7° 3	18° 37	20° 22	22° 53	21° 53	10° 23	12° 35	F 30
S 31	13 7 16	18° 42'13	4° 46	25° 17	19° 32	7° 51	12° 8	22° 59	7° 3	18° 37	20° 21	22° 50	21° 50	10° 30	12° 39	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
T 1	4s19	24n18	5n14	10s41	1n28	8s17	1s26	25n46	2n24	19s 7	0s28	21s58	1n20	23s38	0s17	T 1
F 2	3 56	26 57	5 3	10 56	1 13	7 48	1 26	25 47	2 23	19 4	0 29	21 58	1 20	23 38	0 17	F 2
S 3	3 32	27 55	4 33	11 8	0 59	7 20	1 26	25 47	2 22	19 1	0 29	21 58	1 20	23 38	0 17	S 3
S 4	3 9	27 3	3 47	11 19	0 45	6 51	1 26	25 47	2 22	18 58	0 29	21 58	1 20	23 38	0 17	S 4
M 5	2 45	24 25	2 47	11 27	0 31	6 22	1 26	25 47	2 21	18 55	0 29	21 58	1 20	23 38	0 17	M 5
T 6	2 21	20 15	1 36	11 33	0 17	5 52	1 26	25 47	2 20	18 52	0 29	21 58	1 20	23 38	0 17	T 6
W 7	1 58	14 55	0 19	11 36	0 4	5 23	1 26	25 47	2 19	18 50	0 29	21 58	1 21	23 38	0 17	W 7
T 8	1 34	8 49	0s58	11 38	0s 8	4 53	1 26	25 47	2 18	18 47	0 29	21 58	1 21	23 38	0 18	T 8
F 9	1 10	2 22	2 11	11 37	0 20	4 24	1 26	25 47	2 18	18 44	0 30	21 58	1 21	23 37	0 18	F 9
S 10	0 47	4s 5	3 15	11 35	0 32	3 54	1 26	25 46	2 17	18 41	0 30	21 58	1 21	23 37	0 18	S 10
S 11	0 23	10 13	4 6	11 30	0 43	3 24	1 25	25 46	2 16	18 38	0 30	21 58	1 21	23 37	0 18	S 11
M12	0n 1	15 44	4 43	11 24	0 54	2 54	1 25	25 45	2 15	18 35	0 30	21 58	1 21	23 37	0 18	M12
T 13	0 24	20 26	5 4	11 16	1 4	2 24	1 25	25 45	2 14	18 32	0 30	21 58	1 21	23 37	0 18	T 13
W14	0 48	24 5	5 10	11 6	1 13	1 54	1 24	25 44	2 14	18 30	0 30	21 58	1 21	23 37	0 18	W14
T 15	1 11	26 33	5 2	10 54	1 22	1 24	1 24	25 43	2 13	18 27	0 31	21 58	1 21	23 37	0 18	T 15
F 16	1 35	27 44	4 10	10 40	1 31	0 53	1 23	25 43	2 12	18 24	0 31	21 58	1 21	23 37	0 18	F 16
S 17	1 59	27 36	4 6	10 25	1 39	0 23	1 22	25 42	2 11	18 21	0 31	21 58	1 21	23 37	0 18	S 17
S 18	2 22	26 13	3 22	10 8	1 46	0n 7	1 22	25 41	2 11	18 18	0 31	21 58	1 21	23 37	0 18	S 18
M19	2 45	23 39	2 29	9 50	1 53	0 38	1 21	25 39	2 10	18 16	0 31	21 58	1 21	23 37	0 18	M19
T 20	3 9	20 3	1 30	9 30	1 59	1 8	1 20	25 38	2 9	18 13	0 31	21 58	1 21	23 37	0 18	T 20
W21	3 32	15 33	0 25	9 8	2 5	1 38	1 19	25 37	2 8	18 10	0 32	21 58	1 21	23 37	0 18	W21
T 22	3 55	10 21	0n42	8 45	2 11	2 9	1 18	25 35	2 8	18 8	0 32	21 58	1 22	23 37	0 18	T 22
F 23	4 19	4 37	1 48	8 20	2 15	2 39	1 17	25 34	2 7	18 5	0 32	21 58	1 22	23 37	0 18	F 23
S 24	4 42	1n26	2 50	7 54	2 20	3 9	1 16	25 32	2 6	18 2	0 32	21 58	1 22	23 37	0 18	S 24
S 25	5 5	7 34	3 44	7 27	2 23	3 39	1 15	25 30	2 5	18 0	0 32	21 58	1 22	23 37	0 18	S 25
M26	5 28	13 30	4 27	6 58	2 26	4 9	1 13	25 28	2 5	17 57	0 33	21 58	1 22	23 37	0 18	M26
T 27	5 51	18 51	4 55	6 28	2 29	4 39	1 12	25 26	2 4	17 55	0 33	21 58	1 22	23 37	0 18	T 27
W28	6 13	23 15	5 6	5 56	2 31	5 9	1 11	25 24	2 3	17 52	0 33	21 58	1 22	23 37	0 18	W28
T 29	6 36	26 18	4 58	5 24	2 33	5 39	1 10	25 22	2 2	17 49	0 33	21 57	1 22	23 37	0 18	T 29
F 30	6 59	27 41	4 31	4 50	2 34	6 9	1 8	25 20	2 2	17 47	0 33	21 57	1 22	23 37	0 18	F 30
S 31	7n21	27n13	3n48	4s14	2s34	6n38	1s 7	25n17	2n 1	17s45	0s33	21s57	1n22	23s37	0s18	S 31

Julian Day Number = 2264243.5, Delta T = 05m18s

Ecliptic obliquity = 23°30'29", Nutation = 0°00'10", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 17°35'06", Lahiri = 16°42'07" Julian Calendar 1 March 1487 == Greg. Calendar 10 March 1487

ASTRODIENST EPHEMERIS for the year 1487
geocentric

APRIL 1487 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	13 11 12	19°40'52	18°56	26°49	20°47	8°22	12°17	22°R58	7°3	18°R36	20°R19	22°D49	21°47	10°37	12°42	S 1
M 2	13 15 9	20°39'28	3°0	28°22	22°1	8°52	12°26	22°A57	7°3	18°A35	20°A17	22°A49	21°44	10°43	12°46	M 2
T 3	13 19 5	21°38'02	17°0	29°57	23°15	9°22	12°35	22°56	7°R 3	18°35	20°16	22°R50	21°40	10°50	12°50	T 3
W 4	13 23 2	22°36'34	0°52	1°34	24°29	9°53	12°44	22°55	7°3	18°34	20°14	22°50	21°37	10°57	12°53	W 4
T 5	13 26 58	23°35'04	14°36	3°12	25°43	10°24	12°53	22°54	7°3	18°33	20°12	22°48	21°34	11°3	12°57	T 5
F 6	13 30 55	24°33'31	28°12	4°52	26°57	10°54	13°2	22°53	7°3	18°32	20°10	22°44	21°31	11°10	13°1	F 6
S 7	13 34 52	25°31'57	11°36	6°34	28°12	11°25	13°10	22°52	7°3	18°32	20°9	22°36	21°28	11°17	13°4	S 7
S 8	13 38 48	26°30'21	24°49	8°18	29°26	11°56	13°19	22°50	7°3	18°31	20°7	22°27	21°25	11°23	13°8	S 8
M 9	13 42 45	27°28'42	7°47	10°3	0°40	12°27	13°27	22°49	7°2	18°30	20°5	22°16	21°21	11°30	13°11	M 9
T 10	13 46 41	28°27'02	20°30	11°50	1°54	12°59	13°35	22°47	7°2	18°29	20°4	22°4	21°18	11°37	13°15	T 10
W 11	13 50 38	29°25'20	2°59	13°39	3°8	13°30	13°43	22°45	7°2	18°28	20°2	21°53	21°15	11°43	13°19	W 11
T 12	13 54 34	0°23'37	15°13	15°29	4°22	14°1	13°51	22°44	7°1	18°27	20°0	21°44	21°12	11°50	13°22	T 12
F 13	13 58 31	1°21'52	27°15	17°21	5°36	14°33	13°59	22°42	7°1	18°26	19°59	21°36	21°9	11°57	13°26	F 13
S 14	14 2 27	2°20'06	9°3	19°15	6°50	15°4	14°6	22°40	7°0	18°25	19°57	21°32	21°5	12°3	13°29	S 14
S 15	14 6 24	3°18'17	20°59	21°10	8°4	15°36	14°14	22°38	7°0	18°24	19°55	21°29	21°2	12°10	13°33	S 15
M 16	14 10 21	4°16'28	2°50	23°8	9°18	16°8	14°21	22°36	6°59	18°23	19°54	21°D28	20°59	12°17	13°37	M 16
T 17	14 14 17	5°14'37	14°46	25°7	10°32	16°40	14°28	22°34	6°58	18°22	19°52	21°R28	20°56	12°23	13°40	T 17
W 18	14 18 14	6°12'44	26°54	27°7	11°46	17°12	14°35	22°31	6°57	18°21	19°51	21°28	20°53	12°30	13°44	W 18
T 19	14 22 10	7°10'50	9°19	29°9	13°0	17°44	14°42	22°29	6°57	18°20	19°49	21°27	20°50	12°37	13°47	T 19
F 20	14 26 7	8°8'54	22°4	1°13	14°14	18°16	14°49	22°27	6°56	18°19	19°47	21°24	20°46	12°43	13°50	F 20
S 21	14 30 3	9°6'57	5°13	3°18	15°28	18°49	14°56	22°24	6°55	18°18	19°46	21°18	20°43	12°50	13°54	S 21
S 22	14 34 0	10°4'58	18°48	5°25	16°41	19°21	15°2	22°21	6°54	18°17	19°44	21°10	20°40	12°57	13°57	S 22
M 23	14 37 56	11°2'58	2°46	7°33	17°55	19°53	15°8	22°19	6°53	18°16	19°43	20°59	20°37	13°3	14°1	M 23
T 24	14 41 53	12°0'57	17°4	9°41	19°9	20°26	15°14	22°16	6°52	18°14	19°41	20°48	20°34	13°10	14°4	T 24
W 25	14 45 50	12°58'54	1°36	11°51	20°23	20°59	15°20	22°13	6°51	18°13	19°40	20°37	20°31	13°17	14°8	W 25
T 26	14 49 46	13°56'49	16°15	14°1	21°37	21°31	15°26	22°10	6°50	18°12	19°38	20°27	20°27	13°23	14°11	T 26
F 27	14 53 43	14°54'43	0°54	16°12	22°51	22°4	15°32	22°7	6°49	18°11	19°37	20°19	20°24	13°30	14°14	F 27
S 28	14 57 39	15°52'35	15°26	18°23	24°5	22°37	15°37	22°4	6°48	18°9	19°35	20°14	20°21	13°37	14°17	S 28
S 29	15 1 36	16°50'25	29°46	20°34	25°18	23°10	15°43	22°1	6°46	18°8	19°34	20°12	20°18	13°43	14°21	S 29
M 30	15 5 32	17°48'13	13°53	22°44	26°32	23°43	15°48	21°58	6°45	18°7	19°32	20°12	20°15	13°50	14°24	M 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
S 1	7n43	24n59	2n51	3s38	2s34	7n 8	1s 5	25n15	2n 0	17s42	0s34	21s57	1n22	23s37	0s18	21s37	1n24	8n23	17n38	13s57	14s17	26s28	6n27	1n33	
M 2	8 5	21 14	1 44	3 0	2 34	7 37	1 4	25 12	2 0	17 40	0 34	21 57	1 22	23 37	0 18	21 37	1 24	8 24	17 38	13 57	14 18	26 27	6 28	1 32	
T 3	8 27	16 17	0 31	2 21	2 33	8 6	1 2	25 9	1 59	17 37	0 34	21 57	1 22	23 37	0 18	21 37	1 24	8 24	17 38	13 57	14 19	26 25	6 30	1 32	
W 4	8 49	10 32	0s43	1 41	2 31	8 35	1 0	25 6	1 58	17 35	0 34	21 57	1 22	23 37	0 18	21 37	1 24	8 25	17 38	13 57	14 20	26 24	6 31	1 32	
T 5	9 11	4 20	1 54	1 0	2 29	9 4	0 59	25 3	1 57	17 33	0 34	21 57	1 22	23 37	0 18	21 37	1 24	8 25	17 38	13 57	14 21	26 23	6 33	1 32	
F 6	9 33	1s59	2 57	0 18	2 27	9 32	0 57	25 0	1 57	17 30	0 35	21 57	1 22	23 37	0 18	21 37	1 24	8 26	17 38	13 59	14 22	26 22	6 34	1 32	
S 7	9 54	8 7	3 49	0n25	2 23	10 0	0 55	24 57	1 56	17 28	0 35	21 57	1 22	23 37	0 18	21 37	1 24	8 27	17 38	14 1	14 23	26 20	6 35	1 32	
S 8	10 15	13 48	4 29	1 10	2 20	10 28	0 53	24 53	1 55	17 26	0 35	21 56	1 23	23 37	0 18	21 37	1 24	8 27	17 38	14 4	14 24	26 19	6 37	1 32	
M 9	10 36	18 46	4 53	1 55	2 16	10 56	0 51	24 50	1 55	17 24	0 35	21 56	1 23	23 37	0 18	21 37	1 24	8 28	17 38	14 8	14 25	26 18	6 38	1 32	
T 10	10 57	22 47	5 2	2 41	2 11	11 24	0 49	24 46	1 54	17 22	0 35	21 56	1 23	23 38	0 18	21 36	1 24	8 28	17 38	14 12	14 26	26 17	6 39	1 32	
W 11	11 18	25 40	4 57	3 28	2 6	11 51	0 47	24 42	1 53	17 19	0 36	21 56	1 23	23 38	0 18	21 36	1 24	8 29	17 38	14 15	14 27	26 15	6 41	1 32	
T 12	11 39	27 17	4 38	4 16	2 0	12 18	0 45	24 38	1 53	17 17	0 36	21 56	1 23	23 38	0 18	21 36	1 24	8 29	17 37	14 18	14 28	26 14	6 42	1 32	
F 13	11 59	27 35	4 7	5 5	1 54	12 45	0 43	24 34	1 52	17 15	0 36	21 56	1 23	23 38	0 18	21 36	1 24	8 30	17 37	14 21	14 30	26 13	6 44	1 32	
S 14	12 19	26 36	3 25	5 54	1 47	13 11	0 41	24 30	1 51	17 13	0 36	21 56	1 23	23 38	0 18	21 36	1 24	8 30	17 37	14 22	14 31	26 11	6 45	1 32	
S 15	12 39	24 25	2 35	6 44	1 40	13 37	0 39	24 25	1 51	17 11	0 36	21 55	1 23	23 38	0 18	21 36	1 24	8 31	17 37	14 23	14 32	26 10	6 46	1 32	
M 16	12 59	21 10	1 37	7 35	1 32	14 3	0 37	24 21	1 50	17 9	0 37	21 55	1 23	23 38	0 18	21 36	1 24	8 31	17 37	14 23	14 33	26 9	6 48	1 32	
T 17	13 18	17 1	0 36	8 26	1 24	14 28	0 35	24 16	1 49	17 7	0 37	21 55	1 23	23 38	0 18	21 36	1 24	8 32	17 37	14 23	14 34	26 8	6 49	1 32	
W 18	13 38	12 8	0n29	9 18	1 16	14 53	0 33	24 12	1 49	17 6	0 37	21 55	1 23	23 38	0 18	21 36	1 24	8 32	17 37	14 23	14 35	26 6	6 50	1 32	
T 19	13 57	6 40	1 33	10 10	1 7	15 18	0 31	24 7	1 48	17 4	0 37	21 55	1 23	23 38	0 19	21 35	1 25	8 32	17 36	14 24	14 36	26 5	6 52	1 32	
F 20	14 16	0 47	2 35	11 2	0 58	15 42	0 28	24 2	1 47	17 2	0 38	21 55	1 23	23 38	0 19	21 35	1 25	8 33	17 36	14 25	14 37	26 4	6 53	1 32	
S 21	14 35	5n17	3 30	11 54	0 48	16 6	0 26	23 57	1 47	17 0	0 38	21 54	1 23	23 38	0 19	21 35	1 25	8 33	17 36	14 26	14 38	26 2	6 54	1 32	
S 22	14 53	11 18	4 15	12 46	0 38	16 30	0 24	23 51	1 46	16 59	0 38	21 54	1 23	23 38	0 19	21 35	1 25	8 34	17 36	14 29	14 39	26 1	6 56	1 32	
M 23	15 11	16 56	4 46	13 38	0 28	16 53	0 21	23 46	1 45	16 57	0 38	21 54	1 23	23 38	0 19	21 35	1 25	8 34	17 36	14 33	14 40	25 59	6 57	1 31	
T 24	15 29	21 46	5 0	14 29	0 18	17 15	0 19	23 40	1 45	16 55	0 38	21 54	1 23	23 38	0 19	21 35	1 25	8 34	17 35	14 36	14 41	25 58	6 58	1 31	
W 25	15 47	25 21	4 55	15 19	0 7	17 38	0 17	23 35	1 44	16 54	0 39	21 54	1 23	23 38	0 19	21 35	1 25	8 35	17 35	14 40	14 42	25 57	6 59	1 31	
T 26	16 4	27 17	4 31	16 9	0n4	17 59	0 14	23 29	1 43	16 52	0 39	21 54	1 23	23 39	0 19	21 35	1 25	8 35	17 35	14 43	14 43	25 55	7 1	1 31	
F 27	16 21	27 19	3 49	16 57	0 14	18 21	0 12	23 23	1 43	16 51	0 39	21 53	1 23	23 39	0 19	21 34	1 25	8 35	17 35	14 45	14 44	25 54	7 2	1 31	
S 28	16 38	25 28	2 53	17 45	0 25	18 41	0 10	23 17	1 42	16 50	0 39	21 53	1 23	23 39	0 19	21 34	1 25	8 35	17 34	14 47	14 45	25 53	7 3	1 31	
S 29	16 55	21 59	1 46	18 30	0 35	19 2	0 7	23 11	1 41	16 48	0 40	21 53	1 23	23 39	0 19	21 34	1 25	8 36	17 34	14 47	14 46	25 51	7 4	1 31	
M 30	17n11	17n14	0n33	19n14	0n45	19n21	0s 5	23n 4	1n41	16s47	0s40	21s53	1n23	23s39	0s19	21s34	1n25	8n36	17n34	14s48	14s47	25s50	7n 6	1n31	

ASTRODIENST EPHEMERIS for the year 1487

geocentric

MAY 1487 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	15 9 29	18°45'59	27°04'46	24°05'54	27°04'46	24°05'54	15°55'33	21°05'55	6°04'44	18°05'54	19°05'31	20°05'12	20°05'11	13°05'57	14°05'27	T 1
W 2	15 13 25	19°43'44	11°05'25	27°03'30	29°00'00	24°05'50	15°57'57	21°05'51	6°04'42	18°05'44	19°05'29	20°05'11	20°05'08	14°03'30	14°30'00	W 2
T 3	15 17 22	20°41'27	24°05'11	29°00'11	0°05'13	25°02'23	16°02'20	21°04'48	6°04'41	18°05'33	19°05'28	20°05'08	20°05'05	14°03'10	14°34'00	T 3
F 4	15 21 19	21°39'08	8°05'17	1°05'17	1°27'00	25°05'56	16°06'06	21°04'44	6°03'39	18°05'18	19°05'27	20°05'03	20°05'02	14°03'17	14°37'00	F 4
S 5	15 25 15	22°36'48	21°05'07	3°02'22	2°04'11	26°03'30	16°11'11	21°04'41	6°03'38	18°05'00	19°05'25	19°05'54	19°05'59	14°02'23	14°40'00	S 5
S 6	15 29 12	23°34'27	3°05'58	5°02'24	3°05'54	27°03'30	16°15'15	21°03'37	6°03'36	17°05'58	19°05'24	19°05'43	19°05'56	14°02'30	14°43'00	S 6
M 7	15 33 08	24°32'04	16°03'38	7°02'25	5°05'08	27°03'37	16°19'19	21°03'34	6°03'35	17°05'57	19°05'23	19°05'31	19°05'52	14°02'37	14°46'00	M 7
T 8	15 37 05	25°29'39	29°05'07	9°02'23	6°02'22	28°01'10	16°23'10	21°03'30	6°03'33	17°05'55	19°05'21	19°05'18	19°05'49	14°02'43	14°49'00	T 8
W 9	15 41 01	26°27'14	11°05'24	11°05'19	7°02'25	28°04'44	16°26'26	21°02'26	6°03'32	17°05'54	19°05'20	19°05'05	19°05'46	14°02'50	14°52'00	W 9
T 10	15 44 58	27°24'47	23°03'30	13°05'12	8°04'49	29°01'18	16°30'18	21°02'22	6°03'30	17°05'52	19°05'19	18°05'54	19°05'43	14°02'57	14°55'00	T 10
F 11	15 48 54	28°22'20	5°03'28	15°03'03	10°03'03	29°05'52	16°33'33	21°01'19	6°02'28	17°05'51	19°05'18	18°05'45	19°05'40	15°03'44	14°58'00	F 11
S 12	15 52 51	29°19'51	17°05'19	16°05'51	11°05'16	0°05'25	16°36'36	21°01'15	6°02'27	17°05'49	19°05'16	18°05'38	19°05'37	15°03'10	15°01'00	S 12
S 13	15 56 48	0°05'17	29°05'07	18°03'36	12°03'30	0°05'59	16°39'39	21°01'11	6°02'25	17°05'48	19°05'15	18°05'35	19°05'33	15°03'17	15°04'00	S 13
M14	16 00 44	1°14'51	10°05'57	20°05'19	13°04'43	1°03'33	16°41'41	21°00'07	6°02'23	17°05'46	19°05'14	18°05'33	19°05'30	15°02'24	15°06'00	M14
T 15	16 04 41	2°12'20	22°05'52	21°05'58	14°05'57	2°05'08	16°44'44	21°00'03	6°02'21	17°05'45	19°05'13	18°05'33	19°05'27	15°03'30	15°09'00	T 15
W16	16 08 37	3°09'48	4°05'59	23°03'35	16°05'10	2°04'22	16°46'46	20°05'59	6°01'19	17°05'43	19°05'12	18°05'33	19°05'24	15°03'37	15°12'00	W16
T 17	16 12 34	4°07'15	17°02'22	25°05'09	17°02'24	3°05'16	16°48'48	20°05'55	6°01'17	17°05'42	19°05'11	18°05'33	19°05'21	15°03'44	15°15'00	T 17
F 18	16 16 30	5°04'41	0°05'07	26°04'40	18°03'37	3°05'50	16°50'50	20°05'51	6°01'15	17°05'40	19°05'10	18°05'30	19°05'17	15°03'50	15°17'00	F 18
S 19	16 20 27	6°02'07	13°05'18	28°05'08	19°05'51	4°02'25	16°52'52	20°05'46	6°01'14	17°05'39	19°05'09	18°05'26	19°05'14	15°03'57	15°20'00	S 19
S 20	16 24 23	6°59'32	26°05'57	29°03'32	21°05'04	4°05'59	16°53'53	20°05'42	6°01'12	17°05'37	19°05'08	18°05'19	19°05'11	16°03'44	15°23'00	S 20
M21	16 28 20	7°56'56	11°05'18	0°05'54	22°05'18	5°03'33	16°55'55	20°05'38	6°01'10	17°05'36	19°05'07	18°05'10	19°05'08	16°03'10	15°25'00	M21
T 22	16 32 17	8°54'20	25°03'35	2°03'13	23°03'31	6°05'08	16°56'56	20°05'34	6°00'07	17°05'34	19°05'06	17°05'59	19°05'05	16°03'17	15°28'00	T 22
W23	16 36 13	9°51'43	10°05'25	3°02'28	24°04'45	6°04'43	16°57'57	20°05'29	6°00'05	17°05'32	19°05'05	17°05'49	19°05'02	16°02'24	15°30'00	W23
T 24	16 40 10	10°49'05	25°02'25	4°04'41	25°05'58	7°01'17	16°58'58	20°05'25	6°00'03	17°05'31	19°05'04	17°05'41	18°05'58	16°03'30	15°33'00	T 24
F 25	16 44 06	11°46'27	10°05'25	5°05'50	27°05'12	7°02'52	16°58'58	20°05'21	6°00'01	17°05'29	19°05'03	17°05'34	18°05'55	16°03'37	15°35'00	F 25
S 26	16 48 03	12°43'47	25°05'17	6°05'56	28°05'25	8°02'27	16°59'59	20°05'16	5°59'59	17°05'28	19°05'02	17°05'30	18°05'52	16°03'44	15°37'00	S 26
S 27	16 51 59	13°41'06	9°05'54	7°05'58	29°03'39	9°02'02	16°59'59	20°05'12	5°59'57	17°05'26	19°05'01	17°05'28	18°05'49	16°03'50	15°40'00	S 27
M28	16 55 56	14°38'25	24°05'13	8°05'57	0°05'52	9°03'36	16°05'59	20°05'08	5°59'55	17°05'24	19°05'01	17°05'28	18°05'46	16°03'57	15°42'00	M28
T 29	16 59 52	15°35'42	8°05'10	9°05'53	2°05'10	10°05'11	16°05'59	20°05'03	5°59'53	17°05'23	19°05'00	17°05'29	18°05'43	17°03'44	15°44'00	T 29
W30	17 03 49	16°32'59	21°04'48	10°05'45	3°05'19	10°04'46	16°05'58	19°05'59	5°59'50	17°05'21	18°05'59	17°05'29	18°05'39	17°03'10	15°46'00	W30
T 31	17 07 46	17°30'14	5°05'16	11°05'33	4°05'32	11°05'21	16°05'58	19°05'55	5°59'48	17°05'19	18°05'59	17°05'27	18°05'36	17°03'17	15°49'00	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	17n27	11n40	0s40	19n56	0n55	19n41	0s2	22n58	1n40	16s46	0s40	21s53	1n23	23s39	0s19	T 1
W 2	17 43	5 37	1 50	20 36	1 4	19 59	0 0	22 51	1 40	16 44	0 40	21 52	1 23	23 39	0 19	W 2
T 3	17 59	0s35	2 52	21 14	1 14	20 18	0n2	22 45	1 39	16 43	0 41	21 52	1 23	23 39	0 19	T 3
F 4	18 14	6 39	3 44	21 49	1 22	20 35	0 5	22 38	1 38	16 42	0 41	21 52	1 23	23 39	0 19	F 4
S 5	18 29	12 20	4 24	22 22	1 30	20 52	0 7	22 31	1 38	16 41	0 41	21 52	1 23	23 39	0 19	S 5
S 6	18 43	17 24	4 49	22 52	1 38	21 9	0 10	22 24	1 37	16 40	0 41	21 51	1 23	23 39	0 19	S 6
M 7	18 57	21 38	5 0	23 20	1 44	21 25	0 12	22 16	1 36	16 39	0 41	21 51	1 23	23 39	0 19	M 7
T 8	19 11	24 49	4 56	23 45	1 51	21 40	0 15	22 9	1 36	16 38	0 42	21 51	1 23	23 40	0 19	T 8
W 9	19 25	26 48	4 38	24 7	1 56	21 55	0 17	22 1	1 35	16 37	0 42	21 51	1 23	23 40	0 19	W 9
T 10	19 38	27 28	4 8	24 27	2 1	22 9	0 19	21 54	1 34	16 37	0 42	21 51	1 23	23 40	0 19	T 10
F 11	19 51	26 51	3 27	24 44	2 5	22 23	0 22	21 46	1 34	16 36	0 42	21 50	1 23	23 40	0 19	F 11
S 12	20 4	24 59	2 37	24 59	2 8	22 36	0 24	21 38	1 33	16 35	0 43	21 50	1 23	23 40	0 19	S 12
S 13	20 16	22 2	1 41	25 11	2 10	22 48	0 27	21 30	1 33	16 35	0 43	21 50	1 23	23 40	0 19	S 13
M14	20 28	18 11	0 40	25 21	2 12	23 0	0 29	21 22	1 32	16 34	0 43	21 50	1 23	23 40	0 19	M14
T 15	20 40	13 34	0n23	25 28	2 13	23 10	0 31	21 14	1 31	16 33	0 43	21 49	1 23	23 40	0 19	T 15
W16	20 51	8 23	1 26	25 34	2 13	23 21	0 34	21 5	1 31	16 33	0 44	21 49	1 23	23 40	0 19	W16
T 17	21 2	2 45	2 27	25 37	2 12	23 30	0 36	20 57	1 30	16 33	0 44	21 49	1 23	23 41	0 19	T 17
F 18	21 12	3n 8	3 22	25 38	2 10	23 39	0 38	20 48	1 30	16 32	0 44	21 49	1 23	23 41	0 19	F 18
S 19	21 23	9 4	4 8	25 38	2 8	23 48	0 41	20 39	1 29	16 32	0 44	21 48	1 23	23 41	0 19	S 19
S 20	21 32	14 48	4 42	25 35	2 5	23 55	0 43	20 30	1 28	16 32	0 45	21 48	1 23	23 41	0 19	S 20
M21	21 42	19 56	5 0	25 31	2 1	24 2	0 45	20 21	1 28	16 32	0 45	21 48	1 23	23 41	0 19	M21
T 22	21 51	24 4	5 0	25 26	1 56	24 8	0 47	20 12	1 27	16 31	0 45	21 48	1 23	23 41	0 19	T 22
W23	22 0	26 41	4 40	25 19	1 51	24 14	0 50	20 3	1 26	16 31	0 45	21 47	1 23	23 41	0 19	W23
T 24	22 8	27 26	4 0	25 10	1 45	24 18	0 52	19 53	1 26	16 31	0 46	21 47	1 23	23 41	0 19	T 24
F 25	22 16	26 9	3 4	25 0	1 38	24 22	0 54	19 44	1 25	16 31	0 46	21 47	1 23	23 41	0 19	F 25
S 26	22 23	23 2	1 55	24 50	1 30	24 26	0 56	19 34	1 25	16 32	0 46	21 47	1 23	23 42	0 19	S 26
S 27	22 30	18 28	0 40	24 38	1 22	24 28	0 58	19 24	1 24	16 32	0 47	21 46	1 23	23 42	0 19	S 27
M28	22 37	12 55	0s36	24 25	1 13	24 30	1 0	19 14	1 23	16 32	0 47	21 46	1 23	23 42	0 19	M28
T 29	22 44	6 51	1 48	24 11	1 3	24 31	1 2	19 4	1 23	16 32	0 47	21 46	1 23	23 42	0 19	T 29
W30	22 50	0 37	2 53	23 56	0 52	24 32	1 4	18 54	1 22	16 33	0 47	21 45	1 22	23 42	0 19	W30
T 31	22n55	5s29	3s46	23n41	0n41	24n31	1n 6	18n44	1n22	16s33	0s48	21s45	1n22	23s42	0s19	T 31

Julian Day Number = 2264304.5, Delta T = 05m18s
 Ecliptic obliquity = 23°30'28", Nutation = 0°00'10", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 17°35'15", Lahiri = 16°42'15" Julian Calendar 1 May 1487 == Greg. Calendar 10 May 1487

ASTRODIENST EPHEMERIS for the year 1487

geocentric

JUNE 1487 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	17 11 42	18 ^{II} 27'29	18 [♂] 8	12 [♂] 18	5 [♂] 45	11 [♂] 57	16 [♂] 57	19 [♂] 50	5 [♂] 46	17 [♂] 18	18 [♂] 58	17 [♂] 24	18 [♂] 33	17 [♂] 24	15 [♂] 51	F 1
S 2	17 15 39	19 [♂] 24'43	0 [♂] 55	12 [♂] 58	6 [♂] 59	12 [♂] 32	16 [♂] 56	19 [♂] 46	5 [♂] 43	17 [♂] 16	18 [♂] 57	17 [♂] 18	18 [♂] 30	17 [♂] 30	15 [♂] 53	S 2
S 3	17 19 35	20 [♂] 21'56	13 [♂] 30	13 [♂] 34	8 [♂] 12	13 [♂] 7	16 [♂] 55	19 [♂] 41	5 [♂] 41	17 [♂] 15	18 [♂] 57	17 [♂] 10	18 [♂] 27	17 [♂] 37	15 [♂] 55	S 3
M 4	17 23 32	21 [♂] 19'09	25 [♂] 53	14 [♂] 7	9 [♂] 25	13 [♂] 42	16 [♂] 54	19 [♂] 37	5 [♂] 39	17 [♂] 13	18 [♂] 56	17 [♂] 0	18 [♂] 23	17 [♂] 44	15 [♂] 57	M 4
T 5	17 27 28	22 [♂] 16'21	8 [♂] 7	14 [♂] 35	10 [♂] 39	14 [♂] 18	16 [♂] 52	19 [♂] 32	5 [♂] 37	17 [♂] 11	18 [♂] 56	16 [♂] 50	18 [♂] 20	17 [♂] 50	15 [♂] 59	T 5
W 6	17 31 25	23 [♂] 13'33	20 [♂] 13	14 [♂] 59	11 [♂] 52	14 [♂] 53	16 [♂] 51	19 [♂] 28	5 [♂] 34	17 [♂] 10	18 [♂] 55	16 [♂] 40	18 [♂] 17	17 [♂] 57	16 [♂] 1	W 6
T 7	17 35 21	24 [♂] 10'44	2 [♂] 11	15 [♂] 18	13 [♂] 5	15 [♂] 28	16 [♂] 49	19 [♂] 24	5 [♂] 32	17 [♂] 8	18 [♂] 55	16 [♂] 32	18 [♂] 14	18 [♂] 4	16 [♂] 2	T 7
F 8	17 39 18	25 [♂] 7'56	14 [♂] 3	15 [♂] 33	14 [♂] 18	16 [♂] 4	16 [♂] 47	19 [♂] 19	5 [♂] 30	17 [♂] 7	18 [♂] 54	16 [♂] 25	18 [♂] 11	18 [♂] 10	16 [♂] 4	F 8
S 9	17 43 15	26 [♂] 5'06	25 [♂] 52	15 [♂] 43	15 [♂] 32	16 [♂] 39	16 [♂] 44	19 [♂] 15	5 [♂] 27	17 [♂] 5	18 [♂] 54	16 [♂] 21	18 [♂] 8	18 [♂] 17	16 [♂] 6	S 9
S 10	17 47 11	27 [♂] 2'17	7 [♂] 39	15 [♂] 49	16 [♂] 45	17 [♂] 15	16 [♂] 42	19 [♂] 11	5 [♂] 25	17 [♂] 3	18 [♂] 53	16 [♂] 19	18 [♂] 4	18 [♂] 24	16 [♂] 8	S 10
M 11	17 51 8	27 [♂] 59'28	19 [♂] 29	15 [♂] R50	17 [♂] 58	17 [♂] 51	16 [♂] 39	19 [♂] 6	5 [♂] 22	17 [♂] 2	18 [♂] 53	16 [♂] D18	18 [♂] 1	18 [♂] 30	16 [♂] 9	M 11
T 12	17 55 4	28 [♂] 56'38	1 [♂] 26	15 [♂] 47	19 [♂] 11	18 [♂] 26	16 [♂] 36	19 [♂] 2	5 [♂] 20	17 [♂] 0	18 [♂] 53	16 [♂] 19	17 [♂] 58	18 [♂] 37	16 [♂] 11	T 12
W 13	17 59 1	29 [♂] 53'49	13 [♂] 33	15 [♂] 39	20 [♂] 24	19 [♂] 2	16 [♂] 33	18 [♂] 58	5 [♂] 18	16 [♂] 59	18 [♂] 53	16 [♂] 21	17 [♂] 55	18 [♂] 44	16 [♂] 13	W 13
T 14	18 2 57	0 [♂] 50'59	25 [♂] 55	15 [♂] 26	21 [♂] 37	19 [♂] 38	16 [♂] 30	18 [♂] 53	5 [♂] 15	16 [♂] 57	18 [♂] 52	16 [♂] R21	17 [♂] 52	18 [♂] 50	16 [♂] 14	T 14
F 15	18 6 54	1 [♂] 48'10	8 [♂] Y38	15 [♂] 10	22 [♂] 50	20 [♂] 14	16 [♂] 27	18 [♂] 49	5 [♂] 13	16 [♂] 55	18 [♂] 52	16 [♂] 21	17 [♂] 49	18 [♂] 57	16 [♂] 15	F 15
S 16	18 10 51	2 [♂] 45'21	21 [♂] 46	14 [♂] 49	24 [♂] 4	20 [♂] 49	16 [♂] 23	18 [♂] 45	5 [♂] 10	16 [♂] 54	18 [♂] 52	16 [♂] 20	17 [♂] 45	19 [♂] 4	16 [♂] 17	S 16
S 17	18 14 47	3 [♂] 42'33	5 [♂] 21	14 [♂] 25	25 [♂] 17	21 [♂] 25	16 [♂] 20	18 [♂] 41	5 [♂] 8	16 [♂] 52	18 [♂] 52	16 [♂] 16	17 [♂] 42	19 [♂] 10	16 [♂] 18	S 17
M 18	18 18 44	4 [♂] 39'44	19 [♂] 25	13 [♂] 57	26 [♂] 30	22 [♂] 1	16 [♂] 16	18 [♂] 37	5 [♂] 5	16 [♂] 51	18 [♂] 52	16 [♂] 11	17 [♂] 39	19 [♂] 17	16 [♂] 20	M 18
T 19	18 22 40	5 [♂] 36'56	3 [♂] 11	13 [♂] 26	27 [♂] 43	22 [♂] 37	16 [♂] 12	18 [♂] 32	5 [♂] 3	16 [♂] 49	18 [♂] 52	16 [♂] 6	17 [♂] 36	19 [♂] 24	16 [♂] 21	T 19
W 20	18 26 37	6 [♂] 34'09	18 [♂] 49	12 [♂] 52	28 [♂] 56	23 [♂] 13	16 [♂] 7	18 [♂] 28	5 [♂] 1	16 [♂] 48	18 [♂] D52	16 [♂] 0	17 [♂] 33	19 [♂] 30	16 [♂] 22	W 20
T 21	18 30 33	7 [♂] 31'21	3 [♂] 56	12 [♂] 17	0 [♂] 9	23 [♂] 50	16 [♂] 3	18 [♂] 24	4 [♂] 58	16 [♂] 46	18 [♂] 52	15 [♂] 55	17 [♂] 29	19 [♂] 37	16 [♂] 23	T 21
F 22	18 34 30	8 [♂] 28'34	19 [♂] 9	11 [♂] 40	1 [♂] 22	24 [♂] 26	15 [♂] 58	18 [♂] 20	4 [♂] 56	16 [♂] 45	18 [♂] 52	15 [♂] 51	17 [♂] 26	19 [♂] 44	16 [♂] 24	F 22
S 23	18 38 26	9 [♂] 25'46	4 [♂] 16	11 [♂] 2	2 [♂] 35	25 [♂] 2	15 [♂] 54	18 [♂] 16	4 [♂] 53	16 [♂] 43	18 [♂] 52	15 [♂] 49	17 [♂] 23	19 [♂] 50	16 [♂] 25	S 23
S 24	18 42 23	10 [♂] 22'59	19 [♂] 9	10 [♂] 23	3 [♂] 48	25 [♂] 38	15 [♂] 49	18 [♂] 12	4 [♂] 51	16 [♂] 42	18 [♂] 52	15 [♂] D48	17 [♂] 20	19 [♂] 57	16 [♂] 26	S 24
M 25	18 46 20	11 [♂] 20'11	3 [♂] 11	9 [♂] 46	5 [♂] 1	26 [♂] 15	15 [♂] 44	18 [♂] 9	4 [♂] 49	16 [♂] 41	18 [♂] 52	15 [♂] 49	17 [♂] 17	20 [♂] 3	16 [♂] 27	M 25
T 26	18 50 16	12 [♂] 17'24	17 [♂] 50	9 [♂] 9	6 [♂] 14	26 [♂] 51	15 [♂] 39	18 [♂] 5	4 [♂] 46	16 [♂] 39	18 [♂] 52	15 [♂] 51	17 [♂] 14	20 [♂] 10	16 [♂] 28	T 26
W 27	18 54 13	13 [♂] 14'36	1 [♂] 34	8 [♂] 34	7 [♂] 27	27 [♂] 27	15 [♂] 33	18 [♂] 1	4 [♂] 44	16 [♂] 38	18 [♂] 52	15 [♂] 52	17 [♂] 10	20 [♂] 17	16 [♂] 29	W 27
T 28	18 58 9	14 [♂] 11'49	14 [♂] 55	8 [♂] 1	8 [♂] 40	28 [♂] 4	15 [♂] 28	17 [♂] 57	4 [♂] 41	16 [♂] 36	18 [♂] 53	15 [♂] R52	17 [♂] 7	20 [♂] 23	16 [♂] 30	T 28
F 29	19 2 6	15 [♂] 9'01	27 [♂] 54	7 [♂] 32	9 [♂] 53	28 [♂] 40	15 [♂] 22	17 [♂] 53	4 [♂] 39	16 [♂] 35	18 [♂] 53	15 [♂] 52	17 [♂] 4	20 [♂] 30	16 [♂] 31	F 29
S 30	19 6 2	16 [♂] 6'14	10 [♂] 34	7 [♂] 5	11 [♂] 5	29 [♂] 17	15 [♂] 16	17 [♂] 50	4 [♂] 37	16 [♂] 34	18 [♂] 53	15 [♂] 50	17 [♂] 1	20 [♂] 37	16 [♂] Y31	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	23n 0	11s14	4s26	23n26	0n29	24n30	1n 8	18n33	1n21	16s34	0s48	21s45	1n22	23s42	0s19	21s29	1n25	8n36	17n20	15s40	15s19	25s 1	7n39	1n31	
S 2	23 5	16 24	4 53	23 9	0 17	24 29	1 9	18 23	1 20	16 34	0 48	21 45	1 22	23 42	0 19	21 29	1 25	8 36	17 20	15 42	15 20	24 59	7 40	1 31	
S 3	23 9	20 46	5 4	22 53	0 4	24 26	1 11	18 12	1 20	16 35	0 48	21 44	1 22	23 42	0 19	21 29	1 25	8 36	17 19	15 44	15 21	24 58	7 41	1 31	
M 4	23 13	24 10	5 1	22 36	0s10	24 23	1 13	18 1	1 19	16 35	0 49	21 44	1 22	23 43	0 19	21 29	1 25	8 35	17 19	15 47	15 22	24 56	7 41	1 31	
T 5	23 17	26 24	4 44	22 19	0 24	24 19	1 15	17 51	1 19	16 36	0 49	21 44	1 22	23 43	0 19	21 29	1 25	8 35	17 18	15 50	15 23	24 55	7 42	1 31	
W 6	23 20	27 23	4 15	22 2	0 38	24 14	1 16	17 40	1 18	16 37	0 49	21 44	1 22	23 43	0 19	21 29	1 25	8 35	17 18	15 53	15 24	24 53	7 43	1 31	
T 7	23 23	27 4	3 34	21 45	0 53	24 9	1 18	17 29	1 17	16 38	0 49	21 43	1 22	23 43	0 19	21 29	1 25	8 34	17 17	15 56	15 24	24 51	7 44	1 31	
F 8	23 25	25 30	2 45	21 28	1 9	24 3	1 19	17 17	1 17	16 38	0 50	21 43	1 22	23 43	0 19	21 28	1 25	8 34	17 17	15 58	15 25	24 50	7 44	1 31	
S 9	23 27	22 48	1 48	21 11	1 24	23 56	1 21	17 6	1 16	16 39	0 50	21 43	1 22	23 43	0 19	21 28	1 25	8 34	17 16	15 59	15 26	24 48	7 45	1 31	
S 10	23 28	19 9	0 47	20 55	1 40	23 49	1 22	16 55	1 16	16 40	0 50	21 43	1 22	23 43	0 19	21 28	1 25	8 33	17 16	16 0	15 27	24 46	7 46	1 31	
M11	23 30	14 45	0n17	20 39	1 56	23 41	1 23	16 43	1 15	16 41	0 50	21 42	1 21	23 43	0 19	21 28	1 25	8 33	17 15	16 0	15 28	24 44	7 46	1 31	
T 12	23 30	9 44	1 21	20 23	2 12	23 32	1 25	16 32	1 15	16 43	0 51	21 42	1 21	23 43	0 19	21 28	1 25	8 32	17 14	15 59	15 29	24 43	7 47	1 31	
W13	23 30	4 18	2 22	20 8	2 28	23 22	1 26	16 20	1 14	16 44	0 51	21 42	1 21	23 44	0 19	21 28	1 25	8 32	17 14	15 59	15 30	24 41	7 47	1 31	
T 14	23 30	1n24	3 18	19 54	2 44	23 12	1 27	16 8	1 13	16 45	0 51	21 42	1 21	23 44	0 19	21 28	1 25	8 32	17 13	15 59	15 31	24 39	7 48	1 31	
F 15	23 30	7 12	4 6	19 40	2 59	23 1	1 28	15 56	1 13	16 46	0 51	21 41	1 21	23 44	0 20	21 27	1 25	8 31	17 13	15 59	15 32	24 38	7 49	1 31	
S 16	23 29	12 52	4 42	19 28	3 14	22 50	1 29	15 44	1 12	16 47	0 52	21 41	1 21	23 44	0 20	21 27	1 25	8 31	17 12	15 59	15 33	24 36	7 49	1 31	
S 17	23 27	18 7	5 4	19 16	3 29	22 37	1 30	15 32	1 12	16 49	0 52	21 41	1 21	23 44	0 20	21 27	1 25	8 30	17 12	16 0	15 34	24 34	7 50	1 31	
M18	23 26	22 35	5 9	19 5	3 42	22 24	1 31	15 20	1 11	16 50	0 52	21 41	1 21	23 44	0 20	21 27	1 25	8 30	17 11	16 2	15 35	24 32	7 50	1 31	
T 19	23 23	25 49	4 55	18 56	3 55	22 11	1 32	15 7	1 10	16 52	0 52	21 40	1 21	23 44	0 20	21 27	1 25	8 29	17 11	16 3	15 36	24 31	7 51	1 31	
W20	23 21	27 22	4 21	18 47	4 7	21 57	1 33	14 55	1 10	16 53	0 53	21 40	1 20	23 44	0 20	21 27	1 25	8 29	17 10	16 5	15 37	24 29	7 51	1 31	
T 21	23 18	26 55	3 28	18 40	4 17	21 42	1 34	14 42	1 9	16 55	0 53	21 40	1 20	23 44	0 20	21 27	1 25	8 28	17 9	16 7	15 38	24 27	7 52	1 31	
F 22	23 14	24 27	2 20	18 34	4 27	21 27	1 34	14 30	1 9	16 56	0 53	21 40	1 20	23 44	0 20	21 27	1 25	8 28	17 9	16 8	15 39	24 26	7 52	1 31	
S 23	23 10	20 16	1 3	18 29	4 35	21 11	1 35	14 17	1 8	16 58	0 53	21 40	1 20	23 45	0 20	21 26	1 25	8 27	17 8	16 8	15 40	24 24	7 53	1 31	
S 24	23 6	14 50	0s18	18 26	4 41	20 54	1 35	14 4	1 7	17 0	0 54	21 39	1 20	23 45	0 20	21 26	1 24	8 27	17 8	16 9	15 41	24 22	7 53	1 31	
M25	23 1	8 41	1 36	18 24	4 46	20 37	1 36	13 51	1 7	17 1	0 54	21 39	1 20	23 45	0 20	21 26	1 24	8 26	17 7	16 8	15 42	24 20	7 53	1 31	
T 26	22 56	2 16	2 46	18 23	4 49	20 19	1 36	13 38	1 6	17 3	0 54	21 39	1 20	23 45	0 20	21 26	1 24	8 25	17 6	16 8	15 43	24 18	7 54	1 31	
W27	22 51	4s 3	3 44	18 24	4 50	20 1	1 37	13 25	1 6	17 5	0 54	21 39	1 20	23 45	0 20	21 26	1 24	8 25	17 6	16 8	15 44	24 17	7 54	1 31	
T 28	22 45	10 1	4 29	18 26	4 50	19 42	1 37	13 12	1 5	17 7	0 55	21 38	1 19	23 45	0 20	21 26	1 24	8 24	17 5	16 7	15 45	24 15	7 54	1 31	
F 29	22 39	15 23	4 58	18 30	4 48	19 23	1 37	12 59	1 5	17 9	0 55	21 38	1 19	23 45	0 20	21 26	1 24	8 23	17 5	16 8	15 46	24 13	7 55	1 31	
S 30	22n32	19s58	5s12	18n34	4s45	19n 3	1n37	12n45	1n 4	17s11	0s55	21s38	1n19	23s45	0s20	21s26	1n24	8n23	17n 4	16s 8	15s47	24s11	7n55	1n31	

ASTRODIENST EPHEMERIS for the year 1487

geocentric

JULY 1487 JC

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Day	Sid.t	☉	☾	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	19 9 59	17°53'27	22°11'59	6°R43	12°18'18	29°15'54	15°R10	17°R46	4°R34	16°R32	18°54	15°R46	16°58	20°343	16°V32	S 1
M 2	19 13 55	18° 0'40	5°12'12	6°25	13°31	0°11'30	15°44	17°43	4°32	16°31	18°54	15°42	16°55	20°50	16°32	M 2
T 3	19 17 52	18°57'54	17°15	6°12	14°44	1° 7	14°58	17°39	4°30	16°30	18°54	15°38	16°51	20°57	16°33	T 3
W 4	19 21 49	19°55'08	29°11	6° 4	15°57	1°44	14°52	17°36	4°27	16°28	18°55	15°33	16°48	21° 3	16°33	W 4
T 5	19 25 45	20°52'22	11°33'3	6°D 2	17° 9	2°21	14°45	17°33	4°25	16°27	18°55	15°30	16°45	21°10	16°34	T 5
F 6	19 29 42	21°49'37	22°52	6° 5	18°22	2°58	14°39	17°29	4°23	16°26	18°56	15°27	16°42	21°17	16°34	F 6
S 7	19 33 38	22°46'52	4°44'40	6°13	19°35	3°34	14°32	17°26	4°20	16°25	18°56	15°25	16°39	21°23	16°34	S 7
S 8	19 37 35	23°44'08	16°31	6°28	20°47	4°11	14°25	17°23	4°18	16°23	18°57	15°D25	16°35	21°30	16°35	S 8
M 9	19 41 31	24°41'25	28°25	6°49	22° 0	4°48	14°19	17°20	4°16	16°22	18°58	15°25	16°32	21°37	16°35	M 9
T 10	19 45 28	25°38'43	10°11'27	7°15	23°13	5°25	14°12	17°17	4°14	16°21	18°58	15°27	16°29	21°43	16°35	T 10
W11	19 49 24	26°36'01	22°39	7°48	24°25	6° 2	14° 5	17°14	4°12	16°20	18°59	15°28	16°26	21°50	16°35	W11
T 12	19 53 21	27°33'21	5°19'5	8°26	25°38	6°40	13°57	17°11	4° 9	16°19	19° 0	15°29	16°23	21°57	16°R35	T 12
F 13	19 57 18	28°30'41	17°49	9°10	26°50	7°17	13°50	17° 9	4° 7	16°18	19° 0	15°30	16°20	22° 3	16°35	F 13
S 14	20 1 14	29°28'03	0°8'54	10° 0	28° 3	7°54	13°43	17° 6	4° 5	16°17	19° 1	15°R31	16°16	22°10	16°35	S 14
S 15	20 5 11	0°12'52'26	14°23	10°56	29°15	8°31	13°36	17° 3	4° 3	16°15	19° 2	15°30	16°13	22°17	16°35	S 15
M16	20 9 7	1°22'50	28°18	11°58	0°11'28	9° 9	13°28	17° 1	4° 1	16°14	19° 3	15°29	16°10	22°23	16°35	M16
T 17	20 13 4	2°20'15	12°11'38	13° 5	1°40	9°46	13°21	16°58	3°59	16°13	19° 4	15°28	16° 7	22°30	16°34	T 17
W18	20 17 0	3°17'42	27°21	14°18	2°53	10°24	13°13	16°56	3°57	16°12	19° 5	15°26	16° 4	22°37	16°34	W18
T 19	20 20 57	4°15'09	12°22'1	15°36	4° 5	11° 1	13° 5	16°54	3°55	16°11	19° 5	15°25	16° 1	22°43	16°34	T 19
F 20	20 24 54	5°12'38	27°30	16°58	5°17	11°39	12°58	16°51	3°53	16°11	19° 6	15°24	15°57	22°50	16°33	F 20
S 21	20 28 50	6°10'08	12°12'39	18°26	6°30	12°16	12°50	16°49	3°51	16°10	19° 7	15°D24	15°54	22°57	16°33	S 21
S 22	20 32 47	7° 7'39	27°38	19°59	7°42	12°54	12°42	16°47	3°49	16° 9	19° 9	15°24	15°51	23° 3	16°32	S 22
M23	20 36 43	8° 5'10	12°11'21	21°35	8°54	13°31	12°34	16°45	3°47	16° 8	19°10	15°24	15°48	23°10	16°32	M23
T 24	20 40 40	9° 2'43	26°40	23°16	10° 6	14° 9	12°27	16°43	3°45	16° 7	19°11	15°25	15°45	23°17	16°31	T 24
W25	20 44 36	10° 0'16	10°12'33	25° 1	11°19	14°47	12°19	16°42	3°44	16° 6	19°12	15°26	15°41	23°23	16°30	W25
T 26	20 48 33	10°57'51	24° 0	26°48	12°31	15°25	12°11	16°40	3°42	16° 6	19°13	15°26	15°38	23°30	16°30	T 26
F 27	20 52 29	11°55'26	7°11'3	28°39	13°43	16° 3	12° 3	16°38	3°40	16° 5	19°14	15°R26	15°35	23°37	16°29	F 27
S 28	20 56 26	12°53'02	19°43	0°12'33	14°55	16°41	11°55	16°37	3°38	16° 4	19°15	15°26	15°32	23°43	16°28	S 28
S 29	21 0 22	13°50'39	2°11'5	2°28	16° 7	17°19	11°47	16°35	3°37	16° 3	19°17	15°26	15°29	23°50	16°27	S 29
M30	21 4 19	14°48'18	14°12	4°26	17°19	17°57	11°40	16°34	3°35	16° 3	19°18	15°26	15°26	23°57	16°26	M30
T 31	21 8 16	15°12'45'57	26°11'10	6°12'25	18°11'31	18°11'35	11°43'32	16°11'33	3°34	16°11'2	19°11'19	15°D26	15°22	24° 3	16°V25	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
S 1	22n25	23s34	5s11	18n40	4s40	18n43	1n37	12n32	1n 3	17s13	0s55	21s38	1n19	23s45	0s20	21s26	1n24	8n22	17n 4	16s 9	15s48	24s 9	7n55	1n31					
M 2	22 18	26 4	4 55	18 48	4 34	18 22	1 37	12 18	1 3	17 15	0 55	21 38	1 19	23 45	0 20	21 26	1 24	8 21	17 3	16 10	15 49	24 8	7 55	1 31					
T 3	22 10	27 19	4 27	18 56	4 26	18 0	1 37	12 5	1 2	17 17	0 56	21 38	1 19	23 45	0 20	21 25	1 24	8 21	17 2	16 12	15 50	24 6	7 56	1 31					
W 4	22 1	27 18	3 47	19 5	4 17	17 39	1 37	11 51	1 2	17 19	0 56	21 37	1 19	23 46	0 20	21 25	1 24	8 20	17 2	16 13	15 51	24 4	7 56	1 31					
T 5	21 53	26 0	2 58	19 15	4 7	17 16	1 37	11 37	1 1	17 21	0 56	21 37	1 18	23 46	0 20	21 25	1 24	8 19	17 1	16 14	15 52	24 2	7 56	1 31					
F 6	21 44	23 33	2 1	19 26	3 56	16 53	1 36	11 23	1 0	17 23	0 56	21 37	1 18	23 46	0 20	21 25	1 24	8 19	17 1	16 15	15 53	24 0	7 56	1 31					
S 7	21 35	20 6	0 59	19 37	3 45	16 30	1 36	11 9	1 0	17 25	0 56	21 37	1 18	23 46	0 20	21 25	1 24	8 18	17 0	16 15	15 54	23 58	7 56	1 31					
S 8	21 25	15 50	0n 6	19 49	3 32	16 7	1 35	10 55	0 59	17 27	0 57	21 37	1 18	23 46	0 20	21 25	1 24	8 17	16 59	16 16	15 55	23 57	7 56	1 31					
M 9	21 15	10 57	1 11	20 2	3 19	15 42	1 35	10 41	0 59	17 29	0 57	21 37	1 18	23 46	0 20	21 25	1 24	8 16	16 59	16 15	15 55	23 55	7 56	1 31					
T 10	21 4	5 36	2 14	20 14	3 5	15 18	1 34	10 27	0 58	17 32	0 57	21 37	1 18	23 46	0 20	21 25	1 24	8 16	16 58	16 15	15 56	23 53	7 56	1 31					
W11	20 54	0n 0	3 12	20 27	2 50	14 53	1 33	10 13	0 58	17 34	0 57	21 36	1 17	23 46	0 20	21 25	1 24	8 15	16 58	16 15	15 57	23 51	7 56	1 31					
T 12	20 43	5 43	4 1	20 39	2 36	14 28	1 32	9 58	0 57	17 36	0 57	21 36	1 17	23 46	0 20	21 25	1 24	8 14	16 57	16 14	15 58	23 49	7 56	1 31					
F 13	20 31	11 19	4 40	20 51	2 21	14 2	1 32	9 44	0 56	17 38	0 58	21 36	1 17	23 46	0 20	21 25	1 24	8 13	16 57	16 14	15 59	23 47	7 56	1 31					
S 14	20 19	16 36	5 6	21 3	2 6	13 36	1 31	9 30	0 56	17 41	0 58	21 36	1 17	23 46	0 20	21 25	1 24	8 12	16 56	16 14	16 0	23 45	7 56	1 31					
S 15	20 7	21 14	5 16	21 13	1 50	13 10	1 30	9 15	0 55	17 43	0 58	21 36	1 17	23 46	0 20	21 24	1 24	8 12	16 56	16 14	16 1	23 43	7 56	1 31					
M16	19 55	24 51	5 9	21 23	1 35	12 43	1 28	9 0	0 55	17 45	0 58	21 36	1 17	23 46	0 20	21 24	1 24	8 11	16 55	16 14	16 2	23 42	7 56	1 31					
T 17	19 42	27 2	4 42	21 32	1 20	12 16	1 27	8 46	0 54	17 48	0 58	21 36	1 16	23 47	0 20	21 24	1 24	8 10	16 54	16 15	16 3	23 40	7 56	1 31					
W18	19 29	27 25	3 56	21 40	1 5	11 49	1 26	8 31	0 54	17 50	0 58	21 36	1 16	23 47	0 20	21 24	1 24	8 9	16 54	16 15	16 4	23 38	7 56	1 31					
T 19	19 15	25 48	2 53	21 46	0 50	11 21	1 25	8 16	0 53	17 52	0 59	21 36	1 16	23 47	0 20	21 24	1 24	8 8	16 53	16 16	16 5	23 36	7 56	1 31					
F 20	19 1	22 19	1 38	21 50	0 36	10 53	1 23	8 1	0 52	17 55	0 59	21 36	1 16	23 47	0 20	21 24	1 24	8 7	16 53	16 16	16 6	23 34	7 56	1 31					
S 21	18 47	17 18	0 15	21 52	0 22	10 25	1 22	7 46	0 52	17 57	0 59	21 36	1 16	23 47	0 20	21 24	1 24	8 7	16 52	16 16	16 7	23 32	7 56	1 31					
S 22	18 33	11 16	1s 7	21 53	0 8	9 57	1 20	7 31	0 51	17 59	0 59	21 36	1 16	23 47	0 20	21 24	1 23	8 6	16 52	16 16	16 8	23 30	7 55	1 31					
M23	18 18	4 44	2 24	21 51	0n 5	9 28	1 19	7 16	0 51	18 2	0 59	21 36	1 15	23 47	0 20	21 24	1 23	8 5	16 51	16 16	16 9	23 28	7 55	1 31					
T 24	18 3	1s53	3 30	21 46	0 17	8 59	1 17	7 1	0 50	18 4	0 59	21 36	1 15	23 47	0 20	21 24	1 23	8 4	16 51	16 16	16 10	23 26	7 55	1 31					
W25	17 47	8 11	4 21	21 40	0 29	8 30	1 15	6 46	0 49	18 6	1 0	21 36	1 15	23 47	0 20	21 24	1 23	8 3	16 50	16 15	16 11	23 24	7 55	1 31					
T 26	17 32	13 55	4 56	21 30	0 40	8 1	1 13	6 31	0 49	18 9	1 0	21 36	1 15	23 47	0 20	21 24	1 23	8 2	16 49	16 15	16 12	23 22	7 54	1 31					
F 27	17 16	18 51	5 14	21 18	0 50	7 31	1 11	6 16	0 48	18 11	1 0	21 36	1 15	23 47	0 20	21 24	1 23	8 1	16 49	16 15	16 13	23 20	7 54	1 31					
S 28	17 0	22 47	5 17	21 3	0 59	7 1	1 9	6 0	0 48	18 13	1 0	21 36	1 15	23 47	0 20	21 24	1 23	8 0	16 48	16 15	16 14	23 18	7 54	1 31					
S 29	16 43	25 36	5 4	20 46	1 8	6 31	1 7	5 45	0 47	18 16	1 0	21 36	1 14	23 47	0 20	21 24	1 23	7 59	16 48	16 15	16 14	23 16	7 53	1 31					
M30	16 26	27 11	4 39	20 26	1 15	6 1	1 5	5 30	0 47	18 18	1 0	21 36	1 14	23 47	0 20	21 24	1 23	7 58	16 47	16 15	16 15	23 14	7 53	1 31					
T 31	16n 9	27s28	4s 1	20n 3	1n22	5n31	1n 3	5n14	0n46	18s20	1s 0	21s36	1n14	23s47	0s20	21s24	1n23	7n57	16n47	16s15	16s16	23s12	7n53	1n31					

ASTRODIENST EPHEMERIS for the year 1487
geocentric

AUGUST 1487 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	21 12 12	16°Ω43'38	8°☾ 2	8°Ω25	19°♍43	19°♍13	11°R24	16°R32	3°R32	16°R 2	19°♌21	15°♌26	15°♌19	24°☾10	16°R24	W 1
T 2	21 16 9	17°41'19	19°50	10°25	20°55	19°51	11°♌16	16°♌31	3°☾31	16°♌ 1	19°22	15°26	15°16	24°17	16°Y23	T 2
F 3	21 20 5	18°39'02	1°♌39	12°27	22° 7	20°29	11° 9	16°30	3°29	16° 0	19°23	15°26	15°13	24°23	16°22	F 3
S 4	21 24 2	19°36'46	13°31	14°28	23°19	21° 7	11° 1	16°29	3°28	16° 0	19°25	15°R27	15°10	24°30	16°21	S 4
S 5	21 27 58	20°34'32	25°27	16°29	24°30	21°46	10°53	16°28	3°26	15°59	19°26	15°26	15° 6	24°36	16°19	S 5
M 6	21 31 55	21°32'19	7°♌31	18°30	25°42	22°24	10°46	16°27	3°25	15°59	19°28	15°26	15° 3	24°43	16°18	M 6
T 7	21 35 52	22°30'07	19°44	20°30	26°54	23° 2	10°38	16°27	3°24	15°59	19°29	15°25	15° 0	24°50	16°17	T 7
W 8	21 39 48	23°27'58	2°Y 8	22°29	28° 6	23°41	10°31	16°26	3°22	15°58	19°31	15°24	14°57	24°56	16°15	W 8
T 9	21 43 45	24°25'49	14°45	24°28	29°17	24°19	10°23	16°26	3°21	15°58	19°32	15°23	14°54	25° 3	16°14	T 9
F 10	21 47 41	25°23'43	27°37	26°26	0°♌29	24°58	10°16	16°26	3°20	15°57	19°34	15°22	14°51	25°10	16°12	F 10
S 11	21 51 38	26°21'38	10°♌46	28°22	1°40	25°36	10° 9	16°25	3°19	15°57	19°36	15°21	14°47	25°16	16°11	S 11
S 12	21 55 34	27°19'36	24°13	0°♍18	2°52	26°15	10° 1	16°D25	3°18	15°57	19°37	15°D21	14°44	25°23	16° 9	S 12
M13	21 59 31	28°17'35	8°II 0	2°12	4° 3	26°54	9°54	16°25	3°16	15°57	19°39	15°21	14°41	25°30	16° 8	M13
T 14	22 3 27	29°15'36	22° 7	4° 6	5°15	27°32	9°47	16°26	3°15	15°57	19°41	15°22	14°38	25°36	16° 6	T 14
W15	22 7 24	0°♍13'40	6°☾32	5°58	6°26	28°11	9°40	16°26	3°15	15°56	19°42	15°23	14°35	25°43	16° 4	W15
T 16	22 11 21	1°11'45	21°14	7°49	7°37	28°50	9°34	16°26	3°14	15°56	19°44	15°24	14°32	25°50	16° 2	T 16
F 17	22 15 17	2° 9'52	6°Ω 5	9°38	8°49	29°29	9°27	16°26	3°13	15°56	19°46	15°25	14°28	25°56	16° 1	F 17
S 18	22 19 14	3° 8'01	21° 1	11°27	10° 0	0°♌ 8	9°20	16°27	3°12	15°56	19°48	15°R25	14°25	26° 3	15°59	S 18
S 19	22 23 10	4° 6'11	5°♍52	13°14	11°11	0°47	9°14	16°27	3°11	15°56	19°49	15°24	14°22	26°10	15°57	S 19
M20	22 27 7	5° 4'23	20°32	15° 0	12°22	1°26	9° 8	16°28	3°10	15°D56	19°51	15°22	14°19	26°16	15°55	M20
T 21	22 31 3	6° 2'37	4°♌54	16°44	13°33	2° 5	9° 1	16°29	3°10	15°56	19°53	15°20	14°16	26°23	15°53	T 21
W22	22 35 0	7° 0'53	18°52	18°28	14°44	2°44	8°55	16°30	3° 9	15°56	19°55	15°17	14°12	26°30	15°51	W22
T 23	22 38 56	7°59'10	2°♌24	20°10	15°55	3°23	8°49	16°31	3° 8	15°56	19°57	15°14	14° 9	26°36	15°49	T 23
F 24	22 42 53	8°57'28	15°31	21°52	17° 6	4° 3	8°44	16°32	3° 8	15°56	19°59	15°11	14° 6	26°43	15°47	F 24
S 25	22 46 49	9°55'49	28°14	23°32	18°17	4°42	8°38	16°33	3° 7	15°57	20° 1	15° 9	14° 3	26°50	15°44	S 25
S 26	22 50 46	10°54'11	10°♌37	25°11	19°28	5°21	8°32	16°34	3° 7	15°57	20° 3	15°D 9	14° 0	26°56	15°42	S 26
M27	22 54 43	11°52'34	22°45	26°48	20°39	6° 1	8°27	16°36	3° 7	15°57	20° 5	15° 9	13°57	27° 3	15°40	M27
T 28	22 58 39	12°51'00	4°☾41	28°25	21°49	6°40	8°22	16°37	3° 6	15°57	20° 7	15°11	13°53	27° 9	15°38	T 28
W29	23 2 36	13°49'26	16°30	0°♌ 1	23° 0	7°20	8°17	16°39	3° 6	15°57	20° 9	15°12	13°50	27°16	15°36	W29
T 30	23 6 32	14°47'55	28°18	1°35	24°10	7°59	8°12	16°40	3° 6	15°58	20°11	15°14	13°47	27°23	15°33	T 30
F 31	23 10 29	15°♍46'25	10°♌ 9	3°♌ 9	25°♌21	8°♌39	8°♌ 7	16°♌42	3°☾ 5	15°♌58	20°♌13	15°R15	13°♌44	27°☾29	15°Y31	F 31

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	15n52	26s29	3s13	19n38	1n28	5n 1	1n 0	4n59	0n45	18s23	1 s 0	21s36	1n14	23s47	0s20	21s24	1n23	7n56	16n46	16s15	16s17	23s10	7n52	1n31					
T 2	15 35	24 18	2 18	19 10	1 33	4 30	0 58	4 43	0 45	18 25	1 0	21 36	1 14	23 47	0 20	21 24	1 23	7 55	16 46	16 15	16 18	23 8	7 52	1 31					
F 3	15 17	21 5	1 16	18 40	1 37	3 59	0 56	4 27	0 44	18 27	1 0	21 36	1 13	23 47	0 20	21 24	1 23	7 54	16 45	16 15	16 19	23 6	7 51	1 31					
S 4	14 59	16 59	0 11	18 9	1 41	3 29	0 53	4 12	0 44	18 29	1 1	21 36	1 13	23 47	0 20	21 24	1 23	7 53	16 45	16 15	16 20	23 4	7 51	1 31					
S 5	14 40	12 12	0n55	17 35	1 43	2 58	0 51	3 56	0 43	18 31	1 1	21 36	1 13	23 47	0 20	21 24	1 23	7 53	16 44	16 15	16 21	23 2	7 50	1 31					
M 6	14 22	6 55	2 0	16 59	1 45	2 27	0 48	3 40	0 42	18 34	1 1	21 36	1 13	23 47	0 20	21 24	1 23	7 52	16 44	16 15	16 22	23 0	7 50	1 31					
T 7	14 3	1 20	2 59	16 22	1 46	1 56	0 45	3 25	0 42	18 36	1 1	21 37	1 13	23 47	0 20	21 24	1 23	7 51	16 43	16 15	16 23	22 58	7 49	1 31					
W 8	13 44	4n23	3 51	15 44	1 46	1 25	0 43	3 9	0 41	18 38	1 1	21 37	1 13	23 47	0 20	21 24	1 23	7 50	16 43	16 16	16 24	22 56	7 49	1 31					
T 9	13 25	10 1	4 33	15 4	1 46	0 54	0 40	2 53	0 41	18 40	1 1	21 37	1 12	23 48	0 20	21 24	1 23	7 49	16 43	16 16	16 25	22 54	7 48	1 31					
F 10	13 6	15 21	5 2	14 23	1 45	0 22	0 37	2 37	0 40	18 42	1 1	21 37	1 12	23 48	0 20	21 24	1 23	7 48	16 42	16 16	16 26	22 52	7 48	1 31					
S 11	12 46	20 5	5 16	13 41	1 43	0s 9	0 34	2 21	0 40	18 44	1 1	21 37	1 12	23 48	0 20	21 24	1 22	7 47	16 42	16 17	16 27	22 50	7 47	1 31					
S 12	12 26	23 56	5 13	12 59	1 41	0 40	0 31	2 5	0 39	18 46	1 1	21 37	1 12	23 48	0 20	21 24	1 22	7 46	16 41	16 17	16 28	22 48	7 47	1 31					
M13	12 6	26 31	4 53	12 15	1 39	1 11	0 28	1 49	0 38	18 48	1 1	21 38	1 12	23 48	0 20	21 24	1 22	7 45	16 41	16 17	16 28	22 46	7 46	1 31					
T 14	11 46	27 30	4 14	11 31	1 35	1 43	0 25	1 33	0 38	18 50	1 1	21 38	1 11	23 48	0 20	21 24	1 22	7 43	16 40	16 17	16 29	22 44	7 45	1 31					
W15	11 25	26 39	3 19	10 46	1 32	2 14	0 22	1 17	0 37	18 52	1 1	21 38	1 11	23 48	0 20	21 24	1 22	7 42	16 40	16 16	16 30	22 42	7 45	1 31					
T 16	11 5	23 58	2 10	10 1	1 28	2 45	0 19	1 1	0 37	18 54	1 1	21 38	1 11	23 48	0 20	21 24	1 22	7 41	16 39	16 16	16 31	22 40	7 44	1 31					
F 17	10 44	19 38	0 51	9 16	1 23	3 16	0 15	0 45	0 36	18 55	1 1	21 38	1 11	23 48	0 20	21 24	1 22	7 40	16 39	16 16	16 32	22 38	7 43	1 31					
S 18	10 23	14 3	0s31	8 30	1 19	3 47	0 12	0 29	0 35	18 57	1 1	21 39	1 11	23 48	0 20	21 24	1 22	7 39	16 39	16 16	16 33	22 36	7 42	1 31					
S 19	10 2	7 40	1 51	7 44	1 14	4 18	0 9	0 13	0 35	18 59	1 1	21 39	1 10	23 48	0 20	21 24	1 22	7 38	16 38	16 16	16 34	22 34	7 42	1 31					
M20	9 41	0 58	3 2	6 58	1 8	4 49	0 5	0s 3	0 34	19 1	1 1	21 39	1 10	23 48	0 20	21 24	1 22	7 37	16 38	16 16	16 35	22 32	7 41	1 31					
T 21	9 19	5s37	4 0	6 12	1 2	5 20	0 2	0 19	0 34	19 2	1 1	21 39	1 10	23 48	0 20	21 24	1 22	7 36	16 37	16 17	16 36	22 29	7 40	1 31					
W22	8 58	11 45	4 42	5 26	0 56	5 51	0s 2	0 35	0 33	19 4	1 1	21 40	1 10	23 48	0 20	21 24	1 22	7 35	16 37	16 18	16 37	22 27	7 39	1 31					
T 23	8 36	17 8	5 7	4 40	0 50	6 22	0 5	0 51	0 32	19 6	1 1	21 40	1 10	23 48	0 20	21 24	1 22	7 34	16 37	16 19	16 38	22 25	7 38	1 31					
F 24	8 14	21 33	5 15	3 55	0 44	6 52	0 9	1 8	0 32	19 7	1 1	21 40	1 9	23 48	0 20	21 24	1 22	7 33	16 36	16 20	16 39	22 23	7 38	1 31					
S 25	7 52	24 48	5 7	3 9	0 37	7 23	0 12	1 24	0 31	19 9	1 1	21 41	1 9	23 48	0 20	21 24	1 22	7 32	16 36	16 20	16 40	22 21	7 37	1 31					
S 26	7 30	26 48	4 44	2 23	0 31	7 53	0 16	1 40	0 31	19 10	1 1	21 41	1 9	23 48	0 20	21 25	1 22	7 31	16 36	16 20	16 41	22 19	7 36	1 31					
M27	7 8	27 28	4 10	1 38	0 24	8 23	0 19	1 56	0 30	19 11	1 1	21 41	1 9	23 48	0 19	21 25	1 22	7 30	16 35	16 20	16 42	22 17	7 35	1 31					
T 28	6 45	26 50	3 25	0 53	0 17	8 53	0 23	2 12	0 30	19 13	1 1	21 42	1 9	23 48	0 19	21 25	1 22	7 29	16 35	16 20	16 42	22 15	7 34	1 31					
W29	6 23	24 59	2 31	0 8	0 9	9 23	0 27	2 28	0 29	19 14	1 1	21 42	1 9	23 48	0 19	21 25	1 22	7 28	16 34	16 19	16 43	22 12	7 33	1 31					
T 30	6 0	22 3	1 32	0s36	0 2	9 52	0 30	2 45	0 28	19 15	1 1	21 42	1 8	23 48	0 19	21 25	1 21	7 27	16 34	16 19	16 44	22 10	7 32	1 31					
F 31	5n38	18s12	0s28	1s20	0s 5	10s22	0s34	3s 1	0n28	19s17	1s 1	21s43	1n 8	23s48	0s19	21s25	1n21	7n26	16n34	16s18	16s45	22s 8	7n31	1n31					

ASTRODIENST EPHEMERIS for the year 1487

geocentric

SEPTEMBER 1487 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	23 14 25	16 ¹⁷ 44'57	22 ²² 6	4 ⁴¹ 41	26 ²⁶ 31	9 ¹⁹ 19	8 ⁸ R 3	16 ¹⁶ 44	3 ³ R 5	15 ¹⁵ 59	20 ²⁰ 15	15 ¹⁵ R15	13 ¹³ 41	27 ²⁷ 36	15 ¹⁵ R28	S 1
S 2	23 18 22	17 ¹⁷ 43'31	4 ⁴ 12	6 ⁶ 13	27 ²⁷ 42	9 ⁹ 58	7 ⁷ 58	16 ¹⁶ 46	3 ³ 5	15 ¹⁵ 59	20 ²⁰ 17	15 ¹⁵ 13	13 ¹³ 38	27 ²⁷ 43	15 ¹⁵ 26	S 2
M 3	23 22 18	18 ¹⁸ 42'06	16 ¹⁶ 29	7 ⁷ 43	28 ²⁸ 52	10 ¹⁰ 38	7 ⁷ 54	16 ¹⁶ 48	3 ³ D 5	15 ¹⁵ 59	20 ²⁰ 19	15 ¹⁵ 10	13 ¹³ 34	27 ²⁷ 49	15 ¹⁵ 24	M 3
T 4	23 26 15	19 ¹⁹ 40'44	28 ²⁸ 58	9 ⁹ 12	0 ⁰ 11 2	11 ¹¹ 18	7 ⁷ 50	16 ¹⁶ 50	3 ³ 5	16 ¹⁶ 0	20 ²⁰ 21	15 ¹⁵ 6	13 ¹³ 31	27 ²⁷ 56	15 ¹⁵ 21	T 4
W 5	23 30 12	20 ²⁰ 39'23	11 ¹¹ 40	10 ¹⁰ 40	1 ¹ 12	11 ¹¹ 58	7 ⁷ 46	16 ¹⁶ 52	3 ³ 5	16 ¹⁶ 0	20 ²⁰ 23	15 ¹⁵ 0	13 ¹³ 28	28 ²⁸ 3	15 ¹⁵ 19	W 5
T 6	23 34 8	21 ²¹ 38'05	24 ²⁴ 36	12 ¹² 7	2 ² 23	12 ¹² 38	7 ⁷ 42	16 ¹⁶ 54	3 ³ 5	16 ¹⁶ 1	20 ²⁰ 26	14 ¹⁴ 54	13 ¹³ 25	28 ²⁸ 9	15 ¹⁵ 16	T 6
F 7	23 38 5	22 ²² 36'49	7 ⁷ 45	13 ¹³ 33	3 ³ 33	13 ¹³ 17	7 ⁷ 39	16 ¹⁶ 57	3 ³ 5	16 ¹⁶ 2	20 ²⁰ 28	14 ¹⁴ 48	13 ¹³ 22	28 ²⁸ 16	15 ¹⁵ 14	F 7
S 8	23 42 1	23 ²³ 35'35	21 ²¹ 7	14 ¹⁴ 58	4 ⁴ 42	13 ¹³ 57	7 ⁷ 35	16 ¹⁶ 59	3 ³ 6	16 ¹⁶ 2	20 ²⁰ 30	14 ¹⁴ 43	13 ¹³ 18	28 ²⁸ 23	15 ¹⁵ 11	S 8
S 9	23 45 58	24 ²⁴ 34'23	4 ⁴ 11 2	16 ¹⁶ 22	5 ⁵ 52	14 ¹⁴ 38	7 ⁷ 32	17 ¹⁷ 2	3 ³ 6	16 ¹⁶ 3	20 ²⁰ 32	14 ¹⁴ 39	13 ¹³ 15	28 ²⁸ 29	15 ¹⁵ 8	S 9
M10	23 49 54	25 ²⁵ 33'14	18 ¹⁸ 29	17 ¹⁷ 45	7 ⁷ 2	15 ¹⁵ 18	7 ⁷ 29	17 ¹⁷ 5	3 ³ 6	16 ¹⁶ 4	20 ²⁰ 34	14 ¹⁴ 37	13 ¹³ 12	28 ²⁸ 36	15 ¹⁵ 6	M10
T 11	23 53 51	26 ²⁶ 32'07	2 ² 27	19 ¹⁹ 6	8 ⁸ 12	15 ¹⁵ 58	7 ⁷ 27	17 ¹⁷ 7	3 ³ 7	16 ¹⁶ 4	20 ²⁰ 37	14 ¹⁴ D37	13 ¹³ 9	28 ²⁸ 43	15 ¹⁵ 3	T 11
W12	23 57 47	27 ²⁷ 31'02	16 ¹⁶ 38	20 ²⁰ 27	9 ⁹ 22	16 ¹⁶ 38	7 ⁷ 24	17 ¹⁷ 10	3 ³ 7	16 ¹⁶ 5	20 ²⁰ 39	14 ¹⁴ 38	13 ¹³ 6	28 ²⁸ 49	15 ¹⁵ 0	W12
T 13	0 1 44	28 ²⁸ 30'00	0 ⁰ 15 8	21 ²¹ 46	10 ¹⁰ 31	17 ¹⁷ 18	7 ⁷ 22	17 ¹⁷ 13	3 ³ 7	16 ¹⁶ 6	20 ²⁰ 41	14 ¹⁴ 40	13 ¹³ 3	28 ²⁸ 56	14 ¹⁴ 58	T 13
F 14	0 5 41	29 ²⁹ 29'00	15 ¹⁵ 26	23 ²³ 4	11 ¹¹ 41	17 ¹⁷ 59	7 ⁷ 19	17 ¹⁷ 16	3 ³ 8	16 ¹⁶ 7	20 ²⁰ 44	14 ¹⁴ R40	12 ¹² 59	29 ²⁹ 3	14 ¹⁴ 55	F 14
S 15	0 9 37	0 ⁰ 28'02	29 ²⁹ 57	24 ²⁴ 20	12 ¹² 50	18 ¹⁸ 39	7 ⁷ 17	17 ¹⁷ 19	3 ³ 9	16 ¹⁶ 7	20 ²⁰ 46	14 ¹⁴ 39	12 ¹² 56	29 ²⁹ 9	14 ¹⁴ 52	S 15
S 16	0 13 34	1 ¹ 27'07	14 ¹⁴ 28	25 ²⁵ 35	13 ¹³ 59	19 ¹⁹ 19	7 ⁷ 15	17 ¹⁷ 22	3 ³ 9	16 ¹⁶ 8	20 ²⁰ 48	14 ¹⁴ 36	12 ¹² 53	29 ²⁹ 16	14 ¹⁴ 49	S 16
M17	0 17 30	2 ² 26'13	28 ²⁸ 51	26 ²⁶ 48	15 ¹⁵ 9	20 ²⁰ 0	7 ⁷ 14	17 ¹⁷ 26	3 ³ 10	16 ¹⁶ 9	20 ²⁰ 50	14 ¹⁴ 31	12 ¹² 50	29 ²⁹ 22	14 ¹⁴ 47	M17
T 18	0 21 27	3 ³ 25'22	13 ¹³ 2 2	28 ²⁸ 0	16 ¹⁶ 18	20 ²⁰ 40	7 ⁷ 12	17 ¹⁷ 29	3 ³ 11	16 ¹⁶ 10	20 ²⁰ 53	14 ¹⁴ 24	12 ¹² 47	29 ²⁹ 29	14 ¹⁴ 44	T 18
W19	0 25 23	4 ⁴ 24'32	26 ²⁶ 54	29 ²⁹ 10	17 ¹⁷ 27	21 ²¹ 21	7 ⁷ 11	17 ¹⁷ 32	3 ³ 11	16 ¹⁶ 11	20 ²⁰ 55	14 ¹⁴ 15	12 ¹² 43	29 ²⁹ 36	14 ¹⁴ 41	W19
T 20	0 29 20	5 ⁵ 23'45	10 ¹⁰ 18 25	0 ⁰ 11 18	18 ¹⁸ 36	22 ²² 2	7 ⁷ 10	17 ¹⁷ 36	3 ³ 12	16 ¹⁶ 12	20 ²⁰ 57	14 ¹⁴ 6	12 ¹² 40	29 ²⁹ 42	14 ¹⁴ 38	T 20
F 21	0 33 16	6 ⁶ 22'59	23 ²³ 32	1 ¹ 24	19 ¹⁹ 45	22 ²² 42	7 ⁷ 9	17 ¹⁷ 40	3 ³ 13	16 ¹⁶ 13	21 ²¹ 0	13 ¹³ 59	12 ¹² 37	29 ²⁹ 49	14 ¹⁴ 36	F 21
S 22	0 37 13	7 ⁷ 22'16	6 ⁶ 16 16	2 ² 28	20 ²⁰ 53	23 ²³ 23	7 ⁷ 9	17 ¹⁷ 43	3 ³ 14	16 ¹⁶ 14	21 ²¹ 2	13 ¹³ 52	12 ¹² 34	29 ²⁹ 56	14 ¹⁴ 33	S 22
S 23	0 41 10	8 ⁸ 21'34	18 ¹⁸ 41	3 ³ 30	22 ²² 2	24 ²⁴ 4	7 ⁷ 8	17 ¹⁷ 47	3 ³ 15	16 ¹⁶ 15	21 ²¹ 5	13 ¹³ 48	12 ¹² 31	0 ⁰ 22 2	14 ¹⁴ 30	S 23
M24	0 45 6	9 ⁹ 20'54	0 ⁰ 34 8	4 ⁴ 29	23 ²³ 10	24 ²⁴ 45	7 ⁷ 8	17 ¹⁷ 51	3 ³ 16	16 ¹⁶ 16	21 ²¹ 7	13 ¹³ 46	12 ¹² 28	0 ⁰ 9	14 ¹⁴ 27	M24
T 25	0 49 3	10 ¹⁰ 20'16	12 ¹² 44	5 ⁵ 25	24 ²⁴ 19	25 ²⁵ 26	7 ⁷ D 8	17 ¹⁷ 55	3 ³ 17	16 ¹⁶ 18	21 ²¹ 9	13 ¹³ D45	12 ¹² 24	0 ⁰ 16	14 ¹⁴ 24	T 25
W26	0 52 59	11 ¹¹ 19'40	24 ²⁴ 34	6 ⁶ 18	25 ²⁵ 27	26 ²⁶ 7	7 ⁷ 8	17 ¹⁷ 59	3 ³ 18	16 ¹⁶ 19	21 ²¹ 12	13 ¹³ 46	12 ¹² 21	0 ⁰ 22	14 ¹⁴ 21	W26
T 27	0 56 56	12 ¹² 19'05	6 ⁶ 22 2	7 ⁷ 8	26 ²⁶ 35	26 ²⁶ 48	7 ⁷ 9	18 ¹⁸ 3	3 ³ 19	16 ¹⁶ 20	21 ²¹ 14	13 ¹³ 47	12 ¹² 18	0 ⁰ 29	14 ¹⁴ 19	T 27
F 28	1 0 52	13 ¹³ 18'33	18 ¹⁸ 15	7 ⁷ 54	27 ²⁷ 43	27 ²⁷ 29	7 ⁷ 9	18 ¹⁸ 7	3 ³ 20	16 ¹⁶ 21	21 ²¹ 16	13 ¹³ R47	12 ¹² 15	0 ⁰ 36	14 ¹⁴ 16	F 28
S 29	1 4 49	14 ¹⁴ 18'02	0 ⁰ 16 16	8 ⁸ 36	28 ²⁸ 51	28 ²⁸ 10	7 ⁷ 10	18 ¹⁸ 11	3 ³ 22	16 ¹⁶ 22	21 ²¹ 19	13 ¹³ 46	12 ¹² 12	0 ⁰ 42	14 ¹⁴ 13	S 29
S 30	1 8 45	15 ¹⁵ 17'33	12 ¹² 16 30	9 ⁹ 11 13	29 ²⁹ 11 59	28 ²⁸ 51	7 ⁷ 11	18 ¹⁸ 16	3 ³ 23	16 ¹⁶ 24	21 ²¹ 21	13 ¹³ 42	12 ¹² 9	0 ⁰ 49	14 ¹⁴ 10	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
S 1	5n15	13s36	0n37	2s 4	0s13	10s51	0s38	3s17	0n27	19s18	1 s 1	21s43	1n 8	23s48	0s19	21s25	1n21	7n25	16n34	16s19	16s46	22s 6	7n30	1n31	
S 2	4 52	8 25	1 42	2 47	0 20	11 20	0 42	3 33	0 27	19 19	1 1	21 43	1 8	23 48	0 19	21 25	1 21	7 24	16 33	16 19	16 47	22 4	7 29	1 31	
M 3	4 29	2 52	2 42	3 30	0 28	11 49	0 45	3 49	0 26	19 20	1 1	21 44	1 8	23 48	0 19	21 25	1 21	7 23	16 33	16 20	16 48	22 2	7 28	1 31	
T 4	4 6	2n53	3 36	4 12	0 36	12 17	0 49	4 6	0 25	19 21	1 1	21 44	1 7	23 48	0 19	21 25	1 21	7 22	16 33	16 21	16 49	22 0	7 27	1 31	
W 5	3 43	8 37	4 20	4 54	0 43	12 45	0 53	4 22	0 25	19 22	1 1	21 44	1 7	23 48	0 19	21 25	1 21	7 21	16 32	16 23	16 50	21 57	7 26	1 31	
T 6	3 20	14 4	4 51	5 35	0 51	13 13	0 57	4 38	0 24	19 23	1 1	21 45	1 7	23 48	0 19	21 26	1 21	7 20	16 32	16 25	16 51	21 55	7 25	1 31	
F 7	2 56	18 59	5 8	6 16	0 59	13 41	1 1	4 54	0 24	19 24	1 1	21 45	1 7	23 48	0 19	21 26	1 21	7 19	16 32	16 27	16 51	21 53	7 24	1 31	
S 8	2 33	23 3	5 8	6 56	1 6	14 8	1 5	5 10	0 23	19 24	1 1	21 46	1 7	23 48	0 19	21 26	1 21	7 18	16 32	16 28	16 52	21 51	7 23	1 31	
S 9	2 10	25 55	4 52	7 36	1 14	14 36	1 8	5 26	0 22	19 25	1 1	21 46	1 7	23 48	0 19	21 26	1 21	7 16	16 31	16 29	16 53	21 49	7 22	1 31	
M10	1 46	27 18	4 18	8 14	1 22	15 2	1 12	5 42	0 22	19 26	1 1	21 47	1 6	23 48	0 19	21 26	1 21	7 15	16 31	16 30	16 54	21 46	7 21	1 30	
T 11	1 23	26 58	3 29	8 53	1 29	15 29	1 16	5 58	0 21	19 27	1 1	21 47	1 6	23 48	0 19	21 26	1 21	7 14	16 31	16 30	16 55	21 44	7 20	1 30	
W12	0 59	24 53	2 26	9 30	1 37	15 55	1 20	6 14	0 21	19 27	1 1	21 47	1 6	23 48	0 19	21 26	1 21	7 13	16 31	16 29	16 56	21 42	7 19	1 30	
T 13	0 36	21 12	1 14	10 7	1 44	16 21	1 24	6 30	0 20	19 28	1 1	21 48	1 6	23 48	0 19	21 26	1 21	7 12	16 30	16 29	16 57	21 40	7 18	1 30	
F 14	0 12	16 12	0s 4	10 43	1 51	16 46	1 28	6 46	0 19	19 28	1 1	21 48	1 6	23 48	0 19	21 27	1 21	7 11	16 30	16 29	16 58	21 38	7 17	1 30	
S 15	0s11	10 15	1 22	11 18	1 58	17 11	1 31	7 2	0 19	19 29	1 1	21 49	1 6	23 48	0 19	21 27	1 21	7 10	16 30	16 29	16 59	21 35	7 16	1 30	
S 16	0 35	3 46	2 34	11 52	2 5	17 36	1 35	7 18	0 18	19 29	1 0	21 49	1 5	23 48	0 19	21 27	1 21	7 9	16 30	16 30	17 0	21 33	7 15	1 30	
M17	0 58	2s50	3 35	12 25	2 12	18 0	1 39	7 34	0 18	19 29	1 0	21 50	1 5	23 48	0 19	21 27	1 21	7 8	16 30	16 32	17 1	21 31	7 13	1 30	
T 18	1 22	9 11	4 23	12 57	2 19	18 24	1 43	7 50	0 17	19 30	1 0	21 50	1 5	23 47	0 19	21 27	1 21	7 7	16 29	16 34	17 1	21 29	7 12	1 30	
W19	1 45	14 57	4 53	13 28	2 25	18 47	1 46	8 6	0 16	19 30	1 0	21 51	1 5	23 47	0 19	21 27	1 20	7 6	16 29	16 36	17 2	21 26	7 11	1 30	
T 20	2 9	19 49	5 6	13 58	2 31	19 10	1 50	8 22	0 16	19 30	1 0	21 51	1 5	23 47	0 19	21 27	1 20	7 5	16 29	16 39	17 3	21 24	7 10	1 30	
F 21	2 33	23 35	5 3	14 27	2 37	19 33	1 54	8 37	0 15	19 30	1 0	21 52	1 5	23 47	0 19	21 28	1 20	7 4	16 29	16 41	17 4	21 22	7 9	1 30	
S 22	2 56	26 5	4 44	14 55	2 43	19 55	1 57	8 53	0 15	19 30	1 0	21 52	1 4	23 47	0 19	21 28	1 20	7 3	16 29	16 43	17 5	21 20	7 8	1 30	
S 23	3 19	27 13	4 12	15 21	2 48	20 17	2 1	9 9	0 14	19 30	1 0	21 53	1 4	23 47	0 19	21 28	1 20	7 2	16 29	16 44	17 6	21 17	7 7	1 30	
M24	3 43	27 0	3 30	15 46	2 53	20 38	2 5	9 24	0 13	19 30	1 0	21 53	1 4	23 47	0 19	21 28	1 20	7 1	16 29	16 45	17 7	21 15	7 5	1 30	
T 25	4 6	25 32	2 39	16 10	2 58	20 58	2 8	9 40	0 13	19 30	1 0	21 54	1 4	23 47	0 19	21 28	1 20	7 0	16 28	16 45	17 8	21 13	7 4	1 30	
W26	4 30	22 56	1 41	16 31	3 2	21 19	2 12	9 55	0 12	19 30	1 0	21 54	1 4	23 47	0 19	21 28	1 20	7 0	16 28	16 44	17 9	21 10	7 3	1 29	
T 27	4 53	19 22	0 40	16 51	3 6	21 38	2 15	10 11	0 12	19 30	1 0	21 55	1 4	23 47	0 19	21 29	1 20	6 59	16 28	16 44	17 9	21 8	7 2	1 29	
F 28	5 16	15 2	0n24	17 9	3 9	21 57	2 19	10 26	0 11	19 30	1 0	21 55	1 3	23 47	0 19	21 29	1 20	6 58	16 28	16 44	17 10	21 6	7 1	1 29	
S 29	5 39	10 3	1 27	17 25	3 11	22 16	2 22	10 41	0 10	19 29	0 59	21 56	1 3	23 47	0 19	21 29	1 20	6 57	16 28	16 45	17 11	21 4	6 59	1 29	
S 30	6s 2	4s37	2n27	17s39	3s13	22s34	2s25	10s57	0n10	19s29	0s59	21s56	1n 3	23s47	0s19	21s29	1n20	6n56	16n28	16s46	17s12	21s 1	6n58	1n29	

ASTRODIENST EPHEMERIS for the year 1487

geocentric

OCTOBER 1487 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	1 12 42	16♌17°05	24♋59	9♍46	1♊7	29♊32	7♋12	18♊20	3♊24	16♊25	21♊24	13°R35	12♋5	0♋56	14°R 7	M 1
T 2	1 16 38	17°16'40	7♊45	10°13	2°14	0♍14	7°14	18°24	3°26	16°26	21°26	13°27	12°2	1°2	14°R 4	T 2
W 3	1 20 35	18°16'17	20°49	10°34	3°22	0°55	7°15	18°29	3°27	16°28	21°28	13°16	11°59	1°9	14°1	W 3
T 4	1 24 32	19°15'56	4♋9	10°49	4°29	1°36	7°17	18°34	3°29	16°29	21°31	13°5	11°56	1°15	13°59	T 4
F 5	1 28 28	20°15'36	17°43	10°57	5°36	2°18	7°19	18°38	3°30	16°31	21°33	12°54	11°53	1°22	13°56	F 5
S 6	1 32 25	21°15'20	1♊27	10°R57	6°43	2°59	7°21	18°43	3°32	16°32	21°36	12°44	11°49	1°29	13°53	S 6
S 7	1 36 21	22°15'05	15°20	10°49	7°50	3°41	7°23	18°48	3°34	16°34	21°38	12°36	11°46	1°35	13°50	S 7
M 8	1 40 18	23°14'53	29°19	10°33	8°56	4°22	7°26	18°53	3°35	16°35	21°41	12°32	11°43	1°42	13°47	M 8
T 9	1 44 14	24°14'43	13♊21	10°8	10°3	5°4	7°29	18°58	3°37	16°37	21°43	12°30	11°40	1°49	13°44	T 9
W10	1 48 11	25°14'35	27°26	9°33	11°9	5°46	7°32	19°3	3°39	16°38	21°45	12°D29	11°37	1°55	13°42	W10
T 11	1 52 8	26°14'29	11♊33	8°50	12°15	6°28	7°35	19°8	3°41	16°40	21°48	12°R29	11°34	2°2	13°39	T 11
F 12	1 56 4	27°14'26	25°40	7°57	13°21	7°9	7°38	19°13	3°43	16°41	21°50	12°29	11°30	2°9	13°36	F 12
S 13	2 0 1	28°14'24	9♊47	6°57	14°27	7°51	7°42	19°18	3°45	16°43	21°53	12°26	11°27	2°15	13°33	S 13
S 14	2 3 57	29°14'25	23°51	5°50	15°32	8°33	7°45	19°23	3°47	16°45	21°55	12°21	11°24	2°22	13°31	S 14
M15	2 7 54	0♍14'28	7♊49	4°37	16°38	9°15	7°49	19°29	3°49	16°46	21°57	12°13	11°21	2°29	13°28	M15
T 16	2 11 50	1°14'33	21°37	3°20	17°43	9°57	7°53	19°34	3°51	16°48	22°0	12°2	11°18	2°35	13°25	T 16
W17	2 15 47	2°14'40	5♍12	2°2	18°48	10°39	7°58	19°40	3°53	16°50	22°2	11°50	11°15	2°42	13°23	W17
T 18	2 19 43	3°14'49	18°30	0°45	19°53	11°21	8°2	19°45	3°55	16°52	22°5	11°36	11°11	2°49	13°20	T 18
F 19	2 23 40	4°15'00	1♊29	29♊32	20°57	12°4	8°7	19°51	3°57	16°53	22°7	11°24	11°8	2°55	13°17	F 19
S 20	2 27 36	5°15'12	14°9	28°24	22°1	12°46	8°11	19°56	3°59	16°55	22°9	11°13	11°5	3°2	13°15	S 20
S 21	2 31 33	6°15'27	26°31	27°24	23°5	13°28	8°16	20°2	4°1	16°57	22°12	11°5	11°2	3°8	13°12	S 21
M22	2 35 30	7°15'42	8♊38	26°33	24°9	14°11	8°22	20°8	4°4	16°59	22°14	11°0	10°59	3°15	13°10	M22
T 23	2 39 26	8°15'59	20°34	25°53	25°12	14°53	8°27	20°14	4°6	17°1	22°16	10°58	10°55	3°22	13°7	T 23
W24	2 43 23	9°16'18	2♋23	25°25	26°16	15°35	8°32	20°19	4°9	17°2	22°19	10°57	10°52	3°28	13°4	W24
T 25	2 47 19	10°16'38	14°10	25°8	27°18	16°18	8°38	20°25	4°11	17°4	22°21	10°57	10°49	3°35	13°2	T 25
F 26	2 51 16	11°17'00	26°3	25°D 3	28°21	17°1	8°44	20°31	4°13	17°6	22°23	10°56	10°46	3°42	13°0	F 26
S 27	2 55 12	12°17'23	8♊5	25°9	29°23	17°43	8°50	20°37	4°16	17°8	22°26	10°54	10°43	3°48	12°57	S 27
S 28	2 59 9	13°17'47	20°22	25°25	0♊25	18°26	8°56	20°43	4°18	17°10	22°28	10°50	10°40	3°55	12°55	S 28
M29	3 3 5	14°18'13	2♊58	25°52	1°27	19°9	9°3	20°49	4°21	17°12	22°30	10°43	10°36	4°2	12°52	M29
T 30	3 7 2	15°18'40	15°56	26°27	2°28	19°51	9°9	20°56	4°24	17°14	22°33	10°34	10°33	4°8	12°50	T 30
W31	3 10 59	16♍19°09	29♊16	27♊10	3♊29	20♍34	9♋16	21♊2	4♊26	17♊16	22♊35	10♋22	10♋30	4♋15	12♊48	W31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
M 1	6s25	1n 5	3n21	17s51	3s14	22s52	2s28	11s12	0n 9	19s29	0s59	21s57	1n 3	23s47	0s19	21s29
T 2	6 48	6 52	4 7	18 0	3 14	23 9	2 32	11 27	0 9	19 28	0 59	21 57	1 3	23 47	0 19	21 29
W 3	7 11	12 28	4 40	18 6	3 14	23 25	2 35	11 42	0 8	19 28	0 59	21 58	1 3	23 47	0 19	21 30
T 4	7 34	17 37	4 59	18 9	3 12	23 41	2 38	11 57	0 7	19 27	0 59	21 59	1 2	23 47	0 19	21 30
F 5	7 56	21 59	5 1	18 8	3 9	23 56	2 41	12 12	0 7	19 27	0 59	21 59	1 2	23 47	0 19	21 30
S 6	8 19	25 11	4 47	18 4	3 4	24 11	2 44	12 27	0 6	19 26	0 59	22 0	1 2	23 47	0 19	21 30
S 7	8 41	26 55	4 15	17 56	2 59	24 25	2 47	12 42	0 6	19 25	0 59	22 0	1 2	23 47	0 19	21 30
M 8	9 3	26 58	3 28	17 44	2 51	24 39	2 49	12 56	0 5	19 25	0 59	22 1	1 2	23 47	0 19	21 31
T 9	9 26	25 17	2 28	17 28	2 43	24 51	2 52	13 11	0 4	19 24	0 58	22 1	1 2	23 47	0 19	21 31
W10	9 48	22 1	1 19	17 7	2 32	25 4	2 55	13 25	0 4	19 23	0 58	22 2	1 2	23 47	0 19	21 31
T 11	10 9	17 27	0 5	16 41	2 20	25 15	2 57	13 40	0 3	19 22	0 58	22 2	1 1	23 47	0 19	21 31
F 12	10 31	11 55	1s 9	16 11	2 6	25 26	3 0	13 54	0 2	19 21	0 58	22 3	1 1	23 46	0 19	21 31
S 13	10 53	5 47	2 19	15 36	1 50	25 37	3 2	14 8	0 2	19 20	0 58	22 4	1 1	23 46	0 19	21 32
S 14	11 14	0s37	3 20	14 57	1 32	25 46	3 4	14 22	0 1	19 19	0 58	22 4	1 1	23 46	0 19	21 32
M15	11 35	6 55	4 9	14 15	1 13	25 56	3 6	14 36	0 1	19 18	0 58	22 5	1 1	23 46	0 19	21 32
T 16	11 56	12 48	4 42	13 40	0 54	26 4	3 8	14 50	0 0	19 17	0 58	22 5	1 1	23 46	0 19	21 32
W17	12 17	17 58	4 58	12 34	0 33	26 12	3 10	15 4	0s 1	19 16	0 58	22 6	1 1	23 46	0 19	21 32
T 18	12 38	22 9	4 58	11 58	0 12	26 19	3 12	15 18	0 1	19 14	0 58	22 6	1 0	23 46	0 19	21 33
F 19	12 58	25 7	4 43	11 13	0n 8	26 25	3 14	15 32	0 2	19 13	0 58	22 7	1 0	23 46	0 19	21 33
S 20	13 19	26 45	4 13	10 30	0 28	26 31	3 16	15 45	0 2	19 12	0 57	22 7	1 0	23 46	0 19	21 33
S 21	13 39	27 0	3 32	9 51	0 47	26 36	3 17	15 58	0 3	19 10	0 57	22 8	1 0	23 46	0 19	21 33
M22	13 59	25 55	2 42	9 16	1 4	26 41	3 18	16 12	0 4	19 9	0 57	22 9	1 0	23 46	0 19	21 33
T 23	14 18	23 40	1 46	8 47	1 20	26 45	3 20	16 25	0 4	19 7	0 57	22 9	1 0	23 46	0 19	21 34
W24	14 37	20 25	0 45	8 24	1 34	26 48	3 21	16 38	0 5	19 6	0 57	22 10	1 0	23 46	0 19	21 34
T 25	14 57	16 21	0n17	8 7	1 46	26 51	3 22	16 51	0 5	19 4	0 57	22 10	1 0	23 46	0 19	21 34
F 26	15 15	11 38	1 19	7 55	1 56	26 52	3 23	17 4	0 6	19 3	0 57	22 11	0 59	23 45	0 19	21 34
S 27	15 34	6 25	2 18	7 50	2 4	26 54	3 23	17 16	0 7	19 1	0 57	22 11	0 59	23 45	0 19	21 35
S 28	15 52	0 53	3 12	7 50	2 11	26 54	3 24	17 29	0 7	18 59	0 57	22 12	0 59	23 45	0 19	21 35
M29	16 11	4n50	3 58	7 55	2 16	26 54	3 24	17 41	0 8	18 57	0 57	22 12	0 59	23 45	0 19	21 35
T 30	16 28	10 29	4 34	8 4	2 19	26 54	3 25	17 53	0 8	18 56	0 57	22 13	0 59	23 45	0 19	21 35
W31	16s46	15n50	4n55	8s18	2n21	26s52	3s25	18s 5	0s 9	18s54	0s56	22s13	0n59	23s45	0s19	21s35

Julian Day Number = 2264457.5, Delta T = 05m17s

Ecliptic obliquity = 23°30'28", Nutation = 0°00'12", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 17°35'36", Lahiri = 16°42'36" Julian Calendar 1 Oct. 1487 == Greg. Calendar 10 Oct. 1487

ASTRODIENST EPHEMERIS for the year 1487
geocentric

NOVEMBER 1487 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	3 14 55	17 ¹¹ 19'39	12 ⁸ 58	28 ² 0	4 ³ 29	21 ¹¹ 17	9 ²³ 23	21 ¹⁷ 8	4 ³ 29	17 ¹⁷ 18	22 ² 37	10 ¹⁰ 9	10 ²² 27	4 ²² 22	12 ¹⁰ R46	T 1
F 2	3 18 52	18 ²⁰ 20'11	26 ⁵ 57	28 ⁵ 57	5 ³⁰	22 ² 0	9 ³⁰	21 ¹⁴	4 ³²	17 ²⁰	22 ³⁹	9 ⁵⁷	10 ²⁴	4 ²⁸	12 ¹⁰ Y43	F 2
S 3	3 22 48	19 ²⁰ 20'44	11 ¹¹ 10	29 ⁵ 58	6 ²⁹	22 ⁴³	9 ³⁷	21 ²¹	4 ³⁴	17 ²²	22 ⁴²	9 ⁴⁶	10 ²¹	4 ³⁵	12 ¹⁰ 41	S 3
S 4	3 26 45	20 ²¹ 20	25 ²⁹	1 ¹¹ 5	7 ²⁹	23 ²⁶	9 ⁴⁴	21 ²⁷	4 ³⁷	17 ²⁴	22 ⁴⁴	9 ³⁷	10 ¹⁷	4 ⁴²	12 ¹⁰ 39	S 4
M 5	3 30 41	21 ²¹ 57	9 ²⁵ 51	2 ¹⁶	8 ²⁷	24 ⁹	9 ⁵²	21 ³³	4 ⁴⁰	17 ²⁶	22 ⁴⁶	9 ³²	10 ¹⁴	4 ⁴⁸	12 ¹⁰ 37	M 5
T 6	3 34 38	22 ²² 35	24 ¹⁰	3 ³⁰	9 ²⁶	24 ⁵²	9 ⁵⁹	21 ⁴⁰	4 ⁴³	17 ²⁸	22 ⁴⁸	9 ²⁹	10 ¹¹	4 ⁵⁵	12 ¹⁰ 35	T 6
W 7	3 38 35	23 ²³ 15	8 ²² 24	4 ⁴⁷	10 ²⁴	25 ³⁵	10 ⁷	21 ⁴⁶	4 ⁴⁶	17 ³⁰	22 ⁵⁰	9 ²⁸	10 ⁸	5 ¹	12 ¹⁰ 33	W 7
T 8	3 42 31	24 ²³ 57	22 ³⁰	6 ⁷	11 ²¹	26 ¹⁹	10 ¹⁵	21 ⁵³	4 ⁴⁹	17 ³³	22 ⁵³	9 ²⁸	10 ⁵	5 ⁸	12 ¹⁰ 31	T 8
F 9	3 46 28	25 ²⁴ 41	6 ¹⁰ 29	7 ²⁹	12 ¹⁸	27 ²	10 ²³	21 ⁵⁹	4 ⁵²	17 ³⁵	22 ⁵⁵	9 ²⁸	10 ¹	5 ¹⁵	12 ¹⁰ 29	F 9
S 10	3 50 24	26 ²⁵ 26	20 ¹⁹	8 ⁵³	13 ¹⁵	27 ⁴⁵	10 ³¹	22 ⁶	4 ⁵⁵	17 ³⁷	22 ⁵⁷	9 ²⁶	9 ⁵⁸	5 ²¹	12 ¹⁰ 27	S 10
S 11	3 54 21	27 ²⁶ 12	4 ² 1	10 ¹⁸	14 ¹⁰	28 ²⁹	10 ⁴⁰	22 ¹²	4 ⁵⁸	17 ³⁹	22 ⁵⁹	9 ²¹	9 ⁵⁵	5 ²⁸	12 ¹⁰ 25	S 11
M 12	3 58 17	28 ²⁷ 01	17 ³³	11 ⁴⁵	15 ⁶	29 ¹²	10 ⁴⁸	22 ¹⁹	5 ¹	17 ⁴¹	23 ¹	9 ¹³	9 ⁵²	5 ³⁵	12 ¹⁰ 24	M 12
T 13	4 2 14	29 ²⁷ 50	0 ¹¹ 56	13 ¹³	16 ¹	29 ⁵⁶	10 ⁵⁷	22 ²⁶	5 ⁴	17 ⁴³	23 ³	9 ³	9 ⁴⁹	5 ⁴¹	12 ¹⁰ 22	T 13
W 14	4 6 10	0 ¹⁷ 28'41	14 ⁷	14 ⁴¹	16 ⁵⁵	0 ¹⁷ 39	11 ⁶	22 ³²	5 ⁷	17 ⁴⁶	23 ⁵	8 ⁵¹	9 ⁴⁶	5 ⁴⁸	12 ¹⁰ 20	W 14
T 15	4 10 7	1 ²⁹ 34	27 ⁴	16 ¹¹	17 ⁴⁸	1 ²³	11 ¹⁵	22 ³⁹	5 ¹⁰	17 ⁴⁸	23 ⁷	8 ³⁹	9 ⁴²	5 ⁵⁵	12 ¹⁰ 19	T 15
F 16	4 14 4	2 ³⁰ 28	9 ¹⁷ 48	17 ⁴¹	18 ⁴¹	2 ⁷	11 ²⁴	22 ⁴⁶	5 ¹³	17 ⁵⁰	23 ⁹	8 ²⁷	9 ³⁹	6 ¹	12 ¹⁰ 17	F 16
S 17	4 18 0	3 ³¹ 22	22 ¹⁷	19 ¹¹	19 ³³	2 ⁵⁰	11 ³³	22 ⁵³	5 ¹⁶	17 ⁵²	23 ¹¹	8 ¹⁶	9 ³⁶	6 ⁸	12 ¹⁰ 15	S 17
S 18	4 21 57	4 ³² 18	4 ³ 32	20 ⁴²	20 ²⁵	3 ³⁴	11 ⁴²	22 ⁵⁹	5 ¹⁹	17 ⁵⁴	23 ¹³	8 ⁹	9 ³³	6 ¹⁵	12 ¹⁰ 14	S 18
M 19	4 25 53	5 ³³ 15	16 ³⁴	22 ¹⁴	21 ¹⁶	4 ¹⁸	11 ⁵²	23 ⁶	5 ²³	17 ⁵⁷	23 ¹⁵	8 ³	9 ³⁰	6 ²¹	12 ¹⁰ 13	M 19
T 20	4 29 50	6 ³⁴ 13	28 ²⁸	23 ⁴⁵	22 ⁵	5 ²	12 ¹	23 ¹³	5 ²⁶	17 ⁵⁹	23 ¹⁷	8 ¹	9 ²⁷	6 ²⁸	12 ¹⁰ 11	T 20
W 21	4 33 46	7 ³⁵ 11	10 ²⁸ 15	25 ¹⁷	22 ⁵⁵	5 ⁴⁶	12 ¹¹	23 ²⁰	5 ²⁹	18 ¹	23 ¹⁹	8 ²	9 ²³	6 ³⁵	12 ¹⁰ 10	W 21
T 22	4 37 43	8 ³⁶ 10	22 ²	26 ⁴⁹	23 ⁴³	6 ³⁰	12 ²¹	23 ²⁷	5 ³²	18 ³	23 ²¹	8 ¹	9 ²⁰	6 ⁴¹	12 ¹⁰ 9	T 22
F 23	4 41 39	9 ³⁷ 10	3 ¹¹ 52	28 ²²	24 ³⁰	7 ¹⁴	12 ³¹	23 ³⁴	5 ³⁶	18 ⁶	23 ²²	8 ²	9 ¹⁷	6 ⁴⁸	12 ¹⁰ 7	F 23
S 24	4 45 36	10 ³⁸ 10	15 ⁵³	29 ⁵⁴	25 ¹⁷	7 ⁵⁸	12 ⁴¹	23 ⁴¹	5 ³⁹	18 ⁸	23 ²⁴	8 ²	9 ¹⁴	6 ⁵⁴	12 ¹⁰ 6	S 24
S 25	4 49 33	11 ³⁹ 11	28 ⁸	1 ¹⁷ 27	26 ²	8 ⁴²	12 ⁵¹	23 ⁴⁸	5 ⁴²	18 ¹⁰	23 ²⁶	8 ⁰	9 ¹¹	7 ¹	12 ¹⁰ 5	S 25
M 26	4 53 29	12 ⁴⁰ 12	10 ¹⁷ 44	2 ⁵⁹	26 ⁴⁷	9 ²⁶	13 ¹	23 ⁵⁵	5 ⁴⁶	18 ¹²	23 ²⁸	7 ⁵⁶	9 ⁷	7 ⁸	12 ¹⁰ 4	M 26
T 27	4 57 26	13 ⁴¹ 14	23 ⁴³	4 ³²	27 ³⁰	10 ¹⁰	13 ¹²	24 ²	5 ⁴⁹	18 ¹⁵	23 ³⁰	7 ⁵⁰	9 ⁴	7 ¹⁴	12 ¹⁰ 3	T 27
W 28	5 1 22	14 ⁴² 17	7 ⁸ 9	6 ⁵	28 ¹³	10 ⁵⁵	13 ²²	24 ⁸	5 ⁵²	18 ¹⁷	23 ³¹	7 ⁴³	9 ¹	7 ²¹	12 ¹⁰ 2	W 28
T 29	5 5 19	15 ⁴³ 20	21 ¹	7 ³⁸	28 ⁵⁴	11 ³⁹	13 ³³	24 ¹⁵	5 ⁵⁶	18 ¹⁹	23 ³³	7 ³⁴	8 ⁵⁸	7 ²⁸	12 ¹⁰ 1	T 29
F 30	5 9 15	16 ⁴⁴ 23	5 ¹¹ 17	9 ¹¹	29 ³ 34	12 ¹⁷ 23	13 ⁴⁴	24 ¹⁷ 22	5 ⁵⁹	18 ²¹	23 ³⁵	7 ²⁵	8 ⁵⁵	7 ³⁴	12 ¹⁰ 0	F 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	17s 3	20n32	5n 0	8s35	2n22	26s50	3s25	18s17	0s10	18s52	0s56	22s14	0n59	23s45	0s19	21s36	1n19	6n31	16n30	17s45	17s40	19s45	6n22	1n26			
F 2	17 20	24 11	4 48	8 55	2 22	26 48	3 24	18 29	0 10	18 50	0 56	22 15	0 59	23 45	0 19	21 36	1 19	6 30	16 31	17 48	17 41	19 43	6 21	1 26			
S 3	17 37	26 25	4 17	9 18	2 20	26 45	3 24	18 41	0 11	18 48	0 56	22 15	0 58	23 45	0 19	21 36	1 19	6 30	16 31	17 51	17 42	19 40	6 20	1 26			
S 4	17 53	26 56	3 30	9 44	2 18	26 41	3 23	18 52	0 12	18 46	0 56	22 16	0 58	23 45	0 19	21 36	1 19	6 29	16 31	17 54	17 43	19 38	6 19	1 25			
M 5	18 9	25 38	2 30	10 11	2 15	26 36	3 23	19 4	0 12	18 44	0 56	22 16	0 58	23 44	0 19	21 36	1 19	6 29	16 31	17 55	17 44	19 36	6 18	1 25			
T 6	18 25	22 39	1 20	10 40	2 11	26 32	3 22	19 15	0 13	18 41	0 56	22 17	0 58	23 44	0 19	21 37	1 19	6 28	16 32	17 56	17 45	19 33	6 17	1 25			
W 7	18 40	18 18	0 6	11 10	2 7	26 26	3 21	19 26	0 13	18 39	0 56	22 17	0 58	23 44	0 19	21 37	1 19	6 28	16 32	17 56	17 45	19 31	6 17	1 25			
T 8	18 55	12 58	1s 9	11 41	2 2	26 20	3 19	19 37	0 14	18 37	0 56	22 18	0 58	23 44	0 19	21 37	1 19	6 27	16 32	17 56	17 46	19 28	6 16	1 25			
F 9	19 10	7 1	2 18	12 12	1 57	26 13	3 18	19 47	0 15	18 35	0 56	22 18	0 58	23 44	0 19	21 37	1 18	6 27	16 32	17 56	17 47	19 26	6 15	1 25			
S 10	19 25	0 48	3 19	12 44	1 51	26 6	3 16	19 58	0 15	18 32	0 56	22 19	0 58	23 44	0 19	21 38	1 18	6 26	16 33	17 57	17 48	19 23	6 14	1 25			
S 11	19 39	5s22	4 7	13 17	1 46	25 58	3 14	20 8	0 16	18 30	0 56	22 19	0 58	23 44	0 19	21 38	1 18	6 26	16 33	17 58	17 49	19 21	6 13	1 24			
M 12	19 52	11 14	4 41	13 50	1 39	25 50	3 12	20 18	0 16	18 28	0 55	22 20	0 58	23 44	0 19	21 38	1 18	6 25	16 33	18 0	17 50	19 18	6 12	1 24			
T 13	20 6	16 30	4 59	14 22	1 33	25 41	3 10	20 28	0 17	18 25	0 55	22 20	0 57	23 44	0 19	21 38	1 18	6 25	16 34	18 3	17 51	19 16	6 11	1 24			
W 14	20 19	20 54	5 1	14 55	1 26	25 32	3 8	20 38	0 18	18 23	0 55	22 21	0 57	23 43	0 19	21 38	1 18	6 24	16 34	18 6	17 51	19 13	6 11	1 24			
T 15	20 31	24 13	4 47	15 27	1 20	25 22	3 5	20 48	0 18	18 20	0 55	22 21	0 57	23 43	0 19	21 39	1 18	6 24	16 34	18 9	17 52	19 11	6 10	1 24			
F 16	20 43	26 15	4 19	15 59	1 13	25 12	3 2	20 57	0 19	18 18	0 55	22 22	0 57	23 43	0 19	21 39	1 18	6 24	16 35	18 12	17 53	19 8	6 9	1 24			
S 17	20 55	26 55	3 39	16 31	1 6	25 1	2 59	21 6	0 19	18 15	0 55	22 22	0 57	23 43	0 19	21 39	1 18	6 23	16 35	18 15	17 54	19 6	6 8	1 24			
S 18	21 6	26 14	2 49	17 2	0 59	24 50	2 55	21 15	0 20	18 12	0 55	22 22	0 57	23 43	0 19	21 39	1 18	6 23	16 35	18 17	17 55	19 3	6 8	1 23			
M 19	21 17	24 20	1 52	17 33	0 51	24 39	2 52	21 24	0 21	18 10	0 55	22 23	0 57	23 43	0 19	21 40	1 18	6 22	16 36	18 18	17 56	19 1	6 7	1 23			
T 20	21 28	21 22	0 51	18 3	0 44	24 27	2 48	21 33	0 21	18 7	0 55	22 23	0 57	23 43	0 19	21 40	1 18	6 22	16 36	18 19	17 56	18 58	6 6	1 23			
W 21	21 38	17 32	0n12	18 32	0 37	24 15	2 44	21 41	0 22	18 4	0 55	22 24	0 57	23 43	0 19	21 40	1 18	6 22	16 36	18 19	17 57	18 56	6 6	1 23			
T 22	21 48	13 2	1 15	19 1	0 30	24 2	2 39	21 49	0 22	18 1	0 55	22 24	0 57	23 42	0 19	21 40	1 18	6 21	16 37	18 19	17 58	18 53	6 5	1 23			
F 23	21 57	8 2	2 14	19 29	0 23	23 49	2 34	21 57	0 23	17 58	0 55	22 25	0 56	23 42	0 19	21 40	1 18	6 21	16 37	18 19	17 59	18 51	6 4	1 23			
S 24	22 6	2 41	3 9	19 56	0 16	23 35	2 30	22 5	0 24	17 55	0 55	22 25	0 56	23 42	0 19	21 41	1 18	6 21	16 38	18 19	18 0	18 48	6 4	1 23			
S 25	22 15	2n52	3 56	20 22	0 9	23 22	2 24	22 13	0 24	17 52	0 55	22 25	0 56	23 42	0 19	21 41	1 18	6 21	16 38	18 19	18 1	18 46	6 3	1 22			
M 26	22 23	8 26	4 33	20 47	0 2	23 8	2 19	22 20	0 25	17 49	0 54	22 26	0 56	23 42	0 19	21 41	1 18	6 20	16 38	18 20	18 2	18 43	6 3	1 22			
T 27	22 30	13 50	4 57	21 12	0s 5	22 54	2 13	22 27	0 25	17 46	0 54	22 26	0 56	23 42	0 19	21 41	1 18	6 20	16 39	18 22	18 2	18 40	6 2	1 22			
W 28	22 38	18 46	5 7	21 35	0 12	22 39	2 7	22 34	0 26	17 43	0 54	22 27	0 56	23 42	0 19	21 41	1 18	6 20	16 39	18 24	18 3	18 38	6 2	1 22			
T 29	22 44	22 51	4 58	21 57	0 19	22 24	2 1	22 41	0 27	17 40	0 54	22 27	0 56	23 41	0 19	21 42	1 18	6 20	16 40	18 26	18 4	18 35	6 1	1 22			
F 30	22s51	25n42	4n32	22s19	0s25	22s 9	1s54	22s48	0s27	17s37	0s54	22s27	0n56	23s41	0s19	21s42	1n18	6n20	16n40	18s28	18s 5	18s33	6n 1	1n22			

ASTRODIENST EPHEMERIS for the year 1487

geocentric

DECEMBER 1487 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	5 13 12	17°45'28	19°11'51	10°45'45	0°13'13	13°17'08	13°55'55	24°17'30	6°33'03	18°17'24	23°13'36	7°17'17	8°11'52	7°11'41	11°17'59	S 1
S 2	5 17 8	18°46'33	4°36'36	12°18'18	0°50'13	13°52'14	14°06'06	24°37'24	6°06'06	18°26'26	23°38'38	7°11'11	8°48'48	7°48'48	11°17'59	S 2
M 3	5 21 5	19°47'39	19°25'25	13°52'13	1°26'14	14°37'14	14°17'17	24°44'44	6°10'10	18°28'28	23°39'39	7°08'08	8°45'45	7°54'54	11°58'58	M 3
T 4	5 25 2	20°48'45	4°12'10	15°26'15	2°01'15	15°21'21	14°28'28	24°51'51	6°13'13	18°30'30	23°41'41	7°06'06	8°42'42	8°01'01	11°57'57	T 4
W 5	5 28 58	21°49'52	18°45'18	17°00'17	2°35'16	16°06'16	14°39'39	24°58'58	6°17'17	18°33'33	23°43'43	7°07'07	8°39'39	8°08'08	11°57'57	W 5
T 6	5 32 55	22°51'00	3°11'06	18°34'18	3°06'16	16°50'16	14°51'51	25°05'05	6°20'20	18°35'35	23°44'44	7°08'08	8°36'36	8°14'14	11°56'56	T 6
F 7	5 36 51	23°52'08	17°10'17	20°08'20	3°37'17	17°35'35	15°02'02	25°12'12	6°24'24	18°37'37	23°46'46	7°09'09	8°33'33	8°21'21	11°56'56	F 7
S 8	5 40 48	24°53'17	0°15'58	21°43'21	4°06'06	18°20'20	15°14'14	25°19'19	6°27'27	18°39'39	23°47'47	7°09'09	8°29'29	8°27'27	11°55'55	S 8
S 9	5 44 44	25°54'27	14°29'29	23°17'23	4°33'19	19°05'15	15°25'25	25°26'26	6°31'31	18°42'42	23°48'48	7°07'07	8°26'26	8°34'34	11°55'55	S 9
M10	5 48 41	26°55'37	27°46'27	24°52'24	4°58'19	19°50'15	15°37'15	25°33'33	6°34'34	18°44'44	23°50'50	7°04'04	8°23'23	8°41'41	11°55'55	M10
T 11	5 52 37	27°56'48	10°14'48	26°28'26	5°21'20	20°34'20	15°49'15	25°40'40	6°38'38	18°46'46	23°51'51	6°58'58	8°20'20	8°47'47	11°55'55	T 11
W12	5 56 34	28°58'00	23°36'28	28°03'28	5°43'21	21°19'16	16°01'16	25°47'47	6°41'41	18°48'48	23°52'52	6°52'52	8°17'17	8°54'54	11°54'54	W12
T 13	6 0 31	29°59'11	6°11'13	29°39'29	6°03'22	22°04'16	16°13'16	25°54'54	6°45'45	18°51'51	23°54'54	6°45'45	8°13'13	9°01'01	11°54'54	T 13
F 14	6 4 27	1°02'13	18°38'18	1°15'13	6°21'22	22°49'16	16°25'16	26°01'01	6°48'48	18°53'53	23°55'55	6°38'38	8°10'10	9°07'07	11°54'54	F 14
S 15	6 8 24	2°13'36	0°15'58	2°52'02	6°36'23	23°34'16	16°37'16	26°08'08	6°52'52	18°55'55	23°56'56	6°32'32	8°07'07	9°14'14	11°54'54	S 15
S 16	6 12 20	3°24'48	12°56'12	4°28'04	6°50'24	24°20'16	16°50'16	26°15'15	6°56'56	18°57'57	23°57'57	6°28'28	8°04'04	9°21'21	11°54'54	S 16
M17	6 16 17	4°40'01	24°52'24	6°06'06	7°01'25	25°05'17	17°02'17	26°22'22	6°59'59	19°00'00	23°58'58	6°26'26	8°01'01	9°27'27	11°55'55	M17
T 18	6 20 13	5°51'13	6°11'42	7°43'07	7°10'25	25°50'17	17°14'14	26°29'29	7°03'03	19°02'02	24°00'00	6°26'26	7°58'58	9°34'34	11°55'55	T 18
W19	6 24 10	6°6'25	18°29'18	9°21'09	7°17'26	26°35'17	17°27'17	26°36'36	7°06'06	19°04'04	24°01'01	6°26'26	7°54'54	9°41'41	11°55'55	W19
T 20	6 28 7	7°7'37	0°15'58	10°59'10	7°22'27	27°20'17	17°40'17	26°43'43	7°10'10	19°06'06	24°02'02	6°27'27	7°51'51	9°47'47	11°55'55	T 20
F 21	6 32 3	8°8'48	12°05'12	12°37'12	7°22'27	28°06'17	17°52'17	26°50'50	7°14'14	19°08'08	24°03'03	6°29'29	7°48'48	9°54'54	11°56'56	F 21
S 22	6 36 0	9°9'59	24°04'14	14°16'14	7°23'28	28°51'18	18°05'18	26°57'57	7°17'17	19°11'11	24°04'04	6°31'31	7°45'45	10°01'01	11°56'56	S 22
S 23	6 39 56	10°11'09	6°17'15	15°55'15	7°20'29	29°37'18	18°18'18	27°04'27	7°21'21	19°13'13	24°05'05	6°31'31	7°42'42	10°07'07	11°57'57	S 23
M24	6 43 53	11°12'19	18°48'18	17°35'17	7°15'07	0°12'22	18°31'31	27°11'27	7°24'24	19°15'15	24°06'06	6°31'31	7°39'39	10°14'14	11°57'57	M24
T 25	6 47 49	12°13'29	1°18'42	19°15'19	7°07'10	1°07'10	18°44'44	27°18'27	7°28'28	19°17'17	24°07'07	6°30'30	7°35'35	10°20'20	11°58'58	T 25
W26	6 51 46	13°14'38	15°02'20	20°55'20	6°56'15	1°53'15	18°57'57	27°25'27	7°31'31	19°19'19	24°07'07	6°28'28	7°32'32	10°27'27	11°58'58	W26
T 27	6 55 42	14°15'46	28°50'28	22°35'22	6°43'20	2°38'20	19°10'10	27°32'27	7°35'35	19°21'21	24°08'08	6°25'25	7°29'29	10°34'34	11°59'59	T 27
F 28	6 59 39	15°16'54	13°11'13	24°16'24	6°28'13	3°24'24	19°23'23	27°39'39	7°39'39	19°23'23	24°09'09	6°21'21	7°26'26	10°40'40	12°00'00	F 28
S 29	7 3 36	16°18'02	27°45'27	25°57'25	6°10'04	4°10'04	19°36'36	27°45'27	7°42'42	19°25'25	24°10'10	6°19'19	7°23'23	10°47'47	12°01'01	S 29
S 30	7 7 32	17°19'08	12°13'43	27°37'27	5°49'05	4°55'05	19°49'49	27°52'27	7°46'46	19°27'27	24°11'11	6°17'17	7°19'19	10°54'54	12°02'02	S 30
M31	7 11 29	18°20'15	27°15'15	29°18'29	5°27'05	5°13'05	20°03'03	27°59'27	7°49'49	19°30'30	24°11'11	6°16'16	7°16'16	11°00'00	12°03'03	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	22s57	26n53	3n47	22s39	0s32	21s54	1s47	22s54	0s28	17s34	0s54	22s28	0n56	23s41	0s19	21s42	1n18	6n19	16n40	18s30	18s6	18s30	6n0	1n22						
S 2	23 2	26 12	2 46	22 58	0 38	21 39	1 40	23 0	0 28	17 31	0 54	22 28	0 56	23 41	0 19	21 42	1 18	6 19	16 41	18 32	18 7	18 28	6 0	1 21						
M 3	23 7	23 39	1 34	23 16	0 45	21 23	1 32	23 6	0 29	17 27	0 54	22 28	0 56	23 41	0 19	21 42	1 18	6 19	16 41	18 33	18 7	18 25	5 59	1 21						
T 4	23 11	19 32	0 16	23 33	0 51	21 8	1 24	23 11	0 29	17 24	0 54	22 29	0 56	23 41	0 19	21 43	1 18	6 19	16 42	18 33	18 8	18 22	5 59	1 21						
W 5	23 15	14 15	1s3	23 49	0 57	20 52	1 16	23 17	0 30	17 21	0 54	22 29	0 56	23 40	0 19	21 43	1 18	6 19	16 42	18 33	18 9	18 20	5 59	1 21						
T 6	23 19	8 17	2 16	24 3	1 2	20 36	1 7	23 22	0 31	17 17	0 54	22 29	0 55	23 40	0 19	21 43	1 18	6 19	16 43	18 32	18 10	18 17	5 58	1 21						
F 7	23 22	2 1	3 20	24 16	1 8	20 20	0 58	23 27	0 31	17 14	0 54	22 30	0 55	23 40	0 19	21 43	1 18	6 19	16 43	18 32	18 11	18 15	5 58	1 21						
S 8	23 25	4s13	4 11	24 28	1 13	20 5	0 49	23 31	0 32	17 10	0 54	22 30	0 55	23 40	0 19	21 43	1 18	6 19	16 44	18 32	18 12	18 12	5 58	1 20						
S 9	23 27	10 8	4 47	24 39	1 19	19 49	0 39	23 36	0 32	17 7	0 54	22 30	0 55	23 40	0 19	21 44	1 18	6 19	16 44	18 33	18 12	18 10	5 57	1 20						
M10	23 28	15 28	5 6	24 48	1 24	19 33	0 29	23 40	0 33	17 3	0 54	22 31	0 55	23 40	0 19	21 44	1 18	6 19	16 45	18 34	18 13	18 7	5 57	1 20						
T 11	23 29	20 0	5 10	24 56	1 29	19 17	0 19	23 44	0 34	17 0	0 54	22 31	0 55	23 39	0 19	21 44	1 18	6 19	16 45	18 35	18 14	18 4	5 57	1 20						
W12	23 30	23 31	4 57	25 3	1 33	19 1	0 8	23 47	0 34	16 56	0 54	22 31	0 55	23 39	0 19	21 44	1 18	6 19	16 46	18 37	18 15	18 2	5 57	1 20						
T 13	23 30	25 51	4 31	25 8	1 37	18 46	0n3	23 51	0 35	16 52	0 54	22 32	0 55	23 39	0 19	21 44	1 18	6 19	16 46	18 38	18 16	17 59	5 57	1 20						
F 14	23 30	26 52	3 51	25 12	1 42	18 30	0 15	23 54	0 35	16 49	0 54	22 32	0 55	23 39	0 19	21 45	1 18	6 19	16 47	18 40	18 16	17 57	5 56	1 20						
S 15	23 30	26 32	3 2	25 14	1 45	18 15	0 27	23 57	0 36	16 45	0 54	22 32	0 55	23 39	0 19	21 45	1 18	6 19	16 47	18 41	18 17	17 54	5 56	1 19						
S 16	23 28	24 57	2 5	25 15	1 49	17 59	0 39	23 59	0 36	16 41	0 53	22 32	0 55	23 39	0 19	21 45	1 18	6 19	16 48	18 43	18 18	17 51	5 56	1 19						
M17	23 27	22 15	1 3	25 14	1 52	17 44	0 52	24 2	0 37	16 37	0 53	22 33	0 55	23 38	0 19	21 45	1 18	6 19	16 48	18 43	18 19	17 49	5 56	1 19						
T 18	23 25	18 37	0n2	25 12	1 55	17 29	1 5	24 4	0 37	16 34	0 53	22 33	0 55	23 38	0 19	21 45	1 18	6 19	16 49	18 43	18 20	17 46	5 56	1 19						
W19	23 22	14 17	1 6	25 8	1 58	17 15	1 18	24 6	0 38	16 30	0 53	22 33	0 55	23 38	0 19	21 45	1 18	6 19	16 49	18 43	18 21	17 43	5 56	1 19						
T 20	23 19	9 26	2 7	25 3	2 0	17 1	1 31	24 7	0 39	16 26	0 53	22 33	0 55	23 38	0 19	21 46	1 18	6 19	16 50	18 43	18 21	17 41	5 56	1 19						
F 21	23 15	4 13	3 4	24 56	2 2	16 47	1 45	24 9	0 39	16 22	0 53	22 34	0 55	23 38	0 19	21 46	1 18	6 19	16 50	18 42	18 22	17 38	5 56	1 18						
S 22	23 11	1n12	3 53	24 48	2 4	16 33	2 0	24 10	0 40	16 18	0 53	22 34	0 55	23 37	0 19	21 46	1 18	6 19	16 51	18 42	18 23	17 36	5 56	1 18						
S 23	23 7	6 40	4 33	24 38	2 5	16 20	2 14	24 11	0 40	16 14	0 53	22 34	0 55	23 37	0 19	21 46	1 18	6 20	16 51	18 42	18 24	17 33	5 56	1 18						
M24	23 2	12 0	5 0	0 26	2 6	16 7	2 29	24 11	0 41	16 10	0 53	22 34	0 54	23 37	0 19	21 46	1 18	6 20	16 52	18 42	18 25	17 30	5 56	1 18						
T 25	22 57	17 0	5 14	24 13	2 7	15 54	2 44	24 11	0 41	16 6	0 53	22 34	0 54	23 37	0 19	21 46	1 18	6 20	16 52	18 42	18 26	17 28	5 56	1 18						
W26	22 51	21 21	5 12	23 58	2 7	15 42	2 59	24 11	0 42	16 2	0 53	22 35	0 54	23 37	0 19	21 47	1 18	6 20	16 53	18 43	18 26	17 25	5 56	1 18						
T 27	22 44	24 42	4 52	23 41	2 6	15 31	3 14	24 11	0 42	15 58	0 53	22 35	0 54	23 36	0 19	21 47	1 18	6 20	16 54	18 43	18 27	17 22	5 56	1 18						
F 28	22 38	26 37	4 13	23 23	2 5	15 20	3 29	24 11	0 43	15 54	0 53	22 35	0 54	23 36	0 19	21 47	1 18	6 21	16 54	18 44	18 28	17 20	5 57	1 17						
S 29	22 31	26 46	3 17	23 3	2 4	15 9	3 45	24 10	0 43	15 49	0 53	22 35	0 54	23 36	0 19	21 47	1 18	6 21	16 55	18 45	18 29	17 17	5 57	1 17						
S 30	22 23	25 0	2 7	22 41	2 2	14 59	4 0	24 9	0 44	15 45	0 53	22 35	0 54	23 36	0 19	21 47	1 18	6 21	16 55	18 45	18 30	17 14	5 57	1 17						
M31	22s15	21n25	0n46	22s18	1s59	14s50	4n15	24s8	0s45	15s41	0s53	22s35	0n54	23s36	0s19	21s47	1n18	6n21	16n56	18s46	18s30	17s12	5n57	1n17						