



Astrodienst Ephemeris Tables for the year 1490

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 1490
geocentric

JANUARY 1490 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	7 17 27	19°53'07	12°38'38	12°R16	12°11'11	22°25'25	21°Y 9	18°3 8	15°347	23°146	29°21	29°121	28°131	28°41	19°52	F 1
S 2	7 21 24	20°54'13	24°34	11°311	13°24	23°12	21°14	18°15	15°50	23°48	29°22	29°23	28°27	2°47	19°53	S 2
S 3	7 25 20	21°55'17	6°38	10°13	14°37	23°59	21°19	18°22	15°54	23°50	29°23	29°24	28°24	2°54	19°53	S 3
M 4	7 29 17	22°56'21	18°55	9°24	15°50	24°46	21°25	18°29	15°57	23°52	29°23	29°25	28°21	3° 1	19°54	M 4
T 5	7 33 14	23°57'24	18°27	8°43	17° 3	25°33	21°31	18°37	16° 1	23°54	29°24	29°R26	28°18	3° 8	19°55	T 5
W 6	7 37 10	24°58'26	14°16	8°13	18°16	26°20	21°37	18°44	16° 4	23°56	29°25	29°25	28°15	3°14	19°56	W 6
T 7	7 41 7	25°59'28	27°23	7°51	19°29	27° 7	21°43	18°51	16° 8	23°58	29°25	29°23	28°12	3°21	19°57	T 7
F 8	7 45 3	27° 0'28	10°47	7°38	20°42	27°54	21°49	18°58	16°11	24° 0	29°26	29°19	28° 8	3°28	19°58	F 8
S 9	7 49 0	28° 1'28	24°26	7°D34	21°56	28°41	21°55	19° 5	16°15	24° 2	29°26	29°15	28° 5	3°34	19°59	S 9
S 10	7 52 56	29° 2'27	8°18	7°38	23° 9	29°28	22° 2	19°12	16°18	24° 4	29°27	29°10	28° 2	3°41	20° 0	S 10
M 11	7 56 53	0° 3'25	22°18	7°49	24°22	0°15	22° 9	19°19	16°22	24° 6	29°27	29° 6	27°59	3°48	20° 1	M 11
T 12	8 0 50	1° 4'22	6°24	8° 7	25°35	1° 2	22°16	19°26	16°25	24° 8	29°28	29° 2	27°56	3°54	20° 3	T 12
W 13	8 4 46	2° 5'19	20°34	8°31	26°49	1°50	22°23	19°33	16°29	24°10	29°28	29° 0	27°52	4° 1	20° 4	W 13
T 14	8 8 43	3° 6'15	4°43	9° 1	28° 2	2°37	22°30	19°40	16°32	24°12	29°28	29°D 0	27°49	4° 8	20° 5	T 14
F 15	8 12 39	4° 7'10	18°52	9°37	29°15	3°24	22°37	19°47	16°36	24°14	29°29	29° 0	27°46	4°14	20° 7	F 15
S 16	8 16 36	5° 8'05	2°157	10°17	0°29	4°11	22°45	19°54	16°39	24°15	29°29	29° 2	27°43	4°21	20° 8	S 16
S 17	8 20 32	6° 8'59	16°58	11° 1	1°42	4°58	22°53	20° 1	16°42	24°17	29°29	29° 3	27°40	4°28	20°10	S 17
M 18	8 24 29	7° 9'52	0°53	11°50	2°56	5°46	23° 1	20° 8	16°46	24°19	29°29	29°R 4	27°37	4°35	20°11	M 18
T 19	8 28 25	8°10'44	14°40	12°42	4° 9	6°33	23° 9	20°14	16°49	24°21	29°29	29° 3	27°33	4°41	20°13	T 19
W 20	8 32 22	9°11'35	28°17	13°38	5°23	7°20	23°17	20°21	16°53	24°23	29°30	28°59	27°30	4°48	20°15	W 20
T 21	8 36 19	10°12'25	11°40	14°36	6°36	8° 8	23°25	20°28	16°56	24°24	29°30	28°54	27°27	4°55	20°16	T 21
F 22	8 40 15	11°13'13	24°49	15°37	7°50	8°55	23°34	20°35	16°59	24°26	29°30	28°47	27°24	5° 1	20°18	F 22
S 23	8 44 12	12°14'00	7°42	16°41	9° 3	9°42	23°42	20°42	17° 3	24°28	29°R30	28°39	27°21	5° 8	20°20	S 23
S 24	8 48 8	13°14'45	20°18	17°47	10°17	10°30	23°51	20°49	17° 6	24°29	29°30	28°31	27°18	5°15	20°22	S 24
M 25	8 52 5	14°15'29	2°38	18°56	11°30	11°17	24° 0	20°55	17° 9	24°31	29°30	28°23	27°14	5°21	20°24	M 25
T 26	8 56 1	15°16'12	14°45	20° 6	12°44	12° 4	24° 9	21° 2	17°12	24°33	29°29	28°17	27°11	5°28	20°26	T 26
W 27	8 59 58	16°16'52	26°42	21°18	13°58	12°52	24°18	21° 9	17°16	24°34	29°29	28°13	27° 8	5°35	20°28	W 27
T 28	9 3 54	17°17'31	8°34	22°32	15°11	13°39	24°27	21°15	17°19	24°36	29°29	28°10	27° 5	5°42	20°30	T 28
F 29	9 7 51	18°18'09	20°24	23°48	16°25	14°26	24°37	21°22	17°22	24°37	29°29	28°D10	27° 2	5°48	20°32	F 29
S 30	9 11 48	19°18'44	2°18	25° 5	17°39	15°14	24°46	21°28	17°25	24°39	29°29	28°10	26°58	5°55	20°34	S 30
S 31	9 15 44	20°19'18	14°22	26°24	18°52	16° 1	24°56	21°35	17°28	24°40	29°28	28°12	26°155	6° 2	20°37	S 31

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	22s 2	19n19	3n50	19s31	3n26	20s36	1n44	22s38	1s 1	7n 9	1s13	22s14	0n 3	22s59	0s25	22s 9	1n13	4n17	16n37	23s30	23s30	16n26	8n 6	0n20	
S 2	21 52	21 53	3 1	19 35	3 28	20 48	1 42	22 31	1 1	7 11	1 12	22 13	0 3	22 58	0 25	22 9	1 13	4 18	16 37	23 30	23 30	16 28	8 6	0 20	
S 3	21 43	23 29	2 2	19 39	3 28	20 59	1 39	22 23	1 1	7 13	1 12	22 12	0 3	22 58	0 25	22 9	1 13	4 18	16 38	23 30	23 30	16 30	8 7	0 20	
M 4	21 33	24 0	0 58	19 45	3 26	21 9	1 36	22 15	1 2	7 16	1 12	22 11	0 3	22 57	0 25	22 9	1 13	4 18	16 38	23 30	23 30	16 32	8 7	0 20	
T 5	21 23	23 19	0s11	19 52	3 22	21 19	1 34	22 6	1 2	7 18	1 12	22 10	0 3	22 57	0 25	22 9	1 13	4 18	16 39	23 30	23 30	16 33	8 7	0 20	
W 6	21 12	21 24	1 21	19 59	3 17	21 28	1 31	21 57	1 2	7 21	1 11	22 9	0 3	22 57	0 25	22 9	1 13	4 19	16 39	23 30	23 30	16 35	8 7	0 20	
T 7	21 0	18 20	2 28	20 7	3 10	21 37	1 28	21 49	1 2	7 23	1 11	22 8	0 2	22 56	0 25	22 10	1 13	4 19	16 40	23 30	23 30	16 37	8 8	0 20	
F 8	20 49	14 15	3 28	20 15	3 2	21 45	1 26	21 39	1 2	7 26	1 11	22 7	0 2	22 56	0 25	22 10	1 13	4 19	16 40	23 30	23 30	16 39	8 8	0 20	
S 9	20 37	9 22	4 17	20 24	2 53	21 53	1 23	21 30	1 3	7 29	1 10	22 6	0 2	22 55	0 25	22 10	1 13	4 20	16 41	23 30	23 29	16 41	8 8	0 20	
S 10	20 24	3 58	4 52	20 34	2 44	22 0	1 20	21 20	1 3	7 31	1 10	22 5	0 2	22 55	0 25	22 10	1 13	4 20	16 41	23 30	23 29	16 43	8 9	0 19	
M11	20 12	1s41	5 10	20 43	2 34	22 6	1 17	21 11	1 3	7 34	1 10	22 4	0 2	22 55	0 25	22 10	1 13	4 20	16 42	23 30	23 29	16 44	8 9	0 19	
T 12	19 59	7 17	5 10	20 52	2 24	22 12	1 14	21 0	1 3	7 37	1 10	22 4	0 2	22 54	0 25	22 10	1 13	4 21	16 43	23 30	23 29	16 46	8 9	0 19	
W13	19 45	12 32	4 51	21 1	2 13	22 17	1 11	20 50	1 3	7 40	1 9	22 3	0 2	22 54	0 25	22 10	1 13	4 21	16 43	23 30	23 29	16 48	8 10	0 19	
T 14	19 31	17 7	4 14	21 10	2 2	22 21	1 8	20 40	1 3	7 43	1 9	22 2	0 2	22 53	0 25	22 10	1 13	4 22	16 44	23 30	23 29	16 50	8 10	0 19	
F 15	19 17	20 43	3 22	21 18	1 52	22 25	1 5	20 29	1 4	7 46	1 9	22 1	0 2	22 53	0 25	22 10	1 13	4 22	16 44	23 30	23 29	16 52	8 11	0 19	
S 16	19 2	23 3	2 18	21 26	1 41	22 28	1 2	20 18	1 4	7 49	1 8	22 0	0 2	22 53	0 25	22 10	1 13	4 22	16 45	23 30	23 29	16 53	8 11	0 19	
S 17	18 47	23 57	1 5	21 33	1 30	22 30	0 59	20 6	1 4	7 52	1 8	21 59	0 2	22 52	0 25	22 10	1 13	4 23	16 45	23 30	23 29	16 55	8 11	0 19	
M18	18 32	23 20	0n10	21 40	1 19	22 32	0 56	19 55	1 4	7 55	1 8	21 58	0 2	22 52	0 25	22 10	1 13	4 23	16 46	23 30	23 29	16 57	8 12	0 19	
T 19	18 16	21 18	1 24	21 45	1 9	22 33	0 53	19 43	1 4	7 58	1 8	21 57	0 2	22 51	0 25	22 10	1 13	4 24	16 46	23 30	23 29	16 59	8 13	0 19	
W 20	18 0	18 5	2 32	21 50	0 58	22 34	0 50	19 31	1 4	8 2	1 7	21 56	0 1	22 51	0 25	22 10	1 13	4 24	16 47	23 30	23 29	17 1	8 13	0 19	
T 21	17 44	13 58	3 30	21 54	0 48	22 34	0 47	19 19	1 4	8 5	1 7	21 55	0 1	22 51	0 25	22 10	1 13	4 25	16 47	23 30	23 29	17 2	8 14	0 18	
F 22	17 27	9 15	4 16	21 58	0 38	22 33	0 44	19 7	1 4	8 8	1 7	21 54	0 1	22 50	0 25	22 10	1 13	4 25	16 48	23 30	23 29	17 4	8 14	0 18	
S 23	17 11	4 15	4 48	22 0	0 28	22 31	0 41	18 54	1 4	8 12	1 7	21 53	0 1	22 50	0 25	22 11	1 13	4 26	16 49	23 30	23 29	17 6	8 15	0 18	
S 24	16 53	0n49	5 5	22 1	0 18	22 29	0 38	18 42	1 5	8 15	1 6	21 52	0 1	22 49	0 25	22 11	1 13	4 26	16 49	23 30	23 29	17 8	8 15	0 18	
M25	16 36	5 45	5 7	22 1	0 9	22 26	0 35	18 29	1 5	8 19	1 6	21 51	0 1	22 49	0 25	22 11	1 13	4 27	16 50	23 30	23 29	17 10	8 16	0 18	
T 26	16 18	10 22	4 56	22 0	0s 0	22 22	0 32	18 15	1 5	8 22	1 6	21 50	0 1	22 48	0 25	22 11	1 13	4 27	16 50	23 30	23 29	17 11	8 17	0 18	
W27	16 0	14 32	4 31	21 58	0 9	22 18	0 28	18 2	1 5	8 26	1 6	21 49	0 1	22 48	0 25	22 11	1 13	4 28	16 51	23 30	23 28	17 13	8 17	0 18	
T 28	15 42	18 6	3 55	21 55	0 18	22 13	0 25	17 49	1 5	8 29	1 5	21 48	0 1	22 48	0 25	22 11	1 13	4 28	16 51	23 30	23 28	17 15	8 18	0 18	
F 29	15 23	20 56	3 9	21 50	0 26	22 8	0 22	17 35	1 5	8 33	1 5	21 47	0 1	22 47	0 25	22 11	1 13	4 29	16 52	23 30	23 28	17 17	8 19	0 18	
S 30	15 4	22 53	2 15	21 44	0 34	22 1	0 19	17 21	1 5	8 37	1 5	21 46	0 1	22 47	0 25	22 11	1 13	4 30	16 52	23 30	23 28	17 18	8 20	0 18	
S 31	14s45	23n49	1n14	21s37	0s42	21s54	0n16	17s 7	1 s 5	8n40	1 s 5	21s45	0n 1	22s47	0s25	22s11	1n13	4n30	16n53	23s30	23s28	17n20	8n20	0n17	

ASTRODIENST EPHEMERIS for the year 1490

geocentric

FEBRUARY 1490 JC

00:00 UT

Day	Sid.t	☉	☾	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	9 19 41	21 ²² 19'50	26 ¹¹ 41	27 ³ 44	20 ³ 6	16 ²² 48	25 ¹⁷ 5	21 ³ 42	17 ³ 31	24 ²⁷ 42	29 ² R28	28 ² R12	26 ²⁷ 52	6 ⁸ 8	20 ²⁷ 39	M 1
T 2	9 23 37	22 ²⁰ 20'21	9 ²³ 18	29 ² 5	21 ² 20	17 ³ 36	25 ² 15	21 ² 48	17 ³ 35	24 ² 43	29 ² Δ28	28 ² Δ12	26 ² 49	6 ¹⁵	20 ² 41	T 2
W 3	9 27 34	23 ²⁰ 20'49	22 ² 17	0 ²² 27	22 ² 34	18 ² 23	25 ² 25	21 ² 54	17 ³ 38	24 ² 45	29 ² 27	28 ² 9	26 ² 46	6 ²²	20 ² 44	W 3
T 4	9 31 30	24 ²⁰ 21'16	5 ² Ω39	1 ² 51	23 ² 47	19 ² 10	25 ² 35	22 ² 1	17 ² 41	24 ² 46	29 ² 27	28 ² 4	26 ² 43	6 ²⁸	20 ² 46	T 4
F 5	9 35 27	25 ²⁰ 21'41	19 ² 25	3 ² 16	25 ² 1	19 ² 58	25 ² 46	22 ² 7	17 ² 44	24 ² 47	29 ² 26	27 ² 56	26 ² 39	6 ³⁵	20 ² 49	F 5
S 6	9 39 23	26 ²⁰ 22'04	3 ² η31	4 ² 42	26 ² 15	20 ² 45	25 ² 56	22 ² 13	17 ² 47	24 ² 49	29 ² 26	27 ² 47	26 ² 36	6 ⁴²	20 ² 51	S 6
S 7	9 43 20	27 ²⁰ 22'26	17 ² 51	6 ² 10	27 ² 29	21 ² 32	26 ² 6	22 ² 20	17 ² 50	24 ² 50	29 ² 25	27 ² 37	26 ² 33	6 ⁴⁸	20 ² 54	S 7
M 8	9 47 17	28 ²⁰ 22'46	2 ² Δ21	7 ² 38	28 ² 42	22 ² 20	26 ² 17	22 ² 26	17 ² 52	24 ² 51	29 ² 25	27 ² 28	26 ² 30	6 ⁵⁵	20 ² 56	M 8
T 9	9 51 13	29 ²⁰ 23'04	16 ² 53	9 ² 8	29 ² 56	23 ² 7	26 ² 28	22 ² 32	17 ² 55	24 ² 52	29 ² 24	27 ² 20	26 ² 27	7 ² 2	20 ² 59	T 9
W10	9 55 10	0 ² Δ23'21	1 ² η21	10 ² 38	1 ² Δ10	23 ² 54	26 ² 38	22 ² 38	17 ² 58	24 ² 54	29 ² 24	27 ² 14	26 ² 23	7 ² 9	21 ² 2	W10
T 11	9 59 6	1 ² 23'36	15 ² 41	12 ² 10	2 ² 24	24 ² 42	26 ² 49	22 ² 44	18 ² 1	24 ² 55	29 ² 23	27 ² 11	26 ² 20	7 ² 15	21 ² 4	T 11
F 12	10 3 3	2 ² 23'50	29 ² 49	13 ² 43	3 ² 38	25 ² 29	27 ² 0	22 ² 50	18 ² 4	24 ² 56	29 ² 22	27 ² D10	26 ² 17	7 ² 22	21 ² 7	F 12
S 13	10 6 59	3 ² 24'03	13 ² Δ46	15 ² 17	4 ² 51	26 ² 17	27 ² 11	22 ² 56	18 ² 7	24 ² 57	29 ² 22	27 ² 10	26 ² 14	7 ² 29	21 ² 10	S 13
S 14	10 10 56	4 ² 24'14	27 ² 30	16 ² 52	6 ² 5	27 ² 4	27 ² 23	23 ² 2	18 ² 9	24 ² 58	29 ² 21	27 ² R10	26 ² 11	7 ² 35	21 ² 13	S 14
M15	10 14 52	5 ² 24'24	11 ² 3	18 ² 27	7 ² 19	27 ² 51	27 ² 34	23 ² 8	18 ² 12	24 ² 59	29 ² 20	27 ² 10	26 ² 8	7 ² 42	21 ² 16	M15
T 16	10 18 49	6 ² 24'32	24 ² 26	20 ² 5	8 ² 33	28 ² 38	27 ² 45	23 ² 14	18 ² 15	25 ² 0	29 ² 19	27 ² 7	26 ² 4	7 ² 49	21 ² 19	T 16
W17	10 22 46	7 ² 24'38	7 ² Δ37	21 ² 43	9 ² 47	29 ² 26	27 ² 57	23 ² 20	18 ² 17	25 ² 1	29 ² 18	27 ² 1	26 ² 1	7 ² 55	21 ² 22	W17
T 18	10 26 42	8 ² 24'42	20 ² 38	23 ² 22	11 ² 1	0 ² Δ13	28 ² 8	23 ² 25	18 ² 20	25 ² 2	29 ² 18	26 ² 52	25 ² 58	8 ² 2	21 ² 25	T 18
F 19	10 30 39	9 ² 24'45	3 ² Δ27	25 ² 2	12 ² 15	1 ² 0	28 ² 20	23 ² 31	18 ² 22	25 ² 3	29 ² 17	26 ² 41	25 ² 55	8 ² 9	21 ² 28	F 19
S 20	10 34 35	10 ² 24'45	16 ² 5	26 ² 44	13 ² 29	1 ² 48	28 ² 32	23 ² 37	18 ² 25	25 ² 4	29 ² 16	26 ² 28	25 ² 52	8 ² 15	21 ² 31	S 20
S 21	10 38 32	11 ² 24'44	28 ² 30	28 ² 26	14 ² 43	2 ² 35	28 ² 43	23 ² 42	18 ² 27	25 ² 5	29 ² 15	26 ² 14	25 ² 49	8 ² 22	21 ² 34	S 21
M22	10 42 28	12 ² 24'41	10 ² Δ44	0 ² Δ10	15 ² 56	3 ² 22	28 ² 55	23 ² 48	18 ² 30	25 ² 6	29 ² 14	26 ² 1	25 ² 45	8 ² 29	21 ² 37	M22
T 23	10 46 25	13 ² 24'35	22 ² 47	1 ² 54	17 ² 10	4 ² 9	29 ² 7	23 ² 53	18 ² 32	25 ² 7	29 ² 13	25 ² 50	25 ² 42	8 ² 35	21 ² 40	T 23
W24	10 50 21	14 ² 24'28	4 ² Δ42	3 ² 40	18 ² 24	4 ² 57	29 ² 19	23 ² 59	18 ² 35	25 ² 7	29 ² 12	25 ² 41	25 ² 39	8 ² 42	21 ² 43	W24
T 25	10 54 18	15 ² 24'18	16 ² 31	5 ² 28	19 ² 38	5 ² 44	29 ² 31	24 ² 4	18 ² 37	25 ² 8	29 ² 11	25 ² 35	25 ² 36	8 ² 49	21 ² 47	T 25
F 26	10 58 14	16 ² 24'06	28 ² 20	7 ² 16	20 ² 52	6 ² 31	29 ² 44	24 ² 9	18 ² 39	25 ² 9	29 ² 10	25 ² 32	25 ² 33	8 ² 56	21 ² 50	F 26
S 27	11 2 11	17 ² 23'52	10 ² Δ12	9 ² 5	22 ² 6	7 ² 18	29 ² 56	24 ² 14	18 ² 42	25 ² 9	29 ² 8	25 ² 31	25 ² 29	9 ² 2	21 ² 53	S 27
S 28	11 6 8	18 ² Δ33'36	22 ² Δ14	10 ² Δ56	23 ² Δ20	8 ² Δ5	0 ² Δ8	24 ² Δ19	18 ² Δ44	25 ² Δ10	29 ² Δ7	25 ² Δ31	25 ² Δ26	9 ² Δ9	21 ² Δ56	S 28

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	14s26	23n36	0n 8	21s29	0s50	21s47	0n13	16s52	1s 5	8n44	1s 4	21s45	0n 1	22s46	0s25	22s11	1n13	4n31	16n53	23s30	23s28	17n22	8n21	0n17			
T 2	14 6	22 12	0s59	21 20	0 57	21 39	0 10	16 38	1 5	8 48	1 4	21 44	0 1	22 46	0 25	22 11	1 13	4 31	16 54	23 30	23 28	17 23	8 22	0 17			
W 3	13 46	19 36	2 5	21 9	1 4	21 30	0 7	16 23	1 5	8 52	1 4	21 43	0 0	22 45	0 25	22 11	1 13	4 32	16 54	23 30	23 28	17 25	8 23	0 17			
T 4	13 26	15 54	3 7	20 57	1 11	21 20	0 4	16 9	1 5	8 56	1 4	21 42	0 0	22 45	0 25	22 11	1 13	4 33	16 55	23 29	23 28	17 27	8 24	0 17			
F 5	13 6	11 15	3 59	20 44	1 17	21 10	0 1	15 54	1 5	9 0	1 4	21 41	0 0	22 45	0 25	22 11	1 13	4 33	16 55	23 29	23 28	17 29	8 24	0 17			
S 6	12 46	5 56	4 37	20 29	1 23	21 0	0s 2	15 39	1 5	9 4	1 3	21 40	0 0	22 44	0 25	22 11	1 13	4 34	16 56	23 29	23 28	17 30	8 25	0 17			
S 7	12 25	0 13	5 0	20 13	1 29	20 48	0 5	15 23	1 5	9 8	1 3	21 39	0 0	22 44	0 25	22 11	1 13	4 34	16 56	23 29	23 28	17 32	8 26	0 17			
M 8	12 4	5s34	5 3	19 56	1 34	20 36	0 8	15 8	1 5	9 12	1 3	21 38	0 0	22 44	0 25	22 11	1 13	4 35	16 57	23 29	23 28	17 34	8 27	0 17			
T 9	11 43	11 3	4 47	19 37	1 39	20 24	0 11	14 52	1 5	9 16	1 3	21 37	0 0	22 43	0 25	22 11	1 13	4 36	16 57	23 29	23 27	17 35	8 28	0 17			
W10	11 22	15 55	4 12	19 17	1 44	20 10	0 14	14 37	1 5	9 20	1 3	21 36	0s 0	22 43	0 25	22 11	1 13	4 36	16 58	23 29	23 27	17 37	8 29	0 17			
T 11	11 1	19 48	3 22	18 55	1 48	19 57	0 16	14 21	1 5	9 24	1 2	21 35	0 0	22 42	0 25	22 11	1 13	4 37	16 58	23 29	23 27	17 39	8 30	0 16			
F 12	10 39	22 27	2 20	18 33	1 52	19 42	0 19	14 5	1 5	9 28	1 2	21 34	0 0	22 42	0 25	22 11	1 13	4 38	16 59	23 28	23 27	17 40	8 31	0 16			
S 13	10 17	23 41	1 11	18 8	1 56	19 27	0 22	13 49	1 5	9 32	1 2	21 33	0 0	22 42	0 25	22 11	1 13	4 38	16 59	23 29	23 27	17 42	8 32	0 16			
S 14	9 55	23 27	0n 2	17 43	1 59	19 12	0 25	13 32	1 5	9 36	1 2	21 32	0 0	22 41	0 25	22 11	1 13	4 39	17 0	23 29	23 27	17 44	8 33	0 16			
M15	9 33	21 50	1 13	17 16	2 2	18 56	0 27	13 16	1 5	9 41	1 1	21 31	0 0	22 41	0 25	22 11	1 14	4 40	17 0	23 28	23 27	17 45	8 34	0 16			
T 16	9 11	19 0	2 19	16 48	2 4	18 39	0 30	12 59	1 5	9 45	1 1	21 30	0 0	22 41	0 25	22 11	1 14	4 41	17 1	23 28	23 27	17 47	8 35	0 16			
W17	8 49	15 14	3 17	16 18	2 6	18 22	0 32	12 43	1 5	9 49	1 1	21 30	0 1	22 40	0 25	22 11	1 14	4 41	17 1	23 28	23 27	17 49	8 36	0 16			
T 18	8 26	10 48	4 4	15 47	2 8	18 5	0 35	12 26	1 4	9 54	1 1	21 29	0 1	22 40	0 25	22 11	1 14	4 42	17 2	23 28	23 27	17 50	8 37	0 16			
F 19	8 4	5 58	4 37	15 14	2 9	17 46	0 38	12 9	1 4	9 58	1 1	21 28	0 1	22 40	0 26	22 11	1 14	4 43	17 2	23 28	23 27	17 52	8 38	0 16			
S 20	7 41	0 58	4 56	14 41	2 10	17 28	0 40	11 52	1 4	10 2	1 1	21 27	0 1	22 39	0 26	22 11	1 14	4 43	17 2	23 27	23 26	17 54	8 39	0 16			
S 21	7 18	4n 0	5 0	14 5	2 10	17 9	0 42	11 35	1 4	10 7	1 0	21 26	0 1	22 39	0 26	22 11	1 14	4 44	17 3	23 27	23 26	17 55	8 40	0 16			
M22	6 55	8 43	4 51	13 29	2 10	16 49	0 45	11 18	1 4	10 11	1 0	21 25	0 1	22 39	0 26	22 11	1 14	4 45	17 3	23 27	23 26	17 57	8 41	0 15			
T 23	6 32	13 2	4 29	12 51	2 10	16 29	0 47	11 0	1 4	10 15	1 0	21 24	0 1	22 38	0 26	22 11	1 14	4 46	17 4	23 26	23 26	17 59	8 42	0 15			
W24	6 9	16 48	3 55	12 11	2 9	16 8	0 49	10 43	1 4	10 20	1 0	21 23	0 1	22 38	0 26	22 11	1 14	4 46	17 4	23 26	23 26	18 0	8 43	0 15			
T25	5 46	19 52	3 11	11 31	2 8	15 47	0 52	10 25	1 4	10 24	1 0	21 23	0 1	22 38	0 26	22 11	1 14	4 47	17 4	23 26	23 26	18 2	8 45	0 15			
F 26	5 23	22 6	2 19	10 49	2 6	15 26	0 54	10 8	1 3	10 29	0 59	21 22	0 1	22 38	0 26	22 11	1 14	4 48	17 5	23 26	23 26	18 3	8 46	0 15			
S 27	5 0	23 22	1 20	10 5	2 3	15 4	0 56	9 50	1 3	10 33	0 59	21 21	0 1	22 37	0 26	22 11	1 14	4 48	17 5	23 26	23 26	18 5	8 47	0 15			
S 28	4s36	23n34	0n17	9s20	2s 0	14s42	0s58	9s32	1s 3	10n38	0s59	21s20	0s 1	22s37	0s26	22s11	1n14	4n49	17n 6	23s26	23s26	18n 7	8n48	0n15			

ASTRODIENST EPHEMERIS for the year 1490

geocentric

MARCH 1490 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	11 10 4	19°23'17	4°30	12°48	24°34	8°52	0°21	24°24	18°46	25°11	29°R 6	25°R31	25°23	9°16	22°V 0	M 1
T 2	11 14 1	20°22'56	17° 6	14°41	25°48	9°39	0°33	24°29	18°48	25°11	29°R 5	25°R29	25°20	9°22	22° 3	T 2
W 3	11 17 57	21°22'33	0°0	16°35	27° 1	10°27	0°46	24°34	18°50	25°12	29° 4	25°26	25°17	9°29	22° 7	W 3
T 4	11 21 54	22°22'07	13°34	18°31	28°15	11°14	0°58	24°39	18°52	25°12	29° 2	25°20	25°14	9°36	22°10	T 4
F 5	11 25 50	23°21'40	27°29	20°27	29°29	12° 1	1°11	24°44	18°54	25°13	29° 1	25°11	25°10	9°42	22°13	F 5
S 6	11 29 47	24°21'10	11°51	22°25	0°43	12°48	1°24	24°49	18°56	25°13	29° 0	25° 0	25° 7	9°49	22°17	S 6
S 7	11 33 43	25°20'37	26°33	24°24	1°57	13°35	1°37	24°53	18°58	25°14	28°59	24°49	25° 4	9°56	22°20	S 7
M 8	11 37 40	26°20'03	11°27	26°23	3°11	14°22	1°50	24°58	19° 0	25°14	28°57	24°37	25° 1	10° 2	22°24	M 8
T 9	11 41 37	27°19'27	26°25	28°24	4°25	15° 8	2° 3	25° 2	19° 2	25°14	28°56	24°27	24°58	10° 9	22°27	T 9
W10	11 45 33	28°18'49	11°18	0°25	5°39	15°55	2°16	25° 7	19° 4	25°15	28°55	24°20	24°55	10°16	22°31	W10
T 11	11 49 30	29°18'09	25°57	2°27	6°53	16°42	2°29	25°11	19° 5	25°15	28°53	24°15	24°51	10°22	22°35	T 11
F 12	11 53 26	0°17'28	10°18	4°30	8° 6	17°29	2°42	25°15	19° 7	25°15	28°52	24°13	24°48	10°29	22°38	F 12
S 13	11 57 23	1°16'44	24°20	6°33	9°20	18°16	2°55	25°20	19° 9	25°15	28°50	24°13	24°45	10°36	22°42	S 13
S 14	12 1 19	2°15'59	8°3 2	8°35	10°34	19° 3	3° 8	25°24	19°10	25°15	28°49	24°13	24°42	10°42	22°46	S 14
M15	12 5 16	3°15'12	21°26	10°38	11°48	19°50	3°21	25°28	19°12	25°16	28°47	24°12	24°39	10°49	22°49	M15
T 16	12 9 12	4°14'24	4°34	12°40	13° 2	20°36	3°35	25°32	19°13	25°16	28°46	24° 9	24°35	10°56	22°53	T 16
W17	12 13 9	5°13'33	17°28	14°42	14°16	21°23	3°48	25°36	19°15	25°16	28°44	24° 3	24°32	11° 3	22°57	W17
T 18	12 17 6	6°12'41	0°18	16°42	15°30	22°10	4° 1	25°40	19°16	25°16	28°43	23°55	24°29	11° 9	23° 0	T 18
F 19	12 21 2	7°11'46	12°41	18°41	16°44	22°56	4°15	25°43	19°18	25°R16	28°41	23°43	24°26	11°16	23° 4	F 19
S 20	12 24 59	8°10'50	25° 2	20°38	17°58	23°43	4°28	25°47	19°19	25°16	28°40	23°30	24°23	11°23	23° 8	S 20
S 21	12 28 55	9° 9'52	7°14	22°33	19°11	24°30	4°42	25°50	19°20	25°16	28°38	23°17	24°20	11°29	23°12	S 21
M22	12 32 52	10° 8'51	19°18	24°26	20°25	25°16	4°56	25°54	19°21	25°16	28°37	23° 4	24°16	11°36	23°15	M22
T 23	12 36 48	11° 7'49	1°15	26°15	21°39	26° 3	5° 9	25°57	19°23	25°16	28°35	22°52	24°13	11°43	23°19	T 23
W24	12 40 45	12° 6'44	13° 6	28° 1	22°53	26°49	5°23	26° 1	19°24	25°15	28°33	22°43	24°10	11°49	23°23	W24
T 25	12 44 41	13° 5'38	24°54	29°43	24° 7	27°36	5°37	26° 4	19°25	25°15	28°32	22°37	24° 7	11°56	23°27	T 25
F 26	12 48 38	14° 4'29	6°14	18°22	25°21	28°22	5°50	26° 7	19°26	25°15	28°30	22°34	24° 4	12° 3	23°30	F 26
S 27	12 52 34	15° 3'18	18°34	2°56	26°34	29° 9	6° 4	26°10	19°27	25°15	28°29	22°D32	24° 0	12° 9	23°34	S 27
S 28	12 56 31	16° 2'05	0°34	4°26	27°48	29°55	6°18	26°13	19°28	25°14	28°27	22°33	23°57	12°16	23°38	S 28
M29	13 0 28	17° 0'49	12°48	5°51	29° 2	0°14	6°32	26°16	19°29	25°14	28°25	22°R33	23°54	12°23	23°42	M29
T 30	13 4 24	17°59'31	25°20	7°12	0°16	1°28	6°46	26°19	19°29	25°14	28°24	22°33	23°51	12°29	23°46	T 30
W31	13 8 21	18°58'11	8°17	8°27	1°30	2°14	6°59	26°21	19°30	25°13	28°22	22°R31	23°48	12°36	23°50	W31

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	4s13	22n38	0s47	8s34	1s57	14s19	1s 0	9s14	1s 3	10n42	0s59	21s19	0s 1	22s37	0s26	22s11	1n14	4n50	17n 6	23s26	23s25	18n 8	8n49	0n15					
T 2	3 49	20 34	1 52	7 47	1 53	13 56	1 2	8 56	1 3	10 47	0 59	21 18	0 2	22 36	0 26	22 11	1 14	4 51	17 6	23 26	23 25	18 10	8 50	0 15					
W 3	3 26	17 23	2 52	6 58	1 49	13 32	1 4	8 38	1 3	10 51	0 59	21 18	0 2	22 36	0 26	22 11	1 14	4 51	17 7	23 26	23 25	18 11	8 52	0 15					
T 4	3 2	13 12	3 45	6 9	1 44	13 8	1 6	8 20	1 2	10 56	0 58	21 17	0 2	22 36	0 26	22 11	1 14	4 52	17 7	23 25	23 25	18 13	8 53	0 15					
F 5	2 39	8 12	4 26	5 18	1 38	12 44	1 8	8 2	1 2	11 0	0 58	21 16	0 2	22 36	0 26	22 11	1 14	4 53	17 7	23 25	23 25	18 14	8 54	0 15					
S 6	2 15	2 38	4 52	4 26	1 32	12 20	1 9	7 44	1 2	11 5	0 58	21 15	0 2	22 35	0 26	22 11	1 14	4 54	17 8	23 25	23 25	18 16	8 55	0 14					
S 7	1 51	3s13	5 0	3 32	1 25	11 55	1 11	7 26	1 2	11 10	0 58	21 15	0 2	22 35	0 26	22 11	1 14	4 54	17 8	23 24	23 25	18 18	8 57	0 14					
M 8	1 28	8 57	4 48	2 38	1 18	11 30	1 12	7 7	1 2	11 14	0 58	21 14	0 2	22 35	0 26	22 11	1 14	4 55	17 8	23 24	23 25	18 19	8 58	0 14					
T 9	1 4	14 11	4 15	1 43	1 11	11 4	1 14	6 49	1 1	11 19	0 58	21 13	0 2	22 35	0 26	22 11	1 14	4 56	17 9	23 23	23 25	18 21	8 59	0 14					
W10	0 40	18 31	3 26	0 47	1 2	10 38	1 15	6 30	1 1	11 23	0 57	21 12	0 2	22 35	0 26	22 11	1 14	4 56	17 9	23 23	23 24	18 22	9 0	0 14					
T 11	0 17	21 37	2 23	0n10	0 54	10 12	1 17	6 12	1 1	11 28	0 57	21 12	0 2	22 34	0 26	22 11	1 14	4 57	17 9	23 23	23 24	18 24	9 2	0 14					
F 12	0n 7	23 15	1 13	1 7	0 44	9 46	1 18	5 53	1 1	11 33	0 57	21 11	0 2	22 34	0 26	22 11	1 14	4 58	17 9	23 23	23 24	18 25	9 3	0 14					
S 13	0 31	23 22	0n 1	2 4	0 35	9 19	1 20	5 35	1 0	11 37	0 57	21 10	0 2	22 34	0 26	22 11	1 14	4 59	17 10	23 23	23 24	18 27	9 4	0 14					
S 14	0 54	22 3	1 12	3 2	0 25	8 52	1 21	5 16	1 0	11 42	0 57	21 10	0 2	22 34	0 26	22 11	1 14	4 59	17 10	23 23	23 24	18 28	9 5	0 14					
M15	1 18	19 31	2 19	4 0	0 14	8 25	1 22	4 57	1 0	11 47	0 57	21 9	0 3	22 33	0 26	22 11	1 14	5 0	17 10	23 23	23 24	18 30	9 7	0 14					
T 16	1 41	16 0	3 16	4 58	0 3	7 58	1 23	4 39	1 0	11 51	0 57	21 8	0 3	22 33	0 26	22 11	1 14	5 1	17 10	23 23	23 24	18 31	9 8	0 14					
W17	2 5	11 48	4 2	5 56	0n 8	7 30	1 24	4 20	0 59	11 56	0 57	21 8	0 3	22 33	0 26	22 11	1 15	5 2	17 11	23 22	23 24	18 33	9 9	0 14					
T 18	2 28	7 9	4 36	6 53	0 19	7 2	1 25	4 1	0 59	12 1	0 56	21 7	0 3	22 33	0 26	22 11	1 15	5 2	17 11	23 22	23 23	18 34	9 11	0 13					
F 19	2 52	2 16	4 55	7 49	0 31	6 34	1 26	3 43	0 59	12 5	0 56	21 6	0 3	22 33	0 26	22 11	1 15	5 3	17 11	23 21	23 23	18 36	9 12	0 13					
S 20	3 15	2n37	5 1	8 44	0 42	6 6	1 27	3 24	0 59	12 10	0 56	21 6	0 3	22 33	0 26	22 11	1 15	5 4	17 11	23 21	23 23	18 37	9 13	0 13					
S 21	3 39	7 21	4 52	9 38	0 54	5 38	1 27	3 5	0 58	12 15	0 56	21 5	0 3	22 32	0 26	22 11	1 15	5 4	17 11	23 20	23 23	18 39	9 14	0 13					
M22	4 2	11 44	4 30	10 30	1 5	5 9	1 28	2 46	0 58	12 19	0 56	21 5	0 3	22 32	0 26	22 11	1 15	5 5	17 12	23 19	23 23	18 40	9 16	0 13					
T 23	4 25	15 38	3 57	11 21	1 17	4 41	1 29	2 27	0 58	12 24	0 56	21 4	0 3	22 32	0 26	22 11	1 15	5 6	17 12	23 19	23 23	18 42	9 17	0 13					
W24	4 48	18 53	3 13	12 10	1 28	4 12	1 29	2 9	0 57	12 29	0 56	21 4	0 3	22 32	0 26	22 11	1 15	5 6	17 12	23 18	23 23	18 43	9 18	0 13					
T 25	5 11	21 20	2 21	12 57	1 39	3 43	1 30	1 50	0 57	12 33	0 55	21 3	0 3	22 32	0 26	22 10	1 15	5 7	17 12	23 18	23 22	18 45	9 20	0 13					
F 26	5 34	22 51	1 23	13 41	1 49	3 14	1 30	1 31	0 57	12 38	0 55	21 2	0 3	22 32	0 26	22 10	1 15	5 8	17 12	23 18	23 22	18 46	9 21	0 13					
S 27	5 57	23 22	0 21	14 23	1 59	2 45	1 30	1 12	0 56	12 43	0 55	21 2	0 4	22 32	0 26	22 10	1 15	5 8	17 12	23 18	23 22	18 48	9 22	0 13					
S 28	6 19	22 48	0s43	15 3	2 8	2 16	1 31	0 53	0 56	12 47	0 55	21 2	0 4	22 32	0 27	22 10	1 15	5 9	17 12	23 18	23 22	18 49	9 24	0 13					
M29	6 42	21 8	1 46	15 39	2 17	1 46	1 31	0 34	0 56	12 52	0 55	21 1	0 4	22 31	0 27	22 10	1 15	5 10	17 13	23 18	23 22	18 51	9 25	0 13					
T 30	7 5	18 25	2 46	16 14	2 25	1 17	1 31	0 16	0 55	12 57	0 55	21 1	0 4	22 31	0 27	22 10	1 15	5 10	17 13	23 18	23 22	18 52	9 27	0 13					
W31	7n27	14n43	3s39	16n45	2n32	0s48	1s31	0n 3	0s55	13n 1	0s55	21s 0	0s 4	22s31	0s27	22s10	1n15	5n11	17n13	23s18	23s22	18n54	9n28	0n12					

ASTRODIENST EPHEMERIS for the year 1490

geocentric

APRIL 1490 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	13 12 17	19°56'49	21°12'41	9°37'37	2°47'44	3°00'00	7°13'13	26°32'24	19°33'31	25°12'13	28°15'20	22°12'27	23°12'45	12°48'43	23°12'53	T 1
F 2	13 16 14	20°55'24	5°17'35	10°42'10	3°57'35	3°46'46	7°27'27	26°26'26	19°32'32	25°12'12	28°15'19	22°12'21	23°12'41	12°49'49	23°57'57	F 2
S 3	13 20 10	21°53'57	19°57'57	11°41'41	5°11'11	4°32'32	7°41'41	26°29'29	19°32'32	25°12'12	28°17'17	22°13'13	23°38'38	12°56'56	24°01'01	S 3
S 4	13 24 7	22°52'28	4°12'45	12°35'35	6°25'25	5°18'18	7°55'55	26°31'31	19°33'33	25°12'12	28°15'15	22°04'04	23°35'35	13°03'03	24°05'05	S 4
M 5	13 28 3	23°50'57	19°51'51	13°23'23	7°39'39	6°04'04	8°09'09	26°33'33	19°33'33	25°11'11	28°14'14	21°55'55	23°32'32	13°09'09	24°09'09	M 5
T 6	13 32 0	24°49'25	5°14'04	14°05'05	8°52'52	6°50'50	8°23'23	26°35'35	19°34'34	25°10'10	28°12'12	21°48'48	23°29'29	13°16'16	24°13'13	T 6
W 7	13 35 57	25°47'50	20°15'15	14°42'42	10°06'06	7°36'36	8°37'37	26°38'38	19°34'34	25°10'10	28°10'10	21°42'42	23°26'26	13°23'23	24°17'17	W 7
T 8	13 39 53	26°46'14	5°12'13	15°13'13	11°20'20	8°22'22	8°52'52	26°39'39	19°35'35	25°09'09	28°09'09	21°39'39	23°22'22	13°29'29	24°20'20	T 8
F 9	13 43 50	27°44'36	19°52'52	15°38'38	12°34'34	9°08'08	9°06'06	26°41'41	19°35'35	25°09'09	28°07'07	21°D38	23°19'19	13°36'36	24°24'24	F 9
S 10	13 47 46	28°42'56	4°37'07	15°57'57	13°48'48	9°54'54	9°20'20	26°43'43	19°35'35	25°08'08	28°05'05	21°38'38	23°16'16	13°43'43	24°28'28	S 10
S 11	13 51 43	29°41'15	17°58'58	16°11'11	15°01'01	10°40'40	9°34'34	26°45'45	19°35'35	25°07'07	28°03'03	21°39'39	23°13'13	13°49'49	24°32'32	S 11
M12	13 55 39	0°39'32	1°12'24	16°19'19	16°15'15	11°25'25	9°48'48	26°46'46	19°36'36	25°06'06	28°02'02	21°R39	23°10'10	13°56'56	24°36'36	M12
T 13	13 59 36	1°37'48	14°29'29	16°R21	17°29'29	12°11'11	10°02'02	26°48'48	19°36'36	25°06'06	28°00'00	21°39'39	23°06'06	14°03'03	24°40'40	T 13
W14	14 3 32	2°36'02	27°16'16	16°18'18	18°43'43	12°57'57	10°16'16	26°49'49	19°36'36	25°05'05	27°58'58	21°36'36	23°03'03	14°10'10	24°43'43	W14
T 15	14 7 29	3°34'15	9°14'47	16°10'10	19°56'56	13°42'42	10°30'30	26°51'51	19°R36	25°04'04	27°57'57	21°31'31	23°00'00	14°16'16	24°47'47	T 15
F 16	14 11 26	4°32'26	22°06'06	15°57'57	21°10'10	14°28'28	10°45'45	26°52'52	19°36'36	25°03'03	27°55'55	21°24'24	22°57'57	14°23'23	24°51'51	F 16
S 17	14 15 22	5°30'36	4°15'15	15°40'40	22°24'24	15°14'14	10°59'59	26°53'53	19°36'36	25°02'02	27°53'53	21°16'16	22°54'54	14°30'30	24°55'55	S 17
S 18	14 19 19	6°28'43	16°16'16	15°18'18	23°38'38	15°59'59	11°13'13	26°54'54	19°36'36	25°01'01	27°52'52	21°07'07	22°51'51	14°36'36	24°59'59	S 18
M19	14 23 15	7°26'50	28°11'11	14°52'52	24°51'51	16°44'44	11°27'27	26°55'55	19°35'35	25°00'00	27°50'50	20°59'59	22°47'47	14°43'43	25°03'03	M19
T 20	14 27 12	8°24'55	10°12'08	14°23'23	26°05'05	17°30'30	11°41'41	26°56'56	19°35'35	24°59'59	27°48'48	20°52'52	22°44'44	14°50'50	25°06'06	T 20
W21	14 31 8	9°22'58	21°51'51	13°52'52	27°19'19	18°15'15	11°56'56	26°56'56	19°35'35	24°58'58	27°47'47	20°47'47	22°41'41	14°56'56	25°10'10	W21
T 22	14 35 5	10°20'59	3°12'39	13°18'18	28°32'32	19°01'01	12°10'10	26°57'57	19°35'35	24°57'57	27°45'45	20°43'43	22°38'38	15°03'03	25°14'14	T 22
F 23	14 39 1	11°18'59	15°29'29	12°43'43	29°46'46	19°46'46	12°24'24	26°57'57	19°34'34	24°56'56	27°43'43	20°D42	22°35'35	15°10'10	25°18'18	F 23
S 24	14 42 58	12°16'57	27°25'25	12°07'07	1°18'00	20°31'31	12°38'38	26°58'58	19°34'34	24°55'55	27°42'42	20°42'42	22°32'32	15°16'16	25°21'21	S 24
S 25	14 46 55	13°14'53	9°12'28	11°30'30	2°14'14	21°16'16	12°53'53	26°58'58	19°33'33	24°54'54	27°40'40	20°43'43	22°28'28	15°23'23	25°25'25	S 25
M26	14 50 51	14°12'48	21°44'44	10°54'54	3°27'27	22°01'01	13°07'07	26°58'58	19°33'33	24°53'53	27°38'38	20°44'44	22°25'25	15°30'30	25°29'29	M26
T 27	14 54 48	15°10'40	4°12'17	10°19'19	4°41'41	22°46'46	13°21'21	26°58'58	19°32'32	24°52'52	27°37'37	20°46'46	22°22'22	15°36'36	25°32'32	T 27
W28	14 58 44	16°08'31	17°11'11	9°46'46	5°55'55	23°31'31	13°35'35	26°R58	19°32'32	24°51'51	27°35'35	20°R46	22°19'19	15°43'43	25°36'36	W28
T 29	15 2 41	17°06'20	0°12'30	9°14'14	7°08'08	24°16'16	13°49'49	26°58'58	19°31'31	24°50'50	27°34'34	20°45'45	22°16'16	15°50'50	25°40'40	T 29
F 30	15 6 37	18°04'07	14°12'16	8°14'46	8°12'22	25°10'10	14°18'18	26°58'58	19°30'30	24°48'48	27°32'32	20°43'43	22°12'12	15°56'56	25°43'43	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
T 1	7n49	10n11	4s22	17n14	2n38	0s18	1s31	0n22	0s54	13n 6	0s55	21s 0	0s 4	22s31	0s27	22s10	1n15	5n12	17n13	23s17	23s21	18n55	9n29	0n12	
F 2	8 11	4 58	4 52	17 39	2 43	0n11	1 31	0 41	0 54	13 11	0 55	20 59	0 4	22 31	0 27	22 10	1 15	5 12	17 13	23 17	23 21	18 56	9 31	0 12	
S 3	8 33	0s41	5 4	18 2	2 48	0 41	1 31	0 59	0 54	13 15	0 55	20 59	0 4	22 31	0 27	22 10	1 15	5 13	17 13	23 17	23 21	18 58	9 32	0 12	
S 4	8 55	6 26	4 57	18 22	2 51	1 10	1 31	1 18	0 53	13 20	0 54	20 59	0 4	22 31	0 27	22 10	1 15	5 14	17 13	23 16	23 21	18 59	9 33	0 12	
M 5	9 17	11 56	4 30	18 39	2 53	1 40	1 30	1 37	0 53	13 24	0 54	20 58	0 4	22 31	0 27	22 10	1 15	5 14	17 13	23 15	23 21	19 1	9 35	0 12	
T 6	9 38	16 44	3 43	18 53	2 55	2 9	1 30	1 55	0 53	13 29	0 54	20 58	0 4	22 31	0 27	22 10	1 15	5 15	17 13	23 15	23 21	19 2	9 36	0 12	
W 7	10 0	20 25	2 40	19 4	2 55	2 38	1 30	2 14	0 52	13 34	0 54	20 58	0 4	22 31	0 27	22 10	1 15	5 15	17 13	23 15	23 20	19 3	9 37	0 12	
T 8	10 21	22 39	1 27	19 13	2 54	3 8	1 29	2 32	0 52	13 38	0 54	20 57	0 5	22 31	0 27	22 10	1 15	5 16	17 13	23 14	23 20	19 5	9 39	0 12	
F 9	10 42	23 16	0 9	19 18	2 51	3 37	1 29	2 51	0 51	13 43	0 54	20 57	0 5	22 31	0 27	22 10	1 15	5 16	17 13	23 14	23 20	19 6	9 40	0 12	
S 10	11 3	22 20	1n 7	19 20	2 48	4 6	1 28	3 9	0 51	13 47	0 54	20 57	0 5	22 31	0 27	22 10	1 15	5 17	17 13	23 14	23 20	19 8	9 41	0 12	
S 11	11 24	20 2	2 17	19 20	2 43	4 36	1 27	3 28	0 50	13 52	0 54	20 57	0 5	22 31	0 27	22 10	1 15	5 18	17 13	23 14	23 20	19 9	9 43	0 12	
M12	11 44	16 42	3 17	19 16	2 37	5 5	1 27	3 46	0 50	13 57	0 54	20 56	0 5	22 31	0 27	22 10	1 15	5 18	17 13	23 15	23 20	19 10	9 44	0 12	
T 13	12 4	12 37	4 6	19 10	2 30	5 34	1 26	4 4	0 50	14 1	0 54	20 56	0 5	22 31	0 27	22 10	1 15	5 19	17 13	23 14	23 20	19 12	9 45	0 11	
W14	12 25	8 3	4 41	19 1	2 21	6 3	1 25	4 22	0 49	14 6	0 53	20 56	0 5	22 31	0 27	22 9	1 15	5 19	17 13	23 14	23 19	19 13	9 47	0 11	
T 15	12 44	3 16	5 1	18 49	2 11	6 31	1 24	4 41	0 49	14 10	0 53	20 56	0 5	22 31	0 27	22 9	1 15	5 20	17 13	23 14	23 19	19 14	9 48	0 11	
F 16	13 4	1n34	5 8	18 35	2 0	7 0	1 23	4 59	0 48	14 15	0 53	20 56	0 5	22 31	0 27	22 9	1 15	5 20	17 13	23 14	23 19	19 16	9 49	0 11	
S 17	13 24	6 17	5 0	18 18	1 48	7 28	1 22	5 17	0 48	14 19	0 53	20 56	0 5	22 31	0 27	22 9	1 15	5 21	17 13	23 13	23 19	19 17	9 51	0 11	
S 18	13 43	10 42	4 39	17 59	1 35	7 57	1 21	5 35	0 47	14 24	0 53	20 56	0 5	22 31	0 27	22 9	1 15	5 21	17 12	23 12	23 19	19 19	9 52	0 11	
M19	14 2	14 41	4 6	17 38	1 21	8 25	1 20	5 53	0 47	14 28	0 53	20 55	0 6	22 31	0 27	22 9	1 16	5 21	17 12	23 12	23 19	19 20	9 53	0 11	
T 20	14 21	18 4	3 22	17 14	1 5	8 53	1 19	6 10	0 46	14 33	0 53	20 55	0 6	22 31	0 27	22 9	1 16	5 22	17 12	23 11	23 18	19 21	9 55	0 11	
W21	14 40	20 42	2 30	16 50	0 50	9 21	1 17	6 28	0 46	14 37	0 53	20 55	0 6	22 31	0 27	22 9	1 16	5 22	17 12	23 11	23 18	19 23	9 56	0 11	
T 22	14 58	22 26	1 31	16 24	0 33	9 48	1 16	6 46	0 45	14 41	0 53	20 55	0 6	22 31	0 27	22 9	1 16	5 23	17 12	23 11	23 18	19 24	9 57	0 11	
F 23	15 16	23 11	0 28	15 57	0 16	10 15	1 15	7 4	0 45	14 46	0 53	20 55	0 6	22 31	0 27	22 9	1 16	5 23	17 12	23 11	23 18	19 25	9 59	0 11	
S 24	15 34	22 52	0s37	15 29	0s 1	10 43	1 13	7 21	0 44	14 50	0 53	20 55	0 6	22 32	0 27	22 9	1 16	5 24	17 12	23 11	23 18	19 26	10 0	0 11	
S 25	15 52	21 30	1 41	15 2	0 19	11 9	1 12	7 38	0 44	14 55	0 53	20 55	0 6	22 32	0 27	22 9	1 16	5 24	17 11	23 11	23 17	19 28	10 1	0 11	
M26	16 9	19 5	2 41	14 34	0 36	11 36	1 10	7 56	0 43	14 59	0 53	20 55	0 6	22 32	0 27	22 9	1 16	5 24	17 11	23 11	23 17	19 29	10 2	0 10	
T 27	16 26	15 45	3 36	14 7	0 53	12 2	1 9	8 13	0 43	15 3	0 53	20 55	0 6	22 32	0 27	22 9	1 16	5 25	17 11	23 11	23 17	19 30	10 4	0 10	
W28	16 43	13 35	4 21	13 40	1 10	12 28	1 7	8 30	0 42	15 8	0 53	20 56	0 6	22 32	0 27	22 9	1 16	5 25	17 11	23 11	23 17	19 32	10 5	0 10	
T 29	16 59	6 45	4 54	13 15	1 16	12 54	1 5	8 47	0 42	15 12	0 52	20 56	0 6	22 32	0 27	22 9	1 16	5 25	17 11	23 11	23 17	19 33	10 6	0 10	
F 30	17n16	1n26	5s11	12n51	1s42	13n20	1s 4	9n 4	0s41	15n16	0s52	20s56	0s 7	22s32	0s28	22s 9	1n16	5n26	17n10	23s11	23s17	19n34	10n 8	0n10	

ASTRODIENST EPHEMERIS for the year 1490

geocentric

MAY 1490 JC

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Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	15 10 34	19°15'3	28°29	8°R20	9°836	25°46	14°18	26°R58	19°R29	24°R47	27°R31	20°R40	22°9	16°8 3	25°47	S 1
S 2	15 14 30	19°59'37	13°9	7°858	10°49	26°31	14°32	26°357	19°329	24°46	27°29	20°36	22° 6	16°10	25°51	S 2
M 3	15 18 27	20°57'19	28° 8	7°39	12° 3	27°15	14°46	26°57	19°28	24°45	27°28	20°32	22° 3	16°16	25°54	M 3
T 4	15 22 24	21°55'00	13°21	7°25	13°17	28° 0	15° 0	26°56	19°27	24°43	27°26	20°28	22° 0	16°23	25°58	T 4
W 5	15 26 20	22°52'39	28°35	7°15	14°30	28°45	15°14	26°56	19°26	24°42	27°25	20°25	21°57	16°30	26° 1	W 5
T 6	15 30 17	23°50'18	13°42	7° 9	15°44	29°29	15°28	26°55	19°25	24°41	27°23	20°D24	21°53	16°36	26° 5	T 6
F 7	15 34 13	24°47'55	28°32	7°D 8	16°58	0°814	15°43	26°54	19°24	24°40	27°22	20°24	21°50	16°43	26° 8	F 7
S 8	15 38 10	25°45'31	13°3 0	7°11	18°11	0°58	15°57	26°53	19°23	24°38	27°20	20°25	21°47	16°50	26°12	S 8
S 9	15 42 6	26°43'06	27° 2	7°19	19°25	1°42	16°11	26°52	19°22	24°37	27°19	20°27	21°44	16°56	26°15	S 9
M10	15 46 3	27°40'40	10°37	7°31	20°39	2°27	16°25	26°51	19°21	24°35	27°17	20°28	21°41	17° 3	26°19	M10
T 11	15 49 59	28°38'13	23°47	7°48	21°52	3°11	16°39	26°50	19°19	24°34	27°16	20°R29	21°38	17°10	26°22	T 11
W12	15 53 56	29°35'45	6°35	8° 9	23° 6	3°55	16°53	26°49	19°18	24°33	27°15	20°29	21°34	17°16	26°26	W12
T 13	15 57 53	0°33'17	19° 4	8°35	24°19	4°40	17° 7	26°47	19°17	24°31	27°13	20°28	21°31	17°23	26°29	T 13
F 14	16 1 49	1°30'47	1°17	9° 4	25°33	5°24	17°21	26°46	19°16	24°30	27°12	20°26	21°28	17°30	26°32	F 14
S 15	16 5 46	2°28'17	13°20	9°38	26°47	6° 8	17°35	26°44	19°14	24°28	27°11	20°23	21°25	17°36	26°36	S 15
S 16	16 9 42	3°25'45	25°15	10°16	28° 0	6°52	17°49	26°42	19°13	24°27	27° 9	20°21	21°22	17°43	26°39	S 16
M17	16 13 39	4°23'13	7°8 5	10°58	29°14	7°36	18° 3	26°41	19°11	24°25	27° 8	20°18	21°18	17°50	26°42	M17
T 18	16 17 35	5°20'40	18°53	11°43	0°128	8°20	18°16	26°39	19°10	24°24	27° 7	20°16	21°15	17°56	26°45	T 18
W19	16 21 32	6°18'07	0°1242	12°33	1°41	9° 4	18°30	26°37	19° 8	24°22	27° 6	20°15	21°12	18° 3	26°48	W19
T 20	16 25 28	7°15'32	12°34	13°26	2°55	9°47	18°44	26°35	19° 7	24°21	27° 4	20°14	21° 9	18°10	26°52	T 20
F 21	16 29 25	8°12'57	24°31	14°23	4° 9	10°31	18°58	26°33	19° 5	24°19	27° 3	20°D14	21° 6	18°16	26°55	F 21
S 22	16 33 22	9°10'20	6°35	15°23	5°22	11°15	19°12	26°30	19° 4	24°18	27° 2	20°14	21° 3	18°23	26°58	S 22
S 23	16 37 18	10° 7'43	18°48	16°26	6°36	11°58	19°25	26°28	19° 2	24°16	27° 1	20°15	20°59	18°30	27° 1	S 23
M24	16 41 15	11° 5'04	1°13	17°33	7°50	12°42	19°39	26°26	19° 0	24°15	27° 0	20°16	20°56	18°36	27° 4	M24
T 25	16 45 11	12° 2'25	13°54	18°43	9° 3	13°25	19°53	26°23	18°58	24°13	26°59	20°17	20°53	18°43	27° 7	T 25
W26	16 49 8	12°59'45	26°51	19°56	10°17	14° 9	20° 6	26°21	18°57	24°11	26°58	20°17	20°50	18°50	27°10	W26
T 27	16 53 4	13°57'03	10°9 9	21°13	11°31	14°52	20°20	26°18	18°55	24°10	26°57	20°R18	20°47	18°56	27°13	T 27
F 28	16 57 1	14°54'21	23°49	22°32	12°44	15°36	20°33	26°15	18°53	24° 8	26°56	20°17	20°44	19° 3	27°16	F 28
S 29	17 0 57	15°51'37	7°51	23°55	13°58	16°19	20°47	26°13	18°51	24° 7	26°55	20°17	20°40	19°10	27°19	S 29
S 30	17 4 54	16°48'53	22°16	25°21	15°12	17° 2	21° 0	26°10	18°49	24° 5	26°54	20°17	20°37	19°16	27°21	S 30
M31	17 8 51	17°16'08	6°159	26°850	16°125	17°845	21°814	26°3 7	18°347	24°3 3	26°53	20°17	20°34	19°823	27°24	M31

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	17n32	4s 8	5s10	12n28	1s57	13n45	1s 2	9n21	0s41	15n20	0s52	20s56	0s 7	22s32	0s28	22s 8	1n16	5n26	17n10	23s11	23s16	19n36	10n 9	0n10			
S 2	17 47	9 38	4 49	12 8	2 11	14 10	1 0	9 38	0 40	15 25	0 52	20 56	0 7	22 32	0 28	22 8	1 16	5 26	17 10	23 10	23 16	19 37	10 10	0 10			
M 3	18 3	14 42	4 8	11 49	2 25	14 34	0 58	9 54	0 40	15 29	0 52	20 56	0 7	22 33	0 28	22 8	1 16	5 27	17 10	23 10	23 16	19 38	10 11	0 10			
T 4	18 18	18 54	3 9	11 33	2 37	14 58	0 57	10 11	0 39	15 33	0 52	20 56	0 7	22 33	0 28	22 8	1 16	5 27	17 9	23 10	23 16	19 39	10 13	0 10			
W 5	18 33	21 48	1 57	11 19	2 48	15 22	0 55	10 27	0 39	15 37	0 52	20 57	0 7	22 33	0 28	22 8	1 16	5 27	17 9	23 10	23 16	19 41	10 14	0 10			
T 6	18 47	23 7	0 37	11 8	2 58	15 45	0 53	10 44	0 38	15 41	0 52	20 57	0 7	22 33	0 28	22 8	1 16	5 27	17 9	23 9	23 15	19 42	10 15	0 10			
F 7	19 1	22 45	0n45	10 59	3 8	16 8	0 51	11 0	0 37	15 45	0 52	20 57	0 7	22 33	0 28	22 8	1 16	5 28	17 9	23 9	23 15	19 43	10 16	0 10			
S 8	19 15	20 51	2 1	10 52	3 16	16 31	0 49	11 16	0 37	15 50	0 52	20 57	0 7	22 33	0 28	22 8	1 16	5 28	17 8	23 9	23 15	19 44	10 17	0 10			
S 9	19 29	17 44	3 8	10 48	3 23	16 53	0 47	11 32	0 36	15 54	0 52	20 58	0 7	22 34	0 28	22 8	1 16	5 28	17 8	23 10	23 15	19 46	10 19	0 9			
M10	19 42	13 44	4 2	10 46	3 28	17 15	0 45	11 48	0 36	15 58	0 52	20 58	0 8	22 34	0 28	22 8	1 16	5 28	17 8	23 10	23 15	19 47	10 20	0 9			
T 11	19 55	9 11	4 42	10 47	3 33	17 36	0 42	12 4	0 35	16 2	0 52	20 58	0 8	22 34	0 28	22 8	1 16	5 28	17 7	23 10	23 14	19 48	10 21	0 9			
W12	20 7	4 23	5 6	10 50	3 37	17 57	0 40	12 19	0 35	16 6	0 52	20 59	0 8	22 34	0 28	22 8	1 16	5 28	17 7	23 10	23 14	19 49	10 22	0 9			
T 13	20 19	0n30	5 15	10 55	3 40	18 17	0 38	12 35	0 34	16 10	0 52	20 59	0 8	22 34	0 28	22 8	1 16	5 29	17 7	23 10	23 14	19 50	10 23	0 9			
F 14	20 31	5 15	5 10	11 3	3 42	18 37	0 36	12 50	0 33	16 14	0 52	20 59	0 8	22 35	0 28	22 8	1 16	5 29	17 6	23 10	23 14	19 52	10 24	0 9			
S 15	20 43	9 44	4 51	11 13	3 43	18 57	0 34	13 5	0 33	16 18	0 52	21 0	0 8	22 35	0 28	22 7	1 16	5 29	17 6	23 9	23 14	19 53	10 26	0 9			
S 16	20 54	13 48	4 19	11 24	3 43	19 16	0 32	13 20	0 32	16 22	0 52	21 0	0 8	22 35	0 28	22 7	1 16	5 29	17 6	23 9	23 13	19 54	10 27	0 9			
M17	21 5	17 19	3 37	11 38	3 42	19 34	0 29	13 35	0 32	16 26	0 52	21 1	0 8	22 35	0 28	22 7	1 16	5 29	17 5	23 9	23 13	19 55	10 28	0 9			
T 18	21 15	20 8	2 45	11 54	3 41	19 52	0 27	13 50	0 31	16 29	0 52	21 1	0 8	22 36	0 28	22 7	1 16	5 29	17 5	23 9	23 13	19 56	10 29	0 9			
W19	21 25	22 5	1 46	12 11	3 38	20 9	0 25	14 5	0 30	16 33	0 52	21 2	0 8	22 36	0 28	22 7	1 16	5 29	17 4	23 9	23 13	19 58	10 30	0 9			
T 20	21 35	23 4	0 42	12 30	3 35	20 26	0 22	14 19	0 30	16 37	0 52	21 2	0 8	22 36	0 28	22 7	1 16	5 29	17 4	23 9	23 13	19 59	10 31	0 9			
F 21	21 44	23 0	0s24	12 50	3 31	20 42	0 20	14 33	0 29	16 41	0 52	21 3	0 9	22 36	0 28	22 7	1 16	5 29	17 4	23 9	23 12	20 0	10 32	0 9			
S 22	21 53	21 51	1 29	13 12	3 26	20 58	0 18	14 48	0 29	16 45	0 52	21 3	0 9	22 37	0 28	22 7	1 16	5 29	17 3	23 9	23 12	20 1	10 33	0 9			
S 23	22 2	19 40	2 32	13 35	3 21	21 13	0 15	15 2	0 28	16 48	0 52	21 4	0 9	22 37	0 28	22 7	1 16	5 29	17 3	23 9	23 12	20 2	10 34	0 8			
M24	22 10	16 33	3 28	14 0	3 15	21 28	0 13	15 16	0 27	16 52	0 51	21 4	0 9	22 37	0 28	22 7	1 16	5 29	17 2	23 9	23 12	20 3	10 35	0 8			
T 25	22 18	12 37	4 16	14 25	3 8	21 42	0 11	15 29	0 27	16 56	0 51	21 5	0 9	22 37	0 28	22 7	1 16	5 29	17 2	23 9	23 11	20 5	10 36	0 8			
W26	22 25	8 2	4 51	14 52	3 1	21 55	0 8	15 43	0 26	16 59	0 51	21 5	0 9	22 38	0 28	22 7	1 16	5 29	17 1	23 9	23 11	20 6	10 37	0 8			
T 27	22 32	2 57	5 13	15 19	2 53	22 8	0 6	15 56	0 25	17 3	0 51	21 6	0 9	22 38	0 28	22 7	1 16	5 29	17 1	23 9	23 11	20 7	10 38	0 8			
F 28	22 39	2s23	5 17	15 48	2 45	22 20	0 4	16 10	0 25	17 7	0 51	21 7	0 9	22 38	0 28	22 7	1 16	5 29	17 0	23 9	23 11	20 8	10 39	0 8			
S 29	22 45	7 45	5 3	16 17	2 36	22 31	0 1	16 23	0 24	17 10	0 51	21 7	0 9	22 38	0 28	22 7	1 16	5 29	17 0	23 9	23 11	20 9	10 40	0 8			
S 30	22 51	12 51	4 30	16 46	2 27	22 42	0n 1	16 36	0 23	17 14	0 51	21 8	0 9	22 39	0 28	22 6	1 16	5 29	17 0	23 9	23 10	20 10	10 41	0 8			
M31	22n56	17s19	3s38	17n16	2s17	22n52	0n 4	16n48	0s23	17n17	0s51	21s 8	0s10	22s39	0s28	22s 6	1n16	5n29	16n59	23s 9	23s10	20n11	10n42	0n 8			

ASTRODIENST EPHEMERIS for the year 1490

geocentric

JUNE 1490 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	17 12 47	18II43'22	21III55	28II22	17II39	18II28	21II87	26°R 4	18°R45	24°R 2	26°R52	20°R16	20°R31	19°R30	27°V27	T 1
W 2	17 16 44	19°40'35	6°X57	29°57	18°53	19°11	21°40	26°R 1	18°R43	24°R 0	26°R51	20°R16	20°R28	19°R36	27°V30	W 2
T 3	17 20 40	20°37'48	21°57	1II34	20° 6	19°54	21°54	25°58	18°41	23°59	26°50	20°16	20°24	19°43	27°32	T 3
F 4	17 24 37	21°35'01	6°X46	3°15	21°20	20°37	22° 7	25°55	18°39	23°57	26°50	20°16	20°21	19°50	27°35	F 4
S 5	17 28 33	22°32'13	21°17	4°59	22°34	21°20	22°20	25°51	18°37	23°55	26°49	20°16	20°18	19°56	27°37	S 5
S 6	17 32 30	23°29'25	5°X25	6°45	23°48	22° 3	22°33	25°48	18°35	23°54	26°48	20°16	20°15	20° 3	27°40	S 6
M 7	17 36 27	24°26'37	19° 7	8°35	25° 1	22°46	22°46	25°45	18°33	23°52	26°47	20°15	20°12	20°10	27°42	M 7
T 8	17 40 23	25°23'48	2°X24	10°27	26°15	23°28	22°59	25°41	18°31	23°51	26°47	20°15	20° 9	20°16	27°45	T 8
W 9	17 44 20	26°21'00	15°16	12°21	27°29	24°11	23°12	25°38	18°29	23°49	26°46	20°15	20° 5	20°23	27°47	W 9
T 10	17 48 16	27°18'11	27°47	14°19	28°42	24°53	23°25	25°34	18°27	23°47	26°45	20°D15	20° 2	20°30	27°50	T 10
F 11	17 52 13	28°15'23	10°V 1	16°18	29°56	25°36	23°38	25°30	18°24	23°46	26°45	20°15	19°59	20°36	27°52	F 11
S 12	17 56 9	29°12'34	22° 1	18°20	1°X10	26°18	23°51	25°27	18°22	23°44	26°44	20°15	19°56	20°43	27°54	S 12
S 13	18 0 6	0°X9'46	3°X54	20°23	2°24	27° 1	24° 3	25°23	18°20	23°42	26°44	20°16	19°53	20°50	27°57	S 13
M14	18 4 2	1° 6'58	15°43	22°29	3°37	27°43	24°16	25°19	18°18	23°41	26°43	20°17	19°49	20°56	27°59	M14
T 15	18 7 59	2° 4'10	27°31	24°36	4°51	28°25	24°29	25°15	18°15	23°39	26°43	20°18	19°46	21° 3	28° 1	T 15
W16	18 11 56	3° 1'21	9°II23	26°44	6° 5	29° 7	24°41	25°11	18°13	23°38	26°42	20°19	19°43	21°10	28° 3	W16
T 17	18 15 52	3°58'34	21°22	28°53	7°19	29°50	24°54	25° 7	18°11	23°36	26°42	20°R19	19°40	21°16	28° 5	T 17
F 18	18 19 49	4°55'46	3°X28	1°X 3	8°32	0°II32	25° 6	25° 3	18° 9	23°34	26°42	20°19	19°37	21°23	28° 7	F 18
S 19	18 23 45	5°52'58	15°45	3°13	9°46	1°14	25°18	24°59	18° 6	23°33	26°41	20°18	19°34	21°30	28° 9	S 19
S 20	18 27 42	6°50'10	28°15	5°23	11° 0	1°56	25°31	24°55	18° 4	23°31	26°41	20°16	19°30	21°36	28°11	S 20
M21	18 31 38	7°47'22	10°X57	7°33	12°14	2°37	25°43	24°51	18° 2	23°30	26°41	20°13	19°27	21°43	28°13	M21
T 22	18 35 35	8°44'34	23°52	9°43	13°28	3°19	25°55	24°47	17°59	23°28	26°41	20°11	19°24	21°50	28°15	T 22
W23	18 39 31	9°41'46	7°II 3	11°52	14°41	4° 1	26° 7	24°43	17°57	23°27	26°40	20° 8	19°21	21°56	28°16	W23
T 24	18 43 28	10°38'58	20°28	14° 0	15°55	4°43	26°19	24°39	17°54	23°25	26°40	20° 7	19°18	22° 3	28°18	T 24
F 25	18 47 25	11°36'09	4°X 9	16° 7	17° 9	5°24	26°31	24°34	17°52	23°24	26°40	20° 5	19°15	22°10	28°20	F 25
S 26	18 51 21	12°33'21	18° 6	18°12	18°23	6° 6	26°43	24°30	17°50	23°22	26°40	20°D 5	19°11	22°16	28°21	S 26
S 27	18 55 18	13°30'33	2°II17	20°17	19°37	6°47	26°55	24°26	17°47	23°21	26°40	20° 6	19° 8	22°23	28°23	S 27
M28	18 59 14	14°27'45	16°41	22°20	20°50	7°29	27° 6	24°21	17°45	23°19	26°D40	20° 7	19° 5	22°30	28°24	M28
T 29	19 3 11	15°24'57	1°X15	24°21	22° 4	8°10	27°18	24°17	17°42	23°18	26°40	20° 9	19° 2	22°36	28°26	T 29
W30	19 7 7	16°X22'09	15°X55	26°X21	23°X18	8°II51	27°X29	24°X13	17°X40	23°X16	26°X40	20°R10	18°X59	22°X43	28°V27	W30

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	23n 1	20s44	2s31	17n47	2s 7	23n 2	0n 6	17n 1	0s22	17n21	0s51	21s 9	0s10	22s39	0s28	22s 6	1n16	5n28	16n59	23s 9	23s10	20n12	10n43	0n 8			
W 2	23 6	22 44	1 13	18 17	1 57	23 11	0 8	17 13	0 22	17 24	0 51	21 10	0 10	22 40	0 28	22 6	1 16	5 28	16 58	23 9	23 10	20 14	10 44	0 8			
T 3	23 10	23 6	0n 9	18 48	1 46	23 19	0 11	17 26	0 21	17 28	0 51	21 10	0 10	22 40	0 28	22 6	1 16	5 28	16 58	23 9	23 9	20 15	10 45	0 8			
F 4	23 14	21 50	1 30	19 18	1 35	23 26	0 13	17 38	0 20	17 31	0 51	21 11	0 10	22 40	0 28	22 6	1 16	5 28	16 57	23 9	23 9	20 16	10 46	0 8			
S 5	23 18	19 7	2 44	19 49	1 24	23 33	0 15	17 50	0 20	17 35	0 51	21 12	0 10	22 41	0 28	22 6	1 16	5 28	16 57	23 9	23 9	20 17	10 46	0 8			
S 6	23 21	15 19	3 45	20 18	1 12	23 39	0 18	18 2	0 19	17 38	0 51	21 13	0 10	22 41	0 28	22 6	1 16	5 27	16 56	23 9	23 9	20 18	10 47	0 7			
M 7	23 23	10 49	4 32	20 48	1 1	23 45	0 20	18 13	0 18	17 41	0 51	21 13	0 10	22 41	0 28	22 6	1 16	5 27	16 56	23 9	23 8	20 19	10 48	0 7			
T 8	23 25	5 57	5 2	21 16	0 49	23 49	0 22	18 25	0 18	17 44	0 51	21 14	0 10	22 41	0 28	22 6	1 16	5 27	16 55	23 9	23 8	20 20	10 49	0 7			
W 9	23 27	0 58	5 16	21 43	0 38	23 53	0 25	18 36	0 17	17 48	0 51	21 15	0 10	22 42	0 28	22 6	1 16	5 27	16 55	23 9	23 8	20 21	10 50	0 7			
T 10	23 29	3n56	5 15	22 9	0 26	23 57	0 27	18 47	0 16	17 51	0 51	21 16	0 11	22 42	0 28	22 6	1 16	5 26	16 54	23 9	23 8	20 22	10 50	0 7			
F 11	23 30	8 33	4 59	22 34	0 14	23 59	0 29	18 58	0 15	17 54	0 51	21 16	0 11	22 42	0 29	22 6	1 16	5 26	16 53	23 9	23 8	20 23	10 51	0 7			
S 12	23 30	12 46	4 30	22 56	0 3	24 1	0 31	19 8	0 15	17 57	0 51	21 17	0 11	22 43	0 29	22 6	1 16	5 26	16 53	23 9	23 7	20 24	10 52	0 7			
S 13	23 30	16 27	3 50	23 17	0n 8	24 3	0 34	19 19	0 14	18 0	0 51	21 18	0 11	22 43	0 29	22 6	1 16	5 25	16 52	23 9	23 7	20 25	10 53	0 7			
M14	23 30	19 28	3 0	23 36	0 19	24 3	0 36	19 29	0 13	18 4	0 51	21 19	0 11	22 43	0 29	22 5	1 16	5 25	16 52	23 9	23 7	20 26	10 53	0 7			
T 15	23 29	21 39	2 3	23 53	0 29	24 3	0 38	19 39	0 13	18 7	0 51	21 19	0 11	22 44	0 29	22 5	1 16	5 25	16 51	23 9	23 7	20 27	10 54	0 7			
W16	23 28	22 55	1 0	24 7	0 39	24 2	0 40	19 49	0 12	18 10	0 51	21 20	0 11	22 44	0 29	22 5	1 16	5 24	16 51	23 9	23 6	20 29	10 55	0 7			
T 17	23 27	23 8	0s 6	24 19	0 49	24 0	0 42	19 59	0 11	18 13	0 51	21 21	0 11	22 44	0 29	22 5	1 16	5 24	16 50	23 9	23 6	20 30	10 55	0 7			
F 18	23 25	22 15	1 12	24 28	0 58	23 58	0 44	20 9	0 11	18 16	0 51	21 22	0 11	22 45	0 29	22 5	1 16	5 24	16 50	23 9	23 6	20 31	10 56	0 7			
S 19	23 22	20 19	2 16	24 34	1 6	23 55	0 46	20 18	0 10	18 19	0 51	21 23	0 11	22 45	0 29	22 5	1 16	5 23	16 49	23 9	23 6	20 32	10 57	0 6			
S 20	23 20	17 23	3 15	24 37	1 14	23 51	0 48	20 27	0 9	18 22	0 51	21 24	0 11	22 45	0 29	22 5	1 16	5 23	16 49	23 9	23 5	20 33	10 57	0 6			
M21	23 17	13 37	4 4	24 38	1 21	23 46	0 50	20 36	0 8	18 24	0 51	21 24	0 12	22 46	0 29	22 5	1 16	5 22	16 48	23 9	23 5	20 34	10 58	0 6			
T 22	23 13	9 9	4 43	24 35	1 27	23 41	0 52	20 45	0 8	18 27	0 51	21 25	0 12	22 46	0 29	22 5	1 16	5 22	16 47	23 8	23 5	20 35	10 59	0 6			
W23	23 9	4 11	5 7	24 30	1 32	23 35	0 54	20 54	0 7	18 30	0 52	21 26	0 12	22 46	0 29	22 5	1 16	5 21	16 47	23 8	23 5	20 36	10 59	0 6			
T 24	23 5	1s 3	5 15	24 23	1 37	23 29	0 56	21 2	0 6	18 33	0 52	21 27	0 12	22 47	0 29	22 5	1 16	5 21	16 46	23 8	23 4	20 37	11 0	0 6			
F 25	23 0	6 20	5 6	24 12	1 41	23 21	0 58	21 10	0 6	18 36	0 52	21 28	0 12	22 47	0 29	22 5	1 16	5 20	16 46	23 8	23 4	20 38	11 0	0 6			
S 26	22 55	11 24	4 39	23 59	1 44	23 13	1 0	21 18	0 5	18 38	0 52	21 29	0 12	22 47	0 29	22 5	1 16	5 20	16 45	23 8	23 4	20 39	11 1	0 6			
S 27	22 49	15 57	3 54	23 44	1 47	23 5	1 1	21 26	0 4	18 41	0 52	21 29	0 12	22 48	0 29	22 5	1 16	5 19	16 45	23 8	23 4	20 40	11 1	0 6			
M28	22 43	19 39	2 54	23 26	1 49	22 55	1 3	21 34	0 3	18 44	0 52	21 30	0 12	22 48	0 29	22 5	1 16	5 19	16 44	23 8	23 3	20 40	11 2	0 6			
T 29	22 37	22 8	1 42	23 6	1 50	22 45	1 5	21 41	0 3	18 46	0 52	21 31	0 12	22 48	0 29	22 5	1 16	5 18	16 43	23 8	23 3	20 41	11 2	0 6			
W30	22n30	23s 9	0s23	22n45	1n50	22n34	1n 6	21n48	0s 2	18n49	0s52	21s32	0s12	22s49	0s29	22s 5	1n16	5n18	16n43	23s 8	23s 3	20n42	11n 3	0n 6			

Julian Day Number = 2265431.5, Delta T = 05m11s

Ecliptic obliquity = 23°30'18, Nutation = 0°00'16, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 17°37'49, Lahiri = 16°44'50 Julian Calendar 1 June 1490 == Greg. Calendar 10 June 1490

ASTRODIENST EPHEMERIS for the year 1490

geocentric

JULY 1490 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	19 11 4	17°19'21	0°35	28°19	24°32	9°33	27°41	24°R 8	17°R38	23°R15	26°40	20°R 9	18°45	22°50	28°29	T 1
F 2	19 15 0	18°16'34	15° 8	0°15	25°46	10°14	27°52	24°3 4	17°35	23°13	26°40	20°4 8	18°52	22°56	28°30	F 2
S 3	19 18 57	19°13'47	29°29	2° 9	26°59	10°55	28° 3	23°59	17°33	23°12	26°40	20° 5	18°49	23° 3	28°31	S 3
S 4	19 22 54	20°11'01	13°33	4° 2	28°13	11°36	28°14	23°55	17°30	23°10	26°40	20° 1	18°46	23°10	28°32	S 4
M 5	19 26 50	21° 8'15	27°14	5°53	29°27	12°17	28°26	23°51	17°28	23° 9	26°41	19°56	18°43	23°16	28°33	M 5
T 6	19 30 47	22° 5'30	10°32	7°42	0°41	12°58	28°36	23°46	17°26	23° 8	26°41	19°51	18°40	23°23	28°34	T 6
W 7	19 34 43	23° 2'46	23°26	9°30	1°55	13°38	28°47	23°42	17°23	23° 6	26°41	19°47	18°36	23°30	28°35	W 7
T 8	19 38 40	24° 0'03	6°0	11°15	3° 9	14°19	28°58	23°37	17°21	23° 5	26°42	19°45	18°33	23°36	28°36	T 8
F 9	19 42 36	24°57'20	18°15	12°59	4°22	15° 0	29° 9	23°33	17°18	23° 4	26°42	19°43	18°30	23°43	28°37	F 9
S 10	19 46 33	25°54'39	0°16	14°41	5°36	15°41	29°19	23°28	17°16	23° 2	26°42	19°43	18°27	23°50	28°38	S 10
S 11	19 50 29	26°51'58	12° 9	16°22	6°50	16°21	29°30	23°24	17°14	23° 1	26°43	19°44	18°24	23°56	28°39	S 11
M12	19 54 26	27°49'19	23°58	18° 0	8° 4	17° 2	29°40	23°20	17°11	23° 0	26°43	19°45	18°21	24° 3	28°40	M12
T 13	19 58 23	28°46'41	5°48	19°37	9°18	17°42	29°51	23°15	17° 9	22°59	26°44	19°47	18°17	24°10	28°40	T 13
W14	20 2 19	29°44'03	17°43	21°12	10°32	18°23	0°11	23°11	17° 7	22°57	26°44	19°48	18°14	24°16	28°41	W14
T 15	20 6 16	0°41'27	29°49	22°46	11°46	19° 3	0°11	23° 6	17° 4	22°56	26°45	19°47	18°11	24°23	28°42	T 15
F 16	20 10 12	1°38'52	12°6	24°18	13° 0	19°43	0°21	23° 2	17° 2	22°55	26°45	19°45	18° 8	24°30	28°42	F 16
S 17	20 14 9	2°36'18	24°39	25°47	14°14	20°23	0°31	22°58	17° 0	22°54	26°46	19°41	18° 5	24°36	28°43	S 17
S 18	20 18 5	3°33'44	7°27	27°16	15°28	21° 3	0°41	22°53	16°57	22°53	26°47	19°35	18° 1	24°43	28°43	S 18
M19	20 22 2	4°31'12	20°31	28°42	16°41	21°43	0°50	22°49	16°55	22°52	26°47	19°28	17°58	24°49	28°43	M19
T 20	20 25 58	5°28'41	3°49	0°6	17°55	22°23	1° 0	22°45	16°53	22°50	26°48	19°20	17°55	24°56	28°44	T 20
W21	20 29 55	6°26'10	17°21	1°29	19° 9	23° 3	1° 9	22°40	16°51	22°49	26°49	19°13	17°52	25° 3	28°44	W21
T 22	20 33 52	7°23'40	1°4	2°50	20°23	23°43	1°18	22°36	16°48	22°48	26°50	19° 6	17°49	25° 9	28°44	T 22
F 23	20 37 48	8°21'11	14°56	4° 9	21°37	24°23	1°28	22°32	16°46	22°47	26°50	19° 2	17°46	25°16	28°44	F 23
S 24	20 41 45	9°18'43	28°56	5°26	22°51	25° 3	1°37	22°28	16°44	22°46	26°51	19° 0	17°42	25°23	28°44	S 24
S 25	20 45 41	10°16'16	13°2	6°41	24° 5	25°42	1°46	22°24	16°42	22°45	26°52	18°D59	17°39	25°29	28°44	S 25
M26	20 49 38	11°13'50	27°13	7°53	25°19	26°22	1°54	22°20	16°40	22°44	26°53	19° 0	17°36	25°36	28°44	M26
T 27	20 53 34	12°11'24	11°27	9° 4	26°33	27° 1	2° 3	22°16	16°38	22°43	26°54	19° 1	17°33	25°43	28°44	T 27
W28	20 57 31	13° 9'00	25°42	10°12	27°47	27°41	2°12	22°12	16°36	22°43	26°55	19°R 1	17°30	25°49	28°44	W28
T 29	21 1 27	14° 6'37	9°35	11°19	29° 1	28°20	2°20	22° 8	16°34	22°42	26°56	18°59	17°27	25°56	28°44	T 29
F 30	21 5 24	15° 4'14	24° 6	12°22	0°14	28°59	2°28	22° 4	16°31	22°41	26°57	18°55	17°23	26° 3	28°44	F 30
S 31	21 9 21	16°1'53	8°7	13°23	1°28	29°38	2°36	22°3 0	16°29	22°40	26°58	18°49	17°20	26°8 9	28°43	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
T 1	22n23	22s33	0n57	22n21	1n50	22n23	1n 8	21n55	0s 1	18n51	0s52	21s33	0s12	22s49	0s29	T 1
F 2	22 15	20 27	2 13	21 56	1 49	22 11	1 9	22 2	0 1	18 54	0 52	21 34	0 13	22 49	0 29	F 2
S 3	22 7	17 4	3 19	21 29	1 47	21 58	1 11	22 9	0n 0	18 56	0 52	21 35	0 13	22 50	0 29	S 3
S 4	21 59	12 47	4 12	21 0	1 45	21 45	1 12	22 15	0 1	18 59	0 52	21 35	0 13	22 50	0 29	S 4
M 5	21 50	7 57	4 49	20 30	1 43	21 31	1 13	22 21	0 2	19 1	0 52	21 36	0 13	22 50	0 29	M 5
T 6	21 41	2 53	5 8	19 59	1 39	21 17	1 15	22 27	0 2	19 4	0 52	21 37	0 13	22 51	0 29	T 6
W 7	21 32	2n10	5 12	19 27	1 35	21 1	1 16	22 33	0 3	19 6	0 52	21 38	0 13	22 51	0 29	W 7
T 8	21 22	6 58	5 0	18 54	1 31	20 46	1 17	22 39	0 4	19 8	0 52	21 39	0 13	22 51	0 29	T 8
F 9	21 12	11 24	4 35	18 21	1 26	20 29	1 18	22 44	0 5	19 11	0 52	21 40	0 13	22 51	0 29	F 9
S 10	21 1	15 18	3 58	17 46	1 21	20 12	1 19	22 49	0 5	19 13	0 52	21 41	0 13	22 52	0 29	S 10
S 11	20 50	18 33	3 11	17 10	1 15	19 55	1 20	22 54	0 6	19 15	0 52	21 41	0 13	22 52	0 29	S 11
M12	20 39	21 1	2 16	16 35	1 9	19 36	1 21	22 59	0 7	19 17	0 52	21 42	0 13	22 52	0 29	M12
T 13	20 28	22 34	1 16	15 58	1 3	19 18	1 22	23 4	0 8	19 19	0 52	21 43	0 14	22 53	0 29	T 13
W14	20 16	23 7	0 11	15 21	0 56	18 59	1 23	23 8	0 8	19 21	0 52	21 44	0 14	22 53	0 29	W14
T 15	20 3	22 36	0s54	14 44	0 49	18 39	1 24	23 12	0 9	19 24	0 52	21 45	0 14	22 53	0 29	T 15
F 16	19 51	20 59	1 58	14 7	0 41	18 19	1 25	23 16	0 10	19 26	0 52	21 46	0 14	22 54	0 29	F 16
S 17	19 38	18 20	2 58	13 29	0 33	17 58	1 25	23 20	0 11	19 28	0 52	21 46	0 14	22 54	0 29	S 17
S 18	19 25	14 46	3 49	12 51	0 25	17 37	1 26	23 24	0 12	19 30	0 52	21 47	0 14	22 54	0 29	S 18
M19	19 11	10 25	4 30	12 13	0 17	17 15	1 26	23 27	0 12	19 32	0 53	21 48	0 14	22 54	0 29	M19
T 20	18 57	5 31	4 57	11 35	0 8	16 53	1 27	23 30	0 13	19 33	0 53	21 49	0 14	22 55	0 29	T 20
W21	18 43	0 17	5 8	10 58	0s 1	16 30	1 27	23 33	0 14	19 35	0 53	21 50	0 14	22 55	0 29	W21
T 22	18 28	5s 2	5 1	10 20	0 10	16 7	1 27	23 36	0 15	19 37	0 53	21 50	0 14	22 55	0 29	T 22
F 23	18 14	10 9	4 37	9 43	0 20	15 43	1 28	23 39	0 15	19 39	0 53	21 51	0 14	22 56	0 29	F 23
S 24	17 58	14 48	3 57	9 6	0 29	15 19	1 28	23 41	0 16	19 41	0 53	21 52	0 14	22 56	0 29	S 24
S 25	17 43	18 40	3 1	8 29	0 39	14 55	1 28	23 43	0 17	19 42	0 53	21 53	0 15	22 56	0 29	S 25
M26	17 27	21 27	1 55	7 53	0 49	14 30	1 28	23 45	0 18	19 44	0 53	21 53	0 15	22 56	0 29	M26
T 27	17 11	22 53	0 41	7 17	0 59	14 5	1 28	23 47	0 19	19 46	0 53	21 54	0 15	22 57	0 29	T 27
W28	16 55	22 50	0n36	6 42	1 9	13 39	1 28	23 48	0 19	19 47	0 53	21 55	0 15	22 57	0 29	W28
T 29	16 38	21 18	1 50	6 7	1 20	13 13	1 28	23 50	0 20	19 49	0 53	21 56	0 15	22 57	0 29	T 29
F 30	16 22	18 27	2 57	5 33	1 30	12 47	1 28	23 51	0 21	19 51	0 53	21 56	0 15	22 57	0 29	F 30
S 31	16n 4	14s33	3n52	5n 0	1s40	12n20	1n27	23n52	0n22	19n52	0s53	21s57	0s15	22s58	0s29	S 31

Julian Day Number = 2265461.5, Delta T = 05m11s

Ecliptic obliquity = 23°30'17", Nutation = 0°00'18", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 17°37'54", Lahiri = 16°44'54" Julian Calendar 1 July 1490 == Greg. Calendar 10 July 1490

ASTRODIENST EPHEMERIS for the year 1490

geocentric

AUGUST 1490 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	21 13 17	16°59'33	21°55'54	14°22'22	2°42'42	0°51'17	2°11'44	21°R56	16°R28	22°R39	26°A59	18°R40	17°A17	26°B16	28°R43	S 1
M 2	21 17 14	17°57'15	5°H24	15°17'17	3°56'05	0°57'25	2°52'21	21°R52	16°R26	22°R39	27°0'18	18°R30	17°14'17	26°23'28	28°Y42	M 2
T 3	21 21 10	18°54'57	18°35'16	16°10'10	5°10'13	1°35'30	3°0'21	21°49	16°24	22°38	27°2'18	18°20	17°11'17	26°29'28	28°42'28	T 3
W 4	21 25 7	19°52'42	1°Y26	17°0'17	6°24'21	2°14'30	3°8'21	21°45	16°22	22°37	27°3'18	18°11	17°7'17	26°36'28	28°41'28	W 4
T 5	21 29 3	20°50'28	13°57'17	17°46'46	7°38'25	2°53'30	3°15'21	21°41	16°20	22°36	27°4'18	18°4	17°4'17	26°43'28	28°41'28	T 5
F 6	21 33 0	21°48'15	26°12'18	18°29'29	8°52'33	3°32'30	3°22'21	21°38	16°18	22°36	27°5'17	17°58	17°1'17	26°49'28	28°40'28	F 6
S 7	21 36 56	22°46'05	8°B13	19°8'10	10°6'40	4°11'30	3°30'21	21°34	16°16	22°35	27°7'17	17°55	16°58'16	26°56'28	28°39'28	S 7
S 8	21 40 53	23°43'56	20°5'19	19°44'11	11°19'49	4°49'30	3°37'21	21°31	16°15	22°35	27°8'17	17°D54	16°55'27	27°3'28	28°39'28	S 8
M 9	21 44 50	24°41'49	1°H54	20°15'12	12°33'52	5°28'30	3°43'21	21°27	16°13	22°34	27°9'17	17°54	16°52'27	27°9'28	28°38'28	M 9
T 10	21 48 46	25°39'44	13°45'20	20°42'13	13°47'6	6°6'30	3°50'21	21°24	16°11	22°34	27°11'17	17°R55	16°48'27	27°16'28	28°37'28	T 10
W11	21 52 43	26°37'41	25°43'21	21°4'15	15°1'6	6°45'30	3°57'21	21°21	16°9	22°33	27°12'17	17°54	16°45'27	27°23'28	28°36'28	W11
T 12	21 56 39	27°35'39	7°E52	21°21'16	16°15'7	7°23'40	4°3'21	21°18	16°8	22°33	27°14'17	17°53	16°42'27	27°29'28	28°35'28	T 12
F 13	22 0 36	28°33'39	20°18'20	21°33'17	17°29'8	8°1'40	4°9'21	21°15	16°6	22°32	27°15'17	17°48	16°39'27	27°36'28	28°34'28	F 13
S 14	22 4 32	29°31'42	3°L3	21°40'18	18°43'8	8°39'40	4°15'21	21°12	16°5	22°32	27°17'17	17°42	16°36'27	27°43'28	28°33'28	S 14
S 15	22 8 29	0°M29	16°9'21	21°R41	19°57'9	9°17'40	4°21'21	21°9	16°3	22°31	27°18'17	17°33	16°33'27	27°49'28	28°31'28	S 15
M16	22 12 25	1°27'51	29°34'21	21°36'11	9°55'21	9°55'21	4°27'21	21°6	16°2	22°31	27°20'17	17°22	16°29'27	27°56'28	28°30'28	M16
T 17	22 16 22	2°25'58	13°M18	21°25'22	22°24'10	10°33'40	4°33'21	21°3	16°0	22°31	27°21'17	17°10	16°26'28	28°2'28	28°29'28	T 17
W18	22 20 19	3°24'07	27°16'21	21°8'23	23°38'11	11°11'40	4°38'21	21°0	15°59	22°30	27°23'17	16°59	16°23'28	28°9'28	28°28'28	W18
T 19	22 24 15	4°22'17	11°A23	20°44'24	24°52'11	11°49'40	4°43'20	20°58	15°58	22°30	27°24'17	16°49	16°20'28	28°16'28	28°26'28	T 19
F 20	22 28 12	5°20'29	25°36'20	20°14'26	26°6'12	12°27'40	4°49'20	20°55	15°56	22°30	27°26'17	16°42	16°17'28	28°22'28	28°25'28	F 20
S 21	22 32 8	6°18'43	9°M50	19°38'27	27°20'13	13°4'40	4°53'20	20°53	15°55	22°30	27°28'17	16°37	16°13'28	28°29'28	28°23'28	S 21
S 22	22 36 5	7°16'58	24°2'18	18°56'28	28°34'13	13°42'40	4°58'20	20°50	15°54	22°30	27°29'17	16°35	16°10'28	28°36'28	28°22'28	S 22
M23	22 40 1	8°15'15	8°A11	18°9'29	29°47'14	14°19'50	5°3'20	20°48	15°53	22°30	27°31'17	16°35	16°7'28	28°42'28	28°20'28	M23
T 24	22 43 58	9°13'33	22°14'17	17°16'10	1°L1	14°56'50	5°7'20	20°46	15°52	22°29	27°33'17	16°35	16°4'28	28°49'28	28°19'28	T 24
W25	22 47 54	10°11'53	6°B12	16°20'21	2°15'15	15°34'50	5°11'20	20°44	15°50	22°29	27°35'17	16°34	16°1'28	28°56'28	28°17'28	W25
T 26	22 51 51	11°10'14	20°4'15	15°21'30	3°29'16	16°11'50	5°16'20	20°42	15°49	22°D29	27°37'17	16°31	15°58'29	29°2'28	28°15'28	T 26
F 27	22 55 48	12°8'37	3°A48	14°20'40	4°43'16	16°48'50	5°19'20	20°40	15°48	22°29	27°38'17	16°25	15°54'29	29°9'28	28°13'28	F 27
S 28	22 59 44	13°7'02	17°23'13	13°18'50	5°56'17	17°25'50	5°23'20	20°38	15°47	22°29	27°40'17	16°16	15°51'29	29°16'28	28°12'28	S 28
S 29	23 3 41	14°5'28	0°H48	12°17'7	7°10'18	18°2'50	5°27'20	20°36	15°47	22°30	27°42'17	16°5	15°48'29	29°22'28	28°10'28	S 29
M30	23 7 37	15°3'56	13°59'11	11°19'8	8°24'18	18°39'50	5°30'20	20°35	15°46	22°30	27°44'17	15°53	15°45'29	29°29'28	28°8'28	M30
T 31	23 11 34	16°M2'26	26°H55	10°M24	9°A38	19°E15	5°M33	20°R33	15°R45	22°R30	27°A46	15°A40	15°A42	29°B36	28°Y6	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	15n47	9s57	4n32	4n28	1s51	11n53	1n27	23n53	0n23	19n54	0s53	21s58	0s15	22s58	0s29	22s 4
M 2	15 30	4 57	4 57	3 57	2 2	11 26	1 27	23 54	0 23	19 55	0 53	21 58	0 15	22 58	0 29	22 4
T 3	15 12	0n 8	5 4	3 26	2 12	10 59	1 26	23 54	0 24	19 57	0 53	21 59	0 15	22 58	0 29	22 4
W 4	14 54	5 6	4 56	2 58	2 23	10 31	1 26	23 54	0 25	19 58	0 53	22 0	0 15	22 59	0 29	22 4
T 5	14 35	9 44	4 34	2 30	2 33	10 3	1 25	23 54	0 26	19 59	0 54	22 0	0 15	22 59	0 29	22 4
F 6	14 17	13 52	4 0	2 43	2 43	9 34	1 24	23 54	0 27	20 1	0 54	22 1	0 15	22 59	0 29	22 4
S 7	13 58	17 22	3 15	1 39	2 54	9 6	1 23	23 54	0 27	20 2	0 54	22 2	0 16	22 59	0 29	22 4
S 8	13 39	20 6	2 23	1 16	3 4	8 37	1 23	23 53	0 28	20 3	0 54	22 2	0 16	22 59	0 29	22 4
M 9	13 20	21 59	1 24	0 55	3 13	8 8	1 22	23 53	0 29	20 4	0 54	22 3	0 16	23 0	0 29	22 4
T 10	13 0	22 53	0 22	0 35	3 23	7 38	1 21	23 52	0 30	20 6	0 54	22 3	0 16	23 0	0 29	22 4
W11	12 40	22 45	0s41	0 18	3 32	7 9	1 20	23 51	0 31	20 7	0 54	22 4	0 16	23 0	0 29	22 4
T 12	12 20	21 32	1 44	0 4	3 40	6 39	1 19	23 49	0 32	20 8	0 54	22 5	0 16	23 0	0 29	22 4
F 13	12 0	19 16	2 43	0s 9	3 49	6 9	1 18	23 48	0 32	20 9	0 54	22 5	0 16	23 0	0 29	22 4
S 14	11 40	16 2	3 36	0 18	3 56	5 39	1 16	23 46	0 33	20 10	0 54	22 6	0 16	23 0	0 29	22 4
S 15	11 20	11 56	4 18	0 25	4 3	5 9	1 15	23 45	0 34	20 11	0 54	22 6	0 16	23 1	0 29	22 4
M16	10 59	7 10	4 47	0 28	4 9	4 38	1 14	23 43	0 35	20 12	0 54	22 7	0 16	23 1	0 29	22 4
T 17	10 38	1 57	5 1	0 28	4 13	4 8	1 12	23 41	0 36	20 13	0 54	22 7	0 16	23 1	0 29	22 4
W18	10 17	3s26	4 57	0 25	4 17	3 37	1 11	23 38	0 37	20 14	0 55	22 8	0 16	23 1	0 29	22 4
T 19	9 56	8 43	4 34	0 18	4 20	3 6	1 9	23 36	0 38	20 15	0 55	22 8	0 16	23 1	0 29	22 4
F 20	9 35	13 34	3 55	0 7	4 21	2 35	1 8	23 33	0 38	20 16	0 55	22 9	0 16	23 1	0 29	22 4
S 21	9 13	17 40	3 1	0n 7	4 20	2 4	1 6	23 31	0 39	20 16	0 55	22 9	0 16	23 2	0 29	22 4
S 22	8 52	20 43	1 56	0 26	4 18	1 33	1 4	23 28	0 40	20 17	0 55	22 9	0 17	23 2	0 29	22 4
M23	8 30	22 28	0 44	0 48	4 15	1 2	1 3	23 25	0 41	20 18	0 55	22 10	0 17	23 2	0 29	22 4
T 24	8 8	22 47	0n30	1 13	4 9	0 31	1 1	23 21	0 42	20 19	0 55	22 10	0 17	23 2	0 29	22 4
W25	7 46	21 40	1 42	1 42	4 1	0 0	0 59	23 18	0 43	20 19	0 55	22 11	0 17	23 2	0 29	22 4
T 26	7 24	19 15	2 47	2 14	3 51	0s31	0 57	23 15	0 44	20 20	0 55	22 11	0 17	23 2	0 29	22 4
F 27	7 1	15 45	3 42	2 48	3 40	1 2	0 55	23 11	0 44	20 21	0 55	22 11	0 17	23 2	0 29	22 4
S 28	6 39	11 29	4 24	3 24	3 26	1 33	0 53	23 7	0 45	20 21	0 55	22 12	0 17	23 2	0 29	22 4
S 29	6 17	6 42	4 50	4 1	3 11	2 5	0 51	23 3	0 46	20 22	0 55	22 12	0 17	23 2	0 28	22 5
M30	5 54	1 42	5 0	4 39	2 55	2 36	0 49	22 59	0 47	20 22	0 55	22 12	0 17	23 3	0 28	22 5
T 31	5n31	3n16	4n55	5n16	2s37	3s 7	0n47	22n55	0n48	20n23	0s56	22s13	0s17	23s 3	0s28	22s 5

Julian Day Number = 2265492.5, Delta T = 05m11s

Ecliptic obliquity = 23°30'18", Nutation = 0°00'18", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 17°37'58", Lahiri = 16°44'58" Julian Calendar 1 Aug. 1490 == Greg. Calendar 10 Aug. 1490

ASTRODIENST EPHEMERIS for the year 1490

geocentric

SEPTEMBER 1490 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	23 15 30	17 ^h 05'58"	9 ^h 35'	9 ^h 35'	10 ^h 51'	19 ^h 52'	5 ^h 36'	20 ^h 31'	15 ^h 44'	22 ^h 30'	27 ^h 48'	15 ^h 27'	15 ^h 38'	29 ^h 42'	28 ^h 04'	W 1
T 2	23 19 27	17 ^h 59'32"	22° 0'	8 ^h 52'	12° 5'	20 ^h 29'	5° 39'	20 ^h 30'	15 ^h 43'	22 ^h 30'	27 ^h 50'	15 ^h 17'	15° 35'	29° 49'	28 ^h 02'	T 2
F 3	23 23 23	18 ^h 58'08"	4 ^h 10'	8° 16'	13° 19'	21° 5'	5° 41'	20° 29'	15° 43'	22° 30'	27° 52'	15° 9'	15° 32'	29° 56'	28° 0'	F 3
S 4	23 27 20	19° 56'47"	16° 8'	7° 50'	14° 33'	21° 41'	5° 44'	20° 28'	15° 42'	22° 31'	27° 54'	15° 4'	15° 29'	0 ^h 11' 2"	27° 58'	S 4
S 5	23 31 16	20° 55'27"	27° 59'	7° 32'	15° 46'	22° 18'	5° 46'	20° 26'	15° 41'	22° 31'	27° 56'	15° 1'	15° 26'	0° 9'	27° 55'	S 5
M 6	23 35 13	21° 54'10"	9 ^h 47'	7° D24	17° 0'	22° 54'	5° 48'	20° 25'	15° 41'	22° 31'	27° 58'	15° 0'	15° 23'	0° 15'	27° 53'	M 6
T 7	23 39 10	22° 52'55"	21° 36'	7° 25'	18° 14'	23° 30'	5° 50'	20° 24'	15° 40'	22° 32'	28° 0'	15° 0'	15° 19'	0° 22'	27° 51'	T 7
W 8	23 43 6	23° 51'43"	3 ^h 33'	7° 37'	19° 27'	24° 6'	5° 51'	20° 24'	15° 40'	22° 32'	28° 2'	15° 0'	15° 16'	0° 29'	27° 49'	W 8
T 9	23 47 3	24° 50'32"	15° 44'	7° 59'	20° 41'	24° 42'	5° 53'	20° 23'	15° 40'	22° 33'	28° 4'	14° 58'	15° 13'	0° 35'	27° 46'	T 9
F 10	23 50 59	25° 49'24"	28° 13'	8° 30'	21° 55'	25° 18'	5° 54'	20° 22'	15° 39'	22° 33'	28° 6'	14° 54'	15° 10'	0° 42'	27° 44'	F 10
S 11	23 54 56	26° 48'19"	11 ^h 03'	9° 10'	23° 8'	25° 54'	5° 55'	20° 22'	15° 39'	22° 34'	28° 8'	14° 48'	15° 7'	0° 49'	27° 42'	S 11
S 12	23 58 52	27° 47'15"	24° 18'	9° 58'	24° 22'	26° 29'	5° 56'	20° 21'	15° 39'	22° 34'	28° 11'	14° 39'	15° 4'	0° 55'	27° 39'	S 12
M13	0 2 49	28° 46'14"	7 ^h 58'	10° 55'	25° 35'	27° 5'	5° 56'	20° 21'	15° 39'	22° 35'	28° 13'	14° 29'	15° 0'	1° 2'	27° 37'	M13
T 14	0 6 45	29° 45'14"	22° 2'	11° 59'	26° 49'	27° 40'	5° 57'	20° 21'	15° 38'	22° 35'	28° 15'	14° 17'	14° 57'	1° 9'	27° 34'	T 14
W15	0 10 42	0 ^h 44'17"	6 ^h 23'	13° 10'	28° 3'	28° 15'	5° 57'	20° 21'	15° 38'	22° 36'	28° 17'	14° 6'	14° 54'	1° 15'	27° 32'	W15
T 16	0 14 39	1° 43'22"	20° 57'	14° 26'	29° 16'	28° 51'	5° R57	20° D21	15° D38	22° 37'	28° 19'	13° 56'	14° 51'	1° 22'	27° 29'	T 16
F 17	0 18 35	2° 42'29"	5 ^h 36'	15° 48'	0 ^h 30'	29° 26'	5° 57'	20° 21'	15° 38'	22° 37'	28° 22'	13° 49'	14° 48'	1° 29'	27° 26'	F 17
S 18	0 22 32	3° 41'38"	20° 13'	17° 14'	1° 43'	0 ^h 01'	5° 56'	20° 21'	15° 38'	22° 38'	28° 24'	13° 44'	14° 44'	1° 35'	27° 24'	S 18
S 19	0 26 28	4° 40'48"	4 ^h 42'	18° 44'	2° 57'	0° 36'	5° 56'	20° 21'	15° 39'	22° 39'	28° 26'	13° 42'	14° 41'	1° 42'	27° 21'	S 19
M20	0 30 25	5° 40'01"	19° 0'	20° 17'	4° 10'	1° 10'	5° 55'	20° 21'	15° 39'	22° 40'	28° 28'	13° D42	14° 38'	1° 49'	27° 19'	M20
T 21	0 34 21	6° 39'15"	3 ^h 05'	21° 53'	5° 24'	1° 45'	5° 54'	20° 22'	15° 39'	22° 40'	28° 31'	13° R43	14° 35'	1° 55'	27° 16'	T 21
W22	0 38 18	7° 38'31"	16° 57'	23° 31'	6° 37'	2° 19'	5° 53'	20° 22'	15° 39'	22° 41'	28° 33'	13° 42'	14° 32'	2° 2'	27° 13'	W22
T 23	0 42 14	8° 37'49"	0 ^h 35'	25° 11'	7° 51'	2° 54'	5° 51'	20° 23'	15° 40'	22° 42'	28° 35'	13° 40'	14° 29'	2° 8'	27° 10'	T 23
F 24	0 46 11	9° 37'09"	14° 0'	26° 52'	9° 4'	3° 28'	5° 50'	20° 24'	15° 40'	22° 43'	28° 38'	13° 36'	14° 25'	2° 15'	27° 8'	F 24
S 25	0 50 8	10° 36'30"	27° 14'	28° 35'	10° 18'	4° 2'	5° 48'	20° 25'	15° 40'	22° 44'	28° 40'	13° 29'	14° 22'	2° 22'	27° 5'	S 25
S 26	0 54 4	11° 35'53"	10 ^h 16'	0 ^h 18'	11° 31'	4° 36'	5° 46'	20° 26'	15° 41'	22° 45'	28° 42'	13° 19'	14° 19'	2° 28'	27° 2'	S 26
M27	0 58 1	12° 35'18"	23° 5'	2° 2'	12° 45'	5° 10'	5° 44'	20° 27'	15° 41'	22° 46'	28° 45'	13° 9'	14° 16'	2° 35'	26° 59'	M27
T 28	1 1 57	13° 34'45"	5 ^h 43'	3° 46'	13° 58'	5° 44'	5° 41'	20° 28'	15° 42'	22° 47'	28° 47'	12° 57'	14° 13'	2° 42'	26° 56'	T 28
W29	1 5 54	14° 34'14"	18° 8'	5° 30'	15° 11'	6° 18'	5° 39'	20° 29'	15° 43'	22° 48'	28° 49'	12° 47'	14° 10'	2° 48'	26° 53'	W29
T 30	1 9 50	15° 33'45"	0 ^h 21'	7 ^h 14'	16 ^h 25'	6 ^h 51'	5 ^h 36'	20° 31'	15° 43'	22° 49'	28° 52'	12° 38'	14° 7'	2 ^h 11' 5"	26° 51'	T 30

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
W 1	5n 8	8n 1	4n34	5n52	2s18	3s38	0n44	22n50	0n49	20n23	0s56	22s13	0s17	23s 3	0s28	22s 5
T 2	4 46	12 19	4 2	6 26	1 59	4 9	0 42	22 46	0 50	20 23	0 56	22 13	0 17	23 3	0 28	22 5
F 3	4 23	16 3	3 18	6 58	1 39	4 40	0 40	22 41	0 51	20 24	0 56	22 13	0 17	23 3	0 28	22 5
S 4	4 0	19 3	2 27	7 26	1 19	5 10	0 37	22 36	0 52	20 24	0 56	22 14	0 17	23 3	0 28	22 5
S 5	3 36	21 13	1 29	7 51	0 59	5 41	0 35	22 31	0 52	20 25	0 56	22 14	0 17	23 3	0 28	22 5
M 6	3 13	22 26	0 28	8 12	0 40	6 12	0 32	22 26	0 53	20 25	0 56	22 14	0 17	23 3	0 28	22 5
T 7	2 50	22 39	0s35	8 28	0 22	6 42	0 30	22 21	0 54	20 25	0 56	22 14	0 18	23 3	0 28	22 5
W 8	2 27	21 51	1 37	8 40	0 4	7 13	0 27	22 15	0 55	20 25	0 56	22 14	0 18	23 3	0 28	22 5
T 9	2 3	20 0	2 35	8 48	0n13	7 43	0 25	22 10	0 56	20 25	0 56	22 15	0 18	23 3	0 28	22 5
F 10	1 40	17 11	3 28	8 50	0 28	8 13	0 22	22 4	0 57	20 26	0 56	22 15	0 18	23 3	0 28	22 5
S 11	1 16	13 28	4 12	8 49	0 42	8 43	0 19	21 58	0 58	20 26	0 56	22 15	0 18	23 3	0 28	22 5
S 12	0 53	9 0	4 43	8 42	0 55	9 13	0 17	21 53	0 59	20 26	0 56	22 15	0 18	23 3	0 28	22 5
M13	0 29	3 58	5 0	8 31	1 7	9 42	0 14	21 47	1 0	20 26	0 57	22 15	0 18	23 3	0 28	22 6
T 14	0 6	1s24	4 59	8 16	1 17	10 11	0 11	21 41	1 1	20 26	0 57	22 15	0 18	23 3	0 28	22 6
W15	0s18	6 49	4 39	7 58	1 26	10 40	0 9	21 34	1 2	20 26	0 57	22 15	0 18	23 3	0 28	22 6
T 16	0 41	11 56	4 2	7 35	1 34	11 9	0 6	21 28	1 3	20 26	0 57	22 15	0 18	23 3	0 28	22 6
F 17	1 5	16 22	3 8	7 9	1 40	11 38	0 3	21 22	1 4	20 26	0 57	22 15	0 18	23 3	0 28	22 6
S 18	1 28	19 48	2 2	6 41	1 46	12 6	0 0	21 15	1 5	20 25	0 57	22 15	0 18	23 3	0 28	22 6
S 19	1 52	21 55	0 48	6 9	1 50	12 34	0s 3	21 9	1 5	20 25	0 57	22 15	0 18	23 3	0 28	22 6
M20	2 15	22 35	0n28	5 35	1 53	13 2	0 6	21 2	1 6	20 25	0 57	22 15	0 18	23 3	0 28	22 6
T 21	2 39	21 47	1 41	4 59	1 55	13 29	0 8	20 55	1 7	20 25	0 57	22 15	0 18	23 3	0 28	22 6
W22	3 2	19 40	2 47	4 22	1 56	13 57	0 11	20 48	1 8	20 25	0 57	22 15	0 18	23 3	0 28	22 6
T 23	3 26	16 27	3 43	3 42	1 57	14 23	0 14	20 41	1 9	20 24	0 57	22 15	0 18	23 3	0 28	22 6
F 24	3 49	12 26	4 25	3 1	1 56	14 50	0 17	20 34	1 10	20 24	0 57	22 15	0 18	23 3	0 28	22 7
S 25	4 13	7 53	4 52	2 19	1 55	15 16	0 20	20 27	1 11	20 23	0 57	22 15	0 18	23 3	0 28	22 7
S 26	4 36	3 3	5 3	1 37	1 53	15 42	0 23	20 20	1 12	20 23	0 57	22 15	0 19	23 3	0 28	22 7
M27	4 59	1n50	4 59	0 53	1 51	16 7	0 26	20 13	1 13	20 23	0 57	22 15	0 19	23 3	0 28	22 7
T 28	5 22	6 34	4 41	0 9	1 48	16 32	0 29	20 5	1 14	20 22	0 57	22 15	0 19	23 3	0 28	22 7
W29	5 45	10 57	4 9	0s36	1 44	16 57	0 32	19 58	1 15	20 22	0 58	22 15	0 19	23 2	0 28	22 7
T 30	6s 9	14n50	3n26	1s20	1n40	17s21	0s35	19n51	1n16	20n21	0s58	22s15	0s19	23s 2	0s28	22s 7

Julian Day Number = 2265523.5, Delta T = 05m11s

Ecliptic obliquity = 23°30'18", Nutation = 0°00'17", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 17°38'02", Lahiri = 16°45'03" Julian Calendar 1 Sept. 1490 == Greg. Calendar 10 Sept. 1490

ASTRODIENST EPHEMERIS for the year 1490

geocentric

OCTOBER 1490 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	1 13 47	16♂33'18	12♂24	8♂58	17♂38	7♂25	5°R33	20♂32	15♂44	22♂50	28♂54	12°R31	14♂ 3	3♂ 2	26°R48	F 1
S 2	1 17 43	17°32'54	24°18	10°41	18°51	7°58	5♂30	20°34	15°45	22°52	28°56	12♂27	14° 0	3° 8	26°Y45	S 2
S 3	1 21 40	18°32'32	6♂ 7	12°25	20° 5	8°31	5°26	20°35	15°46	22°53	28°59	12°25	13°57	3°15	26°42	S 3
M 4	1 25 36	19°32'12	17°53	14° 8	21°18	9° 4	5°23	20°37	15°46	22°54	29° 1	12°D25	13°54	3°22	26°39	M 4
T 5	1 29 33	20°31'54	29°41	15°50	22°31	9°37	5°19	20°39	15°47	22°55	29° 4	12°26	13°50	3°28	26°36	T 5
W 6	1 33 30	21°31'38	11♂37	17°32	23°44	10°10	5°15	20°41	15°48	22°57	29° 6	12°27	13°47	3°35	26°33	W 6
T 7	1 37 26	22°31'25	23°45	19°14	24°58	10°43	5°11	20°43	15°49	22°58	29° 9	12°R28	13°44	3°42	26°30	T 7
F 8	1 41 23	23°31'14	6♂11	20°55	26°11	11°15	5° 7	20°45	15°50	22°59	29°11	12°27	13°41	3°48	26°27	F 8
S 9	1 45 19	24°31'05	19° 0	22°36	27°24	11°48	5° 2	20°47	15°52	23° 1	29°13	12°24	13°38	3°55	26°24	S 9
S 10	1 49 16	25°30'59	2♂14	24°16	28°37	12°20	4°57	20°49	15°53	23° 2	29°16	12°19	13°35	4° 1	26°21	S 10
M 11	1 53 12	26°30'54	15°57	25°55	29°50	12°52	4°53	20°52	15°54	23° 3	29°18	12°13	13°31	4° 8	26°18	M 11
T 12	1 57 9	27°30'52	0♂ 7	27°34	1♂ 3	13°24	4°48	20°54	15°55	23° 5	29°21	12° 5	13°28	4°15	26°15	T 12
W 13	2 1 5	28°30'52	14°41	29°13	2°16	13°56	4°42	20°57	15°57	23° 6	29°23	11°58	13°25	4°21	26°12	W 13
T 14	2 5 2	29°30'54	29°32	0♂51	3°30	14°27	4°37	21° 0	15°58	23° 8	29°25	11°52	13°22	4°28	26° 9	T 14
F 15	2 8 59	0♂30'58	14♂33	2°28	4°43	14°59	4°32	21° 3	15°59	23° 9	29°28	11°47	13°19	4°35	26° 6	F 15
S 16	2 12 55	1°31'03	29°33	4° 5	5°56	15°30	4°26	21° 5	16° 1	23°11	29°30	11°45	13°15	4°41	26° 3	S 16
S 17	2 16 52	2°31'11	14♂25	5°42	7° 9	16° 1	4°20	21° 8	16° 2	23°13	29°33	11°D44	13°12	4°48	26° 0	S 17
M 18	2 20 48	3°31'20	29° 3	7°18	8°22	16°32	4°14	21°11	16° 4	23°14	29°35	11°45	13° 9	4°55	25°57	M 18
T 19	2 24 45	4°31'31	13♂21	8°54	9°35	17° 3	4° 8	21°15	16° 6	23°16	29°38	11°47	13° 6	5° 1	25°55	T 19
W 20	2 28 41	5°31'43	27°19	10°29	10°48	17°33	4° 2	21°18	16° 7	23°17	29°40	11°48	13° 3	5° 8	25°52	W 20
T 21	2 32 38	6°31'57	10♂57	12° 4	12° 0	18° 4	3°55	21°21	16° 9	23°19	29°43	11°R48	13° 0	5°15	25°49	T 21
F 22	2 36 34	7°32'12	24°14	13°39	13°13	18°34	3°49	21°25	16°11	23°21	29°45	11°47	12°56	5°21	25°46	F 22
S 23	2 40 31	8°32'28	7♂15	15°13	14°26	19° 4	3°42	21°28	16°13	23°23	29°47	11°44	12°53	5°28	25°43	S 23
S 24	2 44 28	9°32'46	20° 0	16°47	15°39	19°34	3°35	21°32	16°14	23°24	29°50	11°40	12°50	5°35	25°40	S 24
M 25	2 48 24	10°33'06	2°Y32	18°20	16°52	20° 3	3°28	21°35	16°16	23°26	29°52	11°34	12°47	5°41	25°37	M 25
T 26	2 52 21	11°33'27	14°52	19°53	18° 4	20°33	3°21	21°39	16°18	23°28	29°55	11°29	12°44	5°48	25°34	T 26
W 27	2 56 17	12°33'50	27° 2	21°26	19°17	21° 2	3°14	21°43	16°20	23°30	29°57	11°24	12°41	5°54	25°32	W 27
T 28	3 0 14	13°34'14	9♂ 4	22°58	20°30	21°31	3° 7	21°47	16°22	23°31	29°59	11°19	12°37	6° 1	25°29	T 28
F 29	3 4 10	14°34'40	20°59	24°31	21°42	22° 0	3° 0	21°51	16°24	23°33	0♂ 2	11°16	12°34	6° 8	25°26	F 29
S 30	3 8 7	15°35'08	2♂49	26° 3	22°55	22°29	2°52	21°55	16°26	23°35	0° 4	11°15	12°31	6°14	25°23	S 30
S 31	3 12 3	16°35'38	14♂36	27♂34	24♂ 8	22♂57	2♂45	21♂59	16♂29	23♂37	0♂ 6	11°D14	12♂28	6♂21	25°Y21	S 31

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	6s32	18n 3	2n34	2s 5	1n36	17s45	0s38	19n43	1n17	20n21	0s58	22s14	0s19	23s 2	0s28	22s 7	1n11	3n54	16n 2	22s22	22s33	21n47	10n20	0s 2			
S 2	6 54	20 27	1 36	2 50	1 31	18 8	0 41	19 35	1 18	20 20	0 58	22 14	0 19	23 2	0 28	22 7	1 11	3 53	16 2	22 21	22 33	21 48	10 18	0 2			
S 3	7 17	21 57	0 34	3 35	1 27	18 31	0 44	19 28	1 20	20 19	0 58	22 14	0 19	23 2	0 28	22 7	1 11	3 52	16 2	22 21	22 32	21 48	10 17	0 2			
M 4	7 40	22 28	0s29	4 20	1 21	18 53	0 47	19 20	1 21	20 19	0 58	22 14	0 19	23 2	0 28	22 8	1 11	3 51	16 2	22 21	22 32	21 49	10 16	0 2			
T 5	8 2	21 58	1 32	5 5	1 16	19 15	0 50	19 12	1 22	20 18	0 58	22 14	0 19	23 2	0 28	22 8	1 11	3 50	16 2	22 21	22 31	21 49	10 15	0 2			
W 6	8 25	20 29	2 31	5 50	1 10	19 36	0 53	19 4	1 23	20 17	0 58	22 13	0 19	23 2	0 28	22 8	1 11	3 49	16 1	22 21	22 31	21 49	10 14	0 2			
T 7	8 47	18 3	3 24	6 34	1 4	19 57	0 56	18 56	1 24	20 16	0 58	22 13	0 19	23 1	0 28	22 8	1 11	3 49	16 1	22 21	22 31	21 50	10 13	0 3			
F 8	9 10	14 45	4 10	7 17	0 58	20 18	0 58	18 48	1 25	20 16	0 58	22 13	0 19	23 1	0 28	22 8	1 11	3 48	16 1	22 21	22 30	21 50	10 12	0 3			
S 9	9 32	10 40	4 44	8 1	0 52	20 38	1 1	18 40	1 26	20 15	0 58	22 12	0 19	23 1	0 28	22 8	1 11	3 47	16 1	22 21	22 30	21 51	10 10	0 3			
S 10	9 54	5 58	5 4	8 44	0 45	20 57	1 4	18 32	1 27	20 14	0 58	22 12	0 19	23 1	0 28	22 8	1 11	3 46	16 1	22 20	22 30	21 51	10 9	0 3			
M11	10 15	0 49	5 8	9 26	0 39	21 16	1 7	18 24	1 28	20 13	0 58	22 12	0 19	23 1	0 28	22 8	1 11	3 45	16 1	22 19	22 29	21 51	10 8	0 3			
T 12	10 37	4s32	4 54	10 8	0 32	21 34	1 10	18 16	1 29	20 12	0 58	22 12	0 19	23 1	0 28	22 8	1 11	3 44	16 1	22 18	22 29	21 52	10 7	0 3			
W13	10 59	9 48	4 21	10 49	0 26	21 51	1 12	18 8	1 30	20 11	0 58	22 11	0 19	23 1	0 28	22 9	1 11	3 43	16 1	22 17	22 28	21 52	10 6	0 3			
T 14	11 20	14 36	3 29	11 30	0 19	22 8	1 15	18 0	1 31	20 10	0 58	22 11	0 19	23 0	0 28	22 9	1 11	3 42	16 1	22 16	22 28	21 53	10 5	0 3			
F 15	11 41	18 31	2 22	12 10	0 13	22 25	1 18	17 52	1 32	20 9	0 58	22 10	0 19	23 0	0 28	22 9	1 11	3 42	16 1	22 16	22 28	21 53	10 3	0 3			
S 16	12 2	21 11	1 6	12 50	0 6	22 41	1 21	17 43	1 34	20 8	0 58	22 10	0 19	23 0	0 28	22 9	1 11	3 41	16 1	22 15	22 27	21 53	10 2	0 3			
S 17	12 23	22 21	0n15	13 28	0s 1	22 56	1 23	17 35	1 35	20 7	0 58	22 10	0 20	23 0	0 28	22 9	1 11	3 40	16 1	22 15	22 27	21 54	10 1	0 3			
M18	12 43	21 57	1 33	14 6	0 8	23 10	1 26	17 27	1 36	20 6	0 58	22 9	0 20	23 0	0 28	22 9	1 11	3 39	16 1	22 15	22 26	21 54	10 0	0 4			
T 19	13 4	20 7	2 44	14 44	0 14	23 24	1 28	17 19	1 37	20 5	0 58	22 9	0 20	22 59	0 28	22 9	1 11	3 38	16 1	22 16	22 26	21 54	9 59	0 4			
W20	13 24	17 6	3 43	15 20	0 21	23 37	1 31	17 10	1 38	20 4	0 58	22 8	0 20	22 59	0 28	22 9	1 11	3 38	16 1	22 16	22 26	21 55	9 58	0 4			
T 21	13 44	13 14	4 28	15 56	0 27	23 50	1 33	17 2	1 39	20 3	0 58	22 8	0 20	22 59	0 28	22 10	1 11	3 37	16 1	22 16	22 25	21 55	9 56	0 4			
F 22	14 4	8 47	4 58	16 31	0 34	24 2	1 36	16 54	1 41	20 1	0 58	22 7	0 20	22 59	0 28	22 10	1 11	3 36	16 1	22 16	22 25	21 55	9 55	0 4			
S 23	14 23	4 3	5 11	17 5	0 41	24 13	1 38	16 46	1 42	20 0	0 58	22 7	0 20	22 58	0 28	22 10	1 11	3 35	16 1	22 15	22 24	21 56	9 54	0 4			
S 24	14 43	0n46	5 9	17 39	0 47	24 24	1 40	16 37	1 43	19 59	0 58	22 6	0 20	22 58	0 28	22 10	1 11	3 35	16 1	22 15	22 24	21 56	9 53	0 4			
M25	15 2	5 28	4 52	18 11	0 53	24 33	1 43	16 29	1 44	19 58	0 58	22 6	0 20	22 58	0 28	22 10	1 11	3 34	16 1	22 14	22 24	21 56	9 52	0 4			
T 26	15 20	9 53	4 21	18 43	0 59	24 43	1 45	16 21	1 45	19 56	0 58	22 5	0 20	22 58	0 28	22 10	1 11	3 33	16 1	22 13	22 23	21 57	9 51	0 4			
W27	15 39	13 51	3 39	19 13	1 6	24 51	1 47	16 12	1 47	19 55	0 58	22 5	0 20	22 57	0 28	22 10	1 10	3 32	16 1	22 13	22 23	21 57	9 50	0 4			
T 28	15 57	17 12	2 48	19 43	1 12	24 59	1 49	16 4	1 48	19 54	0 58	22 4	0 20	22 57	0 28	22 10	1 10	3 32	16 1	22 12	22 22	21 57	9 49	0 4			
F 29	16 15	19 48	1 49	20 12	1 17	25 6	1 51	15 56	1 49	19 52	0 58	22 3	0 20	22 57	0 28	22 11	1 10	3 31	16 2	22 12	22 22	21 58	9 48	0 4			
S 30	16 33	21 32	0 46	20 40	1 23	25 12	1 53	15 48	1 50	19 51	0 58	22 3	0 20	22 57	0 27	22 11	1 10	3 30	16 2	22 11	22 22	21 58	9 46	0 5			
S 31	16s51	22n18	0s19	21s 7	1s29	25s17	1s55	15n40	1n52	19n50	0s57	22s 2	0s20	22s56	0s27	22s11	1n10	3n30	16n 2	22s11	22s21	21n58	9n45	0s 5			

ASTRODIENST EPHEMERIS for the year 1490
geocentric

NOVEMBER 1490 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	3 16 0	17 ¹¹ 36'09	26 ¹¹ 23	29 ¹¹ 6	25 ¹¹ 20	23 ¹¹ 25	2°R37	22 ¹¹ 3	16 ¹¹ 31	23 ¹¹ 39	0 ¹¹ 9	11 ¹¹ 15	12 ¹¹ 25	6 ¹¹ 28	25°R18	M 1
T 2	3 19 57	18°36'42	8 ¹¹ 13	0 ¹¹ 37	26°33	23°53	2 ¹¹ 29	22° 8	16°33	23°41	0°11	11°17	12°21	6°34	25°Y15	T 2
W 3	3 23 53	19°37'16	20°10	2° 8	27°45	24°21	2°21	22°12	16°35	23°43	0°13	11°19	12°18	6°41	25°13	W 3
T 4	3 27 50	20°37'53	2 ¹¹ 18	3°38	28°57	24°49	2°14	22°17	16°38	23°45	0°16	11°20	12°15	6°48	25°10	T 4
F 5	3 31 46	21°38'31	14°41	5° 8	0 ¹¹ 10	25°16	2° 6	22°21	16°40	23°47	0°18	11°21	12°12	6°54	25° 7	F 5
S 6	3 35 43	22°39'11	27°24	6°38	1°22	25°43	1°58	22°26	16°42	23°49	0°20	11°R21	12° 9	7° 1	25° 5	S 6
S 7	3 39 39	23°39'52	10 ¹¹ 32	8° 8	2°34	26°10	1°50	22°31	16°45	23°51	0°23	11°20	12° 6	7° 8	25° 2	S 7
M 8	3 43 36	24°40'35	24° 6	9°37	3°46	26°37	1°42	22°35	16°47	23°53	0°25	11°19	12° 2	7°14	25° 0	M 8
T 9	3 47 32	25°41'20	8 ¹¹ 8	11° 6	4°59	27° 3	1°34	22°40	16°50	23°55	0°27	11°17	11°59	7°21	24°57	T 9
W10	3 51 29	26°42'06	22°38	12°35	6°11	27°29	1°25	22°45	16°52	23°57	0°29	11°15	11°56	7°28	24°55	W10
T 11	3 55 26	27°42'54	7 ¹¹ 29	14° 3	7°23	27°55	1°17	22°50	16°55	23°59	0°32	11°13	11°53	7°34	24°52	T 11
F 12	3 59 22	28°43'43	22°36	15°30	8°35	28°21	1° 9	22°55	16°57	24° 1	0°34	11°12	11°50	7°41	24°50	F 12
S 13	4 3 19	29°44'34	7 ¹¹ 50	16°57	9°47	28°46	1° 1	23° 0	17° 0	24° 3	0°36	11°D11	11°47	7°47	24°48	S 13
S 14	4 7 15	0 ¹¹ 45'26	23° 0	18°23	10°59	29°11	0°53	23° 6	17° 3	24° 5	0°38	11°12	11°43	7°54	24°46	S 14
M15	4 11 12	1°46'19	7 ¹¹ 57	19°48	12°10	29°35	0°45	23°11	17° 6	24° 7	0°40	11°12	11°40	8° 1	24°43	M15
T 16	4 15 8	2°47'13	22°34	21°13	13°22	29°59	0°36	23°16	17° 8	24°10	0°43	11°13	11°37	8° 7	24°41	T 16
W17	4 19 5	3°48'08	6 ¹¹ 48	22°36	14°34	0 ¹¹ 24	0°28	23°21	17°11	24°12	0°45	11°14	11°34	8°14	24°39	W17
T 18	4 23 1	4°49'03	20°35	23°58	15°45	0°48	0°20	23°27	17°14	24°14	0°47	11°14	11°31	8°21	24°37	T 18
F 19	4 26 58	5°49'59	3 ¹¹ 56	25°18	16°57	1°11	0°12	23°32	17°17	24°16	0°49	11°R14	11°27	8°27	24°35	F 19
S 20	4 30 55	6°50'56	16°55	26°37	18° 8	1°34	0° 4	23°38	17°20	24°18	0°51	11°14	11°24	8°34	24°33	S 20
S 21	4 34 51	7°51'54	29°33	27°53	19°20	1°57	29 ¹¹ 56	23°44	17°23	24°20	0°53	11°14	11°21	8°41	24°31	S 21
M22	4 38 48	8°52'52	11 ¹¹ 55	29° 8	20°31	2°20	29°48	23°49	17°25	24°23	0°55	11°14	11°18	8°47	24°29	M22
T 23	4 42 44	9°53'51	24° 4	0 ¹¹ 19	21°42	2°42	29°40	23°55	17°28	24°25	0°57	11°14	11°15	8°54	24°27	T 23
W24	4 46 41	10°54'51	6 ¹¹ 3	1°28	22°54	3° 4	29°32	24° 1	17°31	24°27	0°59	11°D13	11°12	9° 1	24°25	W24
T 25	4 50 37	11°55'51	17°56	2°33	24° 5	3°25	29°24	24° 7	17°34	24°29	1° 1	11°13	11° 8	9° 7	24°23	T 25
F 26	4 54 34	12°56'52	29°45	3°34	25°16	3°46	29°16	24°13	17°37	24°31	1° 3	11°14	11° 5	9°14	24°22	F 26
S 27	4 58 30	13°57'54	11 ¹¹ 33	4°30	26°26	4° 7	29° 9	24°19	17°41	24°34	1° 5	11°R14	11° 2	9°20	24°20	S 27
S 28	5 2 27	14°58'57	23°21	5°20	27°37	4°27	29° 1	24°25	17°44	24°36	1° 7	11°14	10°59	9°27	24°18	S 28
M29	5 6 24	16° 0'01	5 ¹¹ 12	6° 5	28°48	4°47	28°54	24°31	17°47	24°38	1° 9	11°13	10°56	9°34	24°17	M29
T 30	5 10 20	17 ¹¹ 1'05	17 ¹¹ 9	6 ¹¹ 42	29 ¹¹ 58	5 ¹¹ 7	28 ¹¹ 46	24 ¹¹ 37	17 ¹¹ 50	24 ¹¹ 40	1 ¹¹ 11	11 ¹¹ 13	10 ¹¹ 53	9 ¹¹ 40	24 ¹¹ Y15	T 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	17s 8	22n 5	1s23	21s32	1s34	25s22	1s57	15n31	1n53	19n48	0s57	22s 2	0s20	22s56	0s27	22s11	1n10	3n29	16n 2	22s11	22s21	21n58	9n44	0s 5					
T 2	17 25	20 52	2 24	21 57	1 39	25 26	1 59	15 23	1 54	19 47	0 57	22 1	0 20	22 56	0 27	22 11	1 10	3 28	16 2	22 12	22 20	21 59	9 43	0 5					
W 3	17 41	18 42	3 19	22 21	1 44	25 30	2 0	15 15	1 55	19 45	0 57	22 0	0 20	22 56	0 27	22 11	1 10	3 28	16 2	22 12	22 20	21 59	9 42	0 5					
T 4	17 57	15 42	4 6	22 43	1 49	25 32	2 2	15 7	1 57	19 44	0 57	22 0	0 20	22 55	0 27	22 11	1 10	3 27	16 2	22 12	22 19	21 59	9 41	0 5					
F 5	18 13	11 57	4 43	23 5	1 54	25 34	2 4	14 59	1 58	19 42	0 57	21 59	0 20	22 55	0 27	22 11	1 10	3 26	16 3	22 12	22 19	21 59	9 40	0 5					
S 6	18 29	7 35	5 7	23 25	1 58	25 35	2 5	14 51	1 59	19 41	0 57	21 58	0 20	22 55	0 27	22 11	1 10	3 26	16 3	22 12	22 19	22 0	9 39	0 5					
S 7	18 44	2 45	5 17	23 44	2 2	25 35	2 7	14 43	2 1	19 39	0 57	21 57	0 20	22 54	0 27	22 12	1 10	3 25	16 3	22 12	22 18	22 0	9 38	0 5					
M 8	18 59	2s23	5 9	24 2	2 6	25 35	2 8	14 35	2 2	19 38	0 57	21 57	0 21	22 54	0 27	22 12	1 10	3 25	16 3	22 12	22 18	22 0	9 37	0 5					
T 9	19 14	7 34	4 43	24 18	2 9	25 34	2 9	14 28	2 3	19 36	0 57	21 56	0 21	22 54	0 27	22 12	1 10	3 24	16 3	22 12	22 17	22 0	9 36	0 5					
W10	19 28	12 30	3 58	24 33	2 12	25 32	2 10	14 20	2 5	19 35	0 57	21 55	0 21	22 53	0 27	22 12	1 10	3 24	16 3	22 11	22 17	22 1	9 35	0 6					
T 11	19 42	16 49	2 56	24 47	2 15	25 29	2 11	14 12	2 6	19 33	0 56	21 54	0 21	22 53	0 27	22 12	1 10	3 23	16 4	22 11	22 16	22 1	9 34	0 6					
F 12	19 56	20 6	1 41	25 0	2 18	25 26	2 12	14 5	2 8	19 32	0 56	21 54	0 21	22 53	0 27	22 12	1 10	3 23	16 4	22 11	22 16	22 1	9 33	0 6					
S 13	20 9	21 59	0 19	25 11	2 20	25 21	2 13	13 57	2 9	19 30	0 56	21 53	0 21	22 52	0 27	22 12	1 10	3 22	16 4	22 11	22 16	22 1	9 32	0 6					
S 14	20 22	22 14	1n 5	25 21	2 21	25 17	2 14	13 50	2 10	19 29	0 56	21 52	0 21	22 52	0 27	22 12	1 10	3 22	16 4	22 11	22 15	22 2	9 31	0 6					
M15	20 34	20 53	2 23	25 29	2 23	25 11	2 15	13 42	2 12	19 27	0 56	21 51	0 21	22 52	0 27	22 13	1 10	3 21	16 5	22 11	22 15	22 2	9 31	0 6					
T 16	20 46	18 9	3 30	25 36	2 23	25 5	2 15	13 35	2 13	19 25	0 56	21 50	0 21	22 51	0 27	22 13	1 10	3 21	16 5	22 11	22 14	22 2	9 30	0 6					
W17	20 58	14 23	4 23	25 41	2 24	24 58	2 16	13 28	2 15	19 24	0 56	21 49	0 21	22 51	0 27	22 13	1 10	3 20	16 5	22 11	22 14	22 2	9 29	0 6					
T 18	21 9	9 58	4 58	25 45	2 23	24 50	2 16	13 21	2 16	19 22	0 56	21 48	0 21	22 51	0 27	22 13	1 10	3 20	16 5	22 11	22 13	22 2	9 28	0 6					
F 19	21 20	5 11	5 16	25 48	2 23	24 41	2 17	13 14	2 18	19 21	0 55	21 48	0 21	22 50	0 27	22 13	1 10	3 19	16 6	22 11	22 13	22 2	9 27	0 6					
S 20	21 31	0 19	5 17	25 49	2 21	24 32	2 17	13 7	2 19	19 19	0 55	21 47	0 21	22 50	0 27	22 13	1 10	3 19	16 6	22 11	22 13	22 3	9 26	0 6					
S 21	21 41	4n26	5 2	25 48	2 19	24 22	2 17	13 0	2 21	19 18	0 55	21 46	0 21	22 49	0 27	22 13	1 10	3 18	16 6	22 11	22 12	22 3	9 26	0 6					
M22	21 50	8 55	4 34	25 46	2 16	24 12	2 17	12 53	2 22	19 16	0 55	21 45	0 21	22 49	0 27	22 13	1 10	3 18	16 7	22 11	22 12	22 3	9 25	0 7					
T 23	22 0	12 58	3 54	25 42	2 12	24 0	2 17	12 47	2 24	19 15	0 55	21 44	0 21	22 49	0 27	22 13	1 10	3 18	16 7	22 11	22 11	22 3	9 24	0 7					
W24	22 8	16 28	3 4	25 37	2 7	23 48	2 17	12 40	2 25	19 13	0 55	21 43	0 21	22 48	0 27	22 14	1 10	3 17	16 7	22 11	22 11	22 3	9 23	0 7					
T 25	22 17	19 14	2 6	25 31	2 2	23 36	2 17	12 34	2 27	19 12	0 54	21 42	0 21	22 48	0 27	22 14	1 10	3 17	16 7	22 11	22 10	22 3	9 23	0 7					
F 26	22 25	21 11	1 3	25 23	1 55	23 23	2 16	12 28	2 29	19 10	0 54	21 41	0 21	22 47	0 27	22 14	1 10	3 17	16 8	22 11	22 10	22 4	9 22	0 7					
S 27	22 32	22 12	0s 2	25 13	1 48	23 9	2 16	12 21	2 30	19 9	0 54	21 40	0 21	22 47	0 27	22 14	1 10	3 16	16 8	22 11	22 10	22 4	9 21	0 7					
S 28	22 39	22 13	1 7	25 3	1 39	22 54	2 15	12 15	2 32	19 7	0 54	21 39	0 22	22 47	0 27	22 14	1 10	3 16	16 8	22 11	22 9	22 4	9 20	0 7					
M29	22 46	21 15	2 10	24 51	1 29	22 59	2 15	12 10	2 33	19 6	0 54	21 38	0 22	22 46	0 27	22 14	1 10	3 16	16 9	22 11	22 9	22 4	9 20	0 7					
T 30	22s52	19n19	3s 7	24s38	1s18	22s23	2s14	12n 4	2n35	19n 4	0s54	21s37	0s22	22s46	0s27	22s14	1n10	3n15	16n 9	22s11	22s 8	22n 4	9n19	0s 7					

ASTRODIENST EPHEMERIS for the year 1490
geocentric

DECEMBER 1490 JC

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

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
W 1	22s58	16n31	3s56	24s24	1s 6	22s 7	2s13	11n58	2n37	19n 3	0s53	21s36	0s22	22s45	0s27	22s14
T 2	23 3	12 58	4 36	24 10	0 52	21 50	2 12	11 53	2 38	19 1	0 53	21 35	0 22	22 45	0 27	22 14
F 3	23 8	8 49	5 3	23 54	0 37	21 33	2 11	11 48	2 40	19 0	0 53	21 34	0 22	22 44	0 27	22 15
S 4	23 12	4 12	5 17	23 38	0 21	21 14	2 9	11 43	2 42	18 59	0 53	21 33	0 22	22 44	0 27	22 15
S 5	23 16	0s42	5 14	23 21	0 4	20 56	2 8	11 38	2 44	18 57	0 53	21 31	0 22	22 44	0 27	22 15
M 6	23 20	5 43	4 55	23 4	0n15	20 37	2 6	11 33	2 45	18 56	0 52	21 30	0 22	22 43	0 27	22 15
T 7	23 22	10 36	4 18	22 46	0 34	20 17	2 5	11 28	2 47	18 55	0 52	21 29	0 22	22 43	0 27	22 15
W 8	23 25	15 4	3 25	22 29	0 54	19 57	2 3	11 24	2 49	18 54	0 52	21 28	0 22	22 42	0 27	22 15
T 9	23 27	18 46	2 17	22 11	1 14	19 36	2 1	11 20	2 51	18 52	0 52	21 27	0 22	22 42	0 27	22 15
F 10	23 28	21 17	0 59	21 54	1 33	19 15	1 59	11 16	2 52	18 51	0 51	21 26	0 22	22 41	0 27	22 15
S 11	23 30	22 19	0n25	21 36	1 52	18 53	1 57	11 12	2 54	18 50	0 51	21 25	0 22	22 41	0 27	22 15
S 12	23 30	21 43	1 47	21 20	2 10	18 31	1 55	11 8	2 56	18 49	0 51	21 23	0 22	22 40	0 27	22 15
M 13	23 30	19 33	3 1	21 4	2 26	18 9	1 52	11 5	2 58	18 48	0 51	21 22	0 22	22 40	0 27	22 15
T 14	23 30	16 7	4 1	20 50	2 40	17 46	1 50	11 2	3 0	18 47	0 51	21 21	0 22	22 39	0 27	22 16
W 15	23 29	11 47	4 44	20 37	2 52	17 22	1 47	10 59	3 2	18 46	0 50	21 20	0 22	22 39	0 27	22 16
T 16	23 28	6 57	5 9	20 26	3 1	16 59	1 45	10 56	3 3	18 45	0 50	21 19	0 23	22 38	0 27	22 16
F 17	23 26	1 56	5 15	20 17	3 7	16 34	1 42	10 53	3 5	18 44	0 50	21 17	0 23	22 38	0 27	22 16
S 18	23 24	3n 0	5 5	20 10	3 12	16 10	1 39	10 51	3 7	18 43	0 50	21 16	0 23	22 38	0 27	22 16
S 19	23 21	7 40	4 40	20 6	3 14	15 45	1 36	10 49	3 9	18 42	0 49	21 15	0 23	22 37	0 27	22 16
M 20	23 18	11 54	4 2	20 4	3 14	15 20	1 32	10 47	3 11	18 41	0 49	21 14	0 23	22 37	0 27	22 16
T 21	23 14	15 34	3 15	20 4	3 12	14 54	1 29	10 45	3 13	18 40	0 49	21 12	0 23	22 36	0 27	22 16
W 22	23 10	18 33	2 19	20 6	3 8	14 28	1 25	10 44	3 15	18 40	0 49	21 11	0 23	22 36	0 27	22 16
T 23	23 5	20 44	1 19	20 11	3 4	14 2	1 22	10 43	3 17	18 39	0 48	21 10	0 23	22 35	0 27	22 16
F 24	23 0	22 0	0 15	20 16	2 58	13 35	1 18	10 42	3 19	18 38	0 48	21 8	0 23	22 35	0 27	22 16
S 25	22 55	22 19	0s50	20 24	2 51	13 9	1 14	10 41	3 21	18 38	0 48	21 7	0 23	22 34	0 27	22 16
S 26	22 49	21 37	1 53	20 32	2 43	12 42	1 10	10 41	3 23	18 37	0 48	21 6	0 23	22 34	0 27	22 16
M 27	22 43	19 56	2 51	20 42	2 35	12 14	1 6	10 40	3 25	18 37	0 47	21 5	0 23	22 33	0 27	22 17
T 28	22 36	17 20	3 42	20 52	2 27	11 47	1 2	10 41	3 27	18 36	0 47	21 3	0 23	22 33	0 27	22 17
W 29	22 28	13 57	4 23	21 3	2 18	11 19	0 58	10 41	3 29	18 36	0 47	21 2	0 23	22 32	0 27	22 17
T 30	22 21	9 56	4 53	21 14	2 8	10 51	0 53	10 42	3 31	18 35	0 47	21 1	0 23	22 32	0 27	22 17
F 31	22s12	5n25	5s 8	21s25	1n59	10s23	0s48	10n43	3n33	18n35	0s46	20s59	0s23	22s31	0s27	22s17

Julian Day Number = 2265614.5, Delta T = 05m10s
Ecliptic obliquity = 23°30'16", Nutation = 0°00'16", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 17°38'15", Lahiri = 16°45'15" Julian Calendar 1 Dec. 1490 == Greg. Calendar 10 Dec. 1490