



# Astrodienst Ephemeris Tables for the year 1439

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 1439

geocentric

JANUARY 1439 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	7 14 54	19°15'18	23°47	27°19	24°44	23°35	8°14	15°24	24°R23	3°R37	17°R33	23°R30	24°56	27°23	9°V 4	T 1	
F 2	7 18 50	20°16'23	5°38	28°38	25°59	24°19	8°28	15°26	24°R22	3°36	17°31	23°19	24°53	27°30	9° 5	F 2	
S 3	7 22 47	21°17'28	17°29	29°58	27°13	25° 4	8°42	15°29	24°21	3°35	17°30	23°11	24°50	27°37	9° 6	S 3	
S 4	7 26 43	22°18'32	29°20	1°19	28°28	25°48	8°56	15°32	24°20	3°34	17°29	23° 5	24°47	27°44	9° 8	S 4	
M 5	7 30 40	23°19'35	11°16	2°42	29°43	26°33	9°10	15°35	24°19	3°33	17°27	23° 2	24°44	27°50	9° 9	M 5	
T 6	7 34 36	24°20'38	23°20	4° 5	0°58	27°17	9°23	15°38	24°18	3°32	17°26	23°D 1	24°40	27°57	9°10	T 6	
W 7	7 38 33	25°21'40	5°36	5°29	2°13	28° 2	9°37	15°41	24°17	3°30	17°25	23° 2	24°37	28° 4	9°12	W 7	
T 8	7 42 29	26°22'42	18° 8	6°54	3°28	28°47	9°51	15°44	24°17	3°29	17°23	23° 3	24°34	28°10	9°13	T 8	
F 9	7 46 26	27°23'43	1°12	8°20	4°42	29°31	10° 4	15°47	24°16	3°28	17°22	23°R 3	24°31	28°17	9°15	F 9	
S 10	7 50 23	28°24'44	14°20	9°47	5°57	0°16	10°18	15°50	24°15	3°27	17°21	23° 1	24°28	28°24	9°17	S 10	
S 11	7 54 19	29°25'44	28° 8	11°15	7°12	1° 1	10°32	15°54	24°14	3°25	17°20	22°58	24°25	28°30	9°18	S 11	
M12	7 58 16	0°26'43	12°25	12°43	8°27	1°46	10°45	15°57	24°14	3°24	17°18	22°52	24°21	28°37	9°20	M12	
T 13	8 2 12	1°27'42	27° 8	14°13	9°42	2°30	10°59	16° 1	24°13	3°23	17°17	22°45	24°18	28°44	9°22	T 13	
W14	8 6 9	2°28'39	12°13	15°43	10°57	3°15	11°12	16° 5	24°13	3°21	17°16	22°37	24°15	28°51	9°24	W14	
T 15	8 10 5	3°29'36	17°31	17°13	12°12	4° 0	11°26	16° 9	24°12	3°20	17°15	22°29	24°12	28°57	9°26	T 15	
F 16	8 14 2	4°30'32	12°49	18°45	13°27	4°45	11°39	16°13	24°12	3°19	17°13	22°23	24° 9	29° 4	9°28	F 16	
S 17	8 17 58	5°31'26	27°58	20°17	14°41	5°30	11°53	16°17	24°11	3°17	17°12	22°18	24° 5	29°11	9°30	S 17	
S 18	8 21 55	6°32'20	12°47	21°50	15°56	6°15	12° 6	16°21	24°11	3°16	17°11	22°16	24° 2	29°17	9°32	S 18	
M19	8 25 52	7°33'11	27°11	23°24	17°11	7° 0	12°19	16°25	24°11	3°14	17°10	22°D15	23°59	29°24	9°34	M19	
T 20	8 29 48	8°34'02	11°V 8	24°58	18°26	7°45	12°33	16°29	24°11	3°13	17° 8	22°16	23°56	29°31	9°36	T 20	
W21	8 33 45	9°34'50	24°37	26°33	19°41	8°30	12°46	16°34	24°10	3°11	17° 7	22°18	23°53	29°37	9°38	W21	
T 22	8 37 41	10°35'38	7°B 40	28° 9	20°56	9°15	12°59	16°38	24°10	3°10	17° 6	22°R19	23°50	29°44	9°40	T 22	
F 23	8 41 38	11°36'23	20°22	29°46	22°11	10° 1	13°12	16°43	24°D10	3° 8	17° 5	22°18	23°46	29°51	9°43	F 23	
S 24	8 45 34	12°37'07	2°II 46	1°24	23°25	10°46	13°25	16°48	24°10	3° 7	17° 4	22°16	23°43	29°57	9°45	S 24	
S 25	8 49 31	13°37'50	14°57	3° 2	24°40	11°31	13°38	16°52	24°10	3° 5	17° 2	22°12	23°40	0° 4	9°47	S 25	
M26	8 53 27	14°38'31	26°58	4°41	25°55	12°16	13°51	16°57	24°10	3° 4	17° 1	22° 7	23°37	0°11	9°50	M26	
T 27	8 57 24	15°39'10	8°53	6°21	27°10	13° 2	14° 4	17° 2	24°11	3° 2	17° 0	22° 0	23°34	0°18	9°52	T 27	
W28	9 1 21	16°39'48	20°45	8° 2	28°25	13°47	14°17	17° 7	24°11	3° 0	16°59	21°53	23°31	0°24	9°55	W28	
T 29	9 5 17	17°40'24	2°L 35	9°43	29°40	14°32	14°30	17°12	24°11	2°59	16°58	21°46	23°27	0°31	9°57	T 29	
F 30	9 9 14	18°40'58	14°27	11°26	0°54	15°18	14°43	17°17	24°11	2°57	16°57	21°41	23°24	0°38	10° 0	F 30	
S 31	9 13 10	19°41'31	26°L 21	13°10	2° 9	16° 3	14°55	17°V 22	24°B 12	2°56	16°56	21°37	23°21	0°L 44	10°V 2	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
T 1	22s 7	17n 7	4s21	23s 0	0n29	22s49	0n36	23s48	0s26	23s17	0s 2	3n46	2s30	18n44	0s12	10n59	0n50	23n52	1n32	2n35	2n 1	16n29	5n 3	1n34	
F 2	21 58	15 17	3 45	23 9	0 21	22 54	0 33	23 50	0 27	23 16	0 2	3 47	2 30	18 44	0 12	11 0	0 50	23 53	1 32	2 40	2 2	16 28	5 3	1 34	
S 3	21 49	12 49	2 58	23 18	0 12	22 58	0 30	23 53	0 28	23 15	0 2	3 49	2 30	18 43	0 12	11 0	0 50	23 53	1 32	2 43	2 4	16 27	5 3	1 34	
S 4	21 39	9 49	2 3	23 26	0 4	23 2	0 28	23 55	0 28	23 14	0 2	3 50	2 29	18 43	0 12	11 1	0 50	23 53	1 32	2 45	2 5	16 26	5 4	1 34	
M 5	21 29	6 24	1 2	23 33	0s 4	23 6	0 25	23 57	0 29	23 14	0 2	3 51	2 29	18 43	0 12	11 1	0 50	23 53	1 32	2 46	2 6	16 26	5 4	1 34	
T 6	21 19	2 41	0n 2	23 38	0 12	23 8	0 22	23 59	0 30	23 13	0 2	3 53	2 29	18 43	0 12	11 2	0 50	23 54	1 32	2 47	2 7	16 25	5 5	1 34	
W 7	21 8	1s12	1 7	23 43	0 19	23 10	0 20	24 0	0 30	23 12	0 2	3 54	2 29	18 43	0 12	11 2	0 50	23 54	1 32	2 47	2 9	16 24	5 5	1 33	
T 8	20 56	5 7	2 11	23 46	0 27	23 11	0 17	24 1	0 31	23 11	0 2	3 56	2 28	18 42	0 12	11 2	0 50	23 54	1 32	2 46	2 10	16 23	5 6	1 33	
F 9	20 45	8 54	3 9	23 49	0 34	23 11	0 14	24 2	0 32	23 10	0 2	3 57	2 28	18 42	0 12	11 3	0 51	23 54	1 32	2 46	2 11	16 22	5 6	1 33	
S 10	20 32	12 22	4 0	23 50	0 41	23 11	0 12	24 3	0 32	23 9	0 3	3 59	2 28	18 42	0 12	11 3	0 51	23 54	1 32	2 47	2 12	16 21	5 7	1 33	
S 11	20 20	15 16	4 39	23 49	0 48	23 10	0 9	24 3	0 33	23 8	0 3	4 0	2 28	18 42	0 12	11 4	0 51	23 55	1 32	2 48	2 14	16 21	5 7	1 33	
M12	20 7	17 22	5 2	23 48	0 54	23 8	0 6	24 4	0 34	23 7	0 3	4 2	2 27	18 42	0 12	11 4	0 51	23 55	1 33	2 50	2 15	16 20	5 8	1 33	
T 13	19 54	18 23	5 6	23 45	1 1	23 6	0 4	24 4	0 34	23 6	0 3	4 4	2 27	18 42	0 12	11 5	0 51	23 55	1 33	2 53	2 16	16 19	5 8	1 32	
W14	19 40	18 9	4 49	23 41	1 7	23 3	0 1	24 3	0 35	23 5	0 3	4 5	2 27	18 41	0 12	11 6	0 51	23 55	1 33	2 56	2 17	16 18	5 9	1 32	
T 15	19 26	16 36	4 12	23 36	1 12	22 59	0s 2	24 3	0 36	23 4	0 3	4 7	2 27	18 41	0 12	11 6	0 51	23 56	1 33	2 59	2 19	16 17	5 9	1 32	
F 16	19 11	13 52	3 16	23 29	1 18	22 54	0 4	24 2	0 36	23 3	0 3	4 9	2 26	18 41	0 12	11 7	0 51	23 56	1 33	3 2	2 20	16 16	5 10	1 32	
S 17	18 57	10 13	2 7	23 21	1 23	22 49	0 7	24 1	0 37	23 2	0 3	4 10	2 26	18 41	0 12	11 7	0 51	23 56	1 33	3 4	2 21	16 15	5 11	1 32	
S 18	18 42	6 0	0 51	23 11	1 28	22 43	0 10	23 59	0 38	23 1	0 3	4 12	2 26	18 41	0 12	11 8	0 51	23 56	1 33	3 5	2 22	16 15	5 11	1 32	
M19	18 26	1 32	0s27	23 0	1 33	22 36	0 12	23 58	0 38	23 0	0 3	4 14	2 26	18 41	0 12	11 8	0 51	23 56	1 33	3 5	2 24	16 14	5 12	1 32	
T 20	18 10	2n53	1 40	22 48	1 38	22 29	0 15	23 56	0 39	22 59	0 4	4 16	2 25	18 41	0 12	11 9	0 51	23 57	1 33	3 4	2 25	16 13	5 13	1 31	
W21	17 54	6 59	2 46	22 34	1 42	22 21	0 17	23 54	0 40	22 57	0 4	4 18	2 25	18 41	0 12	11 9	0 51	23 57	1 33	3 4	2 26	16 12	5 13	1 31	
T 22	17 38	10 37	3 41	22 19	1 46	22 12	0 20	23 51	0 40	22 56	0 4	4 20	2 25	18 41	0 11	11 10	0 51	23 57	1 33	3 4	2 28	16 11	5 14	1 31	
F 23	17 21	13 39	4 24	22 2	1 49	22 3	0 22	23 49	0 41	22 55	0 4	4 22	2 25	18 41	0 11	11 10	0 51	23 57	1 33	3 4	2 29	16 10	5 15	1 31	
S 24	17 4	15 59	4 53	21 44	1 53	21 53	0 25	23 46	0 42	22 54	0 4	4 24	2 24	18 41	0 11	11 11	0 51	23 57	1 33	3 5	2 30	16 9	5 16	1 31	
S 25	16 47	17 33	5 8	21 25	1 55	21 42	0 27	23 43	0 42	22 53	0 4	4 26	2 24	18 41	0 11	11 12	0 51	23 58	1 33	3 6	2 31	16 9	5 17	1 31	
M26	16 29	18 19	5 9	21 3	1 58	21 30	0 30	23 39	0 43	22 51	0 4	4 28	2 24	18 41	0 11	11 12	0 51	23 58	1 33	3 8	2 33	16 8	5 17	1 31	
T 27	16 11	18 16	4 57	20 41	2 0	21 18	0 32	23 36	0 44	22 50	0 4	4 30	2 24	18 41	0 11	11 13	0 51	23 58	1 33	3 11	2 34	16 7	5 18	1 30	
W28	15 53	17 25	4 32	20 17	2 2	21 6	0 34	23 32	0 44	22 49	0 4	4 32	2 23	18 41	0 11	11 13	0 51	23 58	1 33	3 14	2 35	16 6	5 19	1 30	
T 29	15 35	15 49	3 56	19 51	2 3	20 53	0 36	23 28	0 45	22 48	0 5	4 34	2 23	18 41	0 11	11 14	0 51	23 58	1 33	3 16	2 36	16 5	5 20	1 30	
F 30	15 16	13 32	3 9	19 24	2 4	20 39	0 39	23 23	0 46	22 46	0 5	4 36	2 23	18 42	0 11	11 15	0 51	23 59	1 33	3 19	2 38	16 4	5 21	1 30	
S 31	14s57	10n41	2s14	18s55	2s 5	20s24	0s41	23s19	0s46	22s45	0s 5	4n39	2s23	18n42	0s11	11n15	0m51	23n59	1n34	3n20	2n39	16n 3	5n22	1n30	



# ASTRODIENST EPHEMERIS for the year 1439

## geocentric

MARCH 1439 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	11 7 30	18°45'18	17°12	6°4	8°16	8°10	20°32	20°22	24°45	2°R 8	16°R32	21°D25	21°49	3°58	11°33	S 1
M 2	11 11 27	19°44'56	29°30	7°29	9°31	8°56	20°43	20°29	24°47	2°R 6	16°32	21°25	21°46	4°5	11°36	M 2
T 3	11 15 23	20°44'32	12°0	8°49	10°45	9°42	20°53	20°36	24°49	2°5	16°31	21°25	21°42	4°12	11°40	T 3
W 4	11 19 20	21°44'05	24°41	10°3	12°0	10°28	21°3	20°43	24°51	2°3	16°31	21°R25	21°39	4°18	11°43	W 4
T 5	11 23 16	22°43'37	7°37	11°11	13°14	11°14	21°13	20°50	24°53	2°1	16°30	21°25	21°36	4°25	11°47	T 5
F 6	11 27 13	23°43'07	20°46	12°12	14°29	12°0	21°23	20°57	24°55	2°0	16°30	21°25	21°33	4°32	11°50	F 6
S 7	11 31 10	24°42'35	4°11	13°7	15°43	12°47	21°32	21°4	24°57	1°58	16°30	21°24	21°30	4°39	11°54	S 7
S 8	11 35 6	25°42'02	17°52	13°54	16°58	13°33	21°42	21°11	24°59	1°57	16°29	21°24	21°27	4°45	11°58	S 8
M 9	11 39 3	26°41'26	1°38	14°33	18°12	14°19	21°52	21°19	25°1	1°55	16°29	21°D24	21°23	4°52	12°1	M 9
T 10	11 42 59	27°40'49	16°0	15°6	19°27	15°5	22°1	21°26	25°3	1°54	16°29	21°24	21°20	4°59	12°5	T 10
W 11	11 46 56	28°40'10	0°24	15°30	20°41	15°51	22°10	21°33	25°6	1°52	16°28	21°25	21°17	5°5	12°9	W 11
T 12	11 50 52	29°39'30	14°59	15°47	21°56	16°37	22°19	21°40	25°8	1°51	16°28	21°26	21°14	5°12	12°12	T 12
F 13	11 54 49	0°38'47	29°38	15°57	23°10	17°23	22°28	21°48	25°10	1°50	16°28	21°26	21°11	5°19	12°16	F 13
S 14	11 58 45	1°38'03	14°17	15°R59	24°25	18°10	22°37	21°55	25°13	1°48	16°28	21°R27	21°8	5°25	12°20	S 14
S 15	12 2 42	2°37'16	28°49	15°54	25°39	18°56	22°46	22°3	25°15	1°47	16°27	21°27	21°4	5°32	12°23	S 15
M 16	12 6 39	3°36'27	13°8	15°42	26°54	19°42	22°55	22°10	25°18	1°45	16°27	21°26	21°1	5°39	12°27	M 16
T 17	12 10 35	4°35'37	27°9	15°24	28°8	20°28	23°3	22°17	25°20	1°44	16°27	21°25	20°58	5°45	12°31	T 17
W 18	12 14 32	5°34'44	10°8	14°59	29°23	21°14	23°12	22°25	25°22	1°43	16°27	21°23	20°55	5°52	12°34	W 18
T 19	12 18 28	6°33'49	24°3	14°29	0°37	22°0	23°20	22°32	25°25	1°41	16°27	21°21	20°52	5°59	12°38	T 19
F 20	12 22 25	7°32'51	6°56	13°55	1°51	22°47	23°28	22°40	25°28	1°40	16°27	21°19	20°48	6°5	12°42	F 20
S 21	12 26 21	8°31'52	19°29	13°16	3°6	23°33	23°36	22°48	25°30	1°39	16°27	21°17	20°45	6°12	12°45	S 21
S 22	12 30 18	9°30'50	1°44	12°34	4°20	24°19	23°44	22°55	25°33	1°37	16°D27	21°16	20°42	6°19	12°49	S 22
M 23	12 34 14	10°29'46	13°46	11°50	5°34	25°5	23°52	23°3	25°36	1°36	16°27	21°D16	20°39	6°25	12°53	M 23
T 24	12 38 11	11°28'39	25°40	11°4	6°49	25°51	23°59	23°10	25°38	1°35	16°27	21°17	20°36	6°32	12°57	T 24
W 25	12 42 7	12°27'30	7°30	10°18	8°3	26°37	24°7	23°18	25°41	1°34	16°27	21°18	20°33	6°39	13°0	W 25
T 26	12 46 4	13°26'19	19°21	9°32	9°17	27°23	24°14	23°25	25°44	1°33	16°27	21°20	20°29	6°46	13°4	T 26
F 27	12 50 1	14°25'06	1°18	8°47	10°31	28°10	24°21	23°33	25°47	1°32	16°27	21°21	20°26	6°52	13°8	F 27
S 28	12 53 57	15°23'50	13°24	8°4	11°46	28°56	24°28	23°41	25°49	1°30	16°27	21°23	20°23	6°59	13°12	S 28
S 29	12 57 54	16°22'32	25°42	7°24	13°0	29°42	24°35	23°48	25°52	1°29	16°27	21°R23	20°20	7°6	13°15	S 29
M 30	13 1 50	17°21'12	8°15	6°47	14°14	0°42	24°42	23°56	25°55	1°28	16°28	21°22	20°17	7°12	13°19	M 30
T 31	13 5 47	18°19'50	21°3	6°14	15°28	1°14	24°48	24°4	25°58	1°27	16°28	21°19	20°13	7°19	13°23	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	4s28	4n43	0s23	3n37	1n18	9s47	1s24	19s19	1s5	22s4	0s8	5n51	2s18	18n50	0s11	11n33
M 2	4 4	0 53	0n45	4 23	1 31	9 20	1 24	19 7	1 5	22 3	0 8	5 54	2 18	18 51	0 11	11 33
T 3	3 41	3s 2	1 52	5 6	1 44	8 52	1 25	18 56	1 6	22 1	0 8	5 57	2 17	18 51	0 11	11 34
W 4	3 17	6 53	2 55	5 47	1 57	8 24	1 25	18 44	1 6	22 0	0 8	5 59	2 17	18 52	0 11	11 34
T 5	2 54	10 28	3 49	6 25	2 9	7 55	1 26	18 32	1 7	21 58	0 9	6 2	2 17	18 52	0 11	11 35
F 6	2 30	13 36	4 33	6 59	2 20	7 27	1 26	18 19	1 7	21 57	0 9	6 5	2 17	18 53	0 11	11 36
S 7	2 6	16 4	5 3	7 31	2 31	6 58	1 26	18 7	1 8	21 56	0 9	6 8	2 17	18 53	0 11	11 36
S 8	1 43	17 42	5 17	7 58	2 41	6 29	1 27	17 54	1 9	21 54	0 9	6 11	2 17	18 54	0 11	11 37
M 9	1 19	18 18	5 12	8 23	2 51	6 0	1 27	17 41	1 9	21 53	0 9	6 13	2 17	18 54	0 11	11 37
T 10	0 55	17 46	4 49	8 43	2 59	5 31	1 27	17 28	1 10	21 51	0 9	6 16	2 17	18 55	0 11	11 38
W 11	0 32	16 6	4 7	8 59	3 6	5 2	1 27	17 15	1 10	21 50	0 9	6 19	2 17	18 55	0 11	11 38
T 12	0 8	13 23	3 9	9 11	3 12	4 32	1 27	17 1	1 11	21 49	0 10	6 22	2 16	18 56	0 11	11 39
F 13	0n15	9 47	1 58	9 19	3 17	4 3	1 27	16 48	1 11	21 47	0 10	6 25	2 16	18 57	0 11	11 39
S 14	0 39	5 35	0 40	9 23	3 21	3 33	1 26	16 34	1 12	21 46	0 10	6 27	2 16	18 57	0 11	11 40
S 15	1 3	1 6	0s41	9 23	3 23	3 3	1 26	16 20	1 12	21 45	0 10	6 30	2 16	18 58	0 11	11 40
M 16	1 26	3n24	1 57	9 19	3 23	2 33	1 26	16 6	1 13	21 43	0 10	6 33	2 16	18 58	0 11	11 41
T 17	1 50	7 36	3 5	9 11	3 22	2 3	1 26	15 52	1 13	21 42	0 10	6 36	2 16	18 59	0 11	11 41
W 18	2 13	11 18	4 0	8 59	3 19	1 33	1 25	15 38	1 14	21 41	0 10	6 39	2 16	19 0	0 10	11 42
T 19	2 37	14 18	4 41	8 43	3 14	1 3	1 25	15 23	1 14	21 40	0 11	6 42	2 16	19 0	0 10	11 42
F 20	3 0	16 30	5 6	8 24	3 8	0 33	1 24	15 9	1 15	21 38	0 11	6 45	2 16	19 1	0 10	11 43
S 21	3 24	17 51	5 16	8 1	3 1	0 3	1 24	14 54	1 15	21 37	0 11	6 47	2 16	19 1	0 10	11 43
S 22	3 47	18 19	5 11	7 36	2 51	0n28	1 23	14 39	1 16	21 36	0 11	6 50	2 16	19 2	0 10	11 44
M 23	4 10	17 57	4 52	7 9	2 40	0 58	1 22	14 24	1 16	21 35	0 11	6 53	2 16	19 3	0 10	11 44
T 24	4 33	16 48	4 21	6 40	2 28	1 28	1 21	14 9	1 17	21 34	0 11	6 56	2 15	19 3	0 10	11 44
W 25	4 56	14 55	3 39	6 9	2 15	1 58	1 20	13 53	1 17	21 32	0 11	6 59	2 15	19 4	0 10	11 45
T 26	5 19	12 24	2 48	5 38	2 1	2 28	1 20	13 38	1 18	21 31	0 12	7 2	2 15	19 5	0 10	11 45
F 27	5 42	9 21	1 48	5 7	1 46	2 58	1 19	13 22	1 18	21 30	0 12	7 5	2 15	19 5	0 10	11 46
S 28	6 5	5 52	0 44	4 35	1 30	3 28	1 18	13 6	1 19	21 29	0 12	7 7	2 15	19 6	0 10	11 46
S 29	6 27	2 5	0n24	4 4	1 14	3 58	1 16	12 51	1 19	21 28	0 12	7 10	2 15	19 7	0 10	11 46
M 30	6 50	1s53	1 31	3 35	0 57	4 28	1 15	12 35	1 19	21 27	0 12	7 13	2 15	19 8	0 10	11 47
T 31	7n12	5s50	2n36	3n 6	0n41	4n58	1s14	12s19	1s20	21s26	0s12	7n16	2s15	19n 8	0s10	11n47

Julian Day Number = 2246711.5, Delta T = 06m48s

Ecliptic obliquity = 23°30'35", Nutation = - 0°00'02", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°54'58", Lahiri = 16°01'59" Julian Calendar 1 March 1439 == Greg. Calendar 10 March 1439







## ASTRODIENST EPHEMERIS for the year 1439

geocentric

JUNE 1439 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	17 10 13	18 <sup>II</sup> 4'17	3 <sup>III</sup> 54	24 <sup>II</sup> 23	1 <sup>III</sup> 45	18 <sup>V</sup> 2	25°R53	1 <sup>III</sup> 32	29 <sup>III</sup> 27	1 <sup>III</sup> 22	17 <sup>III</sup> 24	16°R38	16 <sup>III</sup> 56	14 <sup>II</sup> 13	16 <sup>V</sup> 38	M 1
T 2	17 14 10	19° 1'31	18°27	26°30	2°59	18°46	25°348	1°38	29°31	1°23	17°26	16 <sup>III</sup> 34	16°53	14°19	16°40	T 2
W 3	17 18 6	19°58'44	2 <sup>III</sup> 48	28°36	4°12	19°30	25°43	1°44	29°34	1°24	17°27	16°32	16°50	14°26	16°42	W 3
T 4	17 22 3	20°55'57	16°55	0 <sup>III</sup> 41	5°26	20°13	25°38	1°50	29°37	1°24	17°29	16°32	16°47	14°33	16°44	T 4
F 5	17 25 59	21°53'10	0 <sup>V</sup> 46	2°43	6°39	20°57	25°33	1°56	29°41	1°25	17°30	16°32	16°44	14°39	16°46	F 5
S 6	17 29 56	22°50'23	14°23	4°44	7°53	21°41	25°28	2° 2	29°44	1°26	17°32	16°31	16°41	14°46	16°48	S 6
S 7	17 33 53	23°47'36	27°46	6°43	9° 6	22°24	25°23	2° 7	29°47	1°28	17°33	16°28	16°37	14°53	16°50	S 7
M 8	17 37 49	24°44'49	10 <sup>III</sup> 57	8°40	10°20	23° 8	25°17	2°13	29°51	1°29	17°35	16°22	16°34	14°59	16°52	M 8
T 9	17 41 46	25°42'02	23°56	10°35	11°33	23°51	25°11	2°19	29°54	1°30	17°36	16°13	16°31	15° 6	16°54	T 9
W10	17 45 42	26°39'14	6 <sup>III</sup> 43	12°27	12°46	24°34	25° 6	2°24	29°57	1°31	17°38	16° 2	16°28	15°13	16°56	W10
T 11	17 49 39	27°36'27	19°19	14°18	14° 0	25°17	25° 0	2°30	0 <sup>III</sup> 0	1°32	17°39	15°49	16°25	15°19	16°58	T 11
F 12	17 53 35	28°33'39	1 <sup>III</sup> 43	16° 6	15°13	26° 1	24°54	2°35	0° 4	1°33	17°41	15°36	16°22	15°26	16°59	F 12
S 13	17 57 32	29°30'51	13°57	17°53	16°27	26°44	24°47	2°41	0° 7	1°34	17°42	15°24	16°18	15°33	17° 1	S 13
S 14	18 1 28	0 <sup>III</sup> 28'03	26° 0	19°37	17°40	27°27	24°41	2°46	0°10	1°36	17°44	15°14	16°15	15°39	17° 2	S 14
M15	18 5 25	1°25'15	7 <sup>II</sup> 55	21°19	18°53	28° 9	24°35	2°51	0°13	1°37	17°45	15° 6	16°12	15°46	17° 4	M15
T 16	18 9 22	2°22'27	19°44	22°58	20° 7	28°52	24°28	2°56	0°16	1°38	17°47	15° 1	16° 9	15°53	17° 5	T 16
W17	18 13 18	3°19'38	1 <sup>III</sup> 31	24°36	21°20	29°35	24°21	3° 1	0°19	1°40	17°49	14°58	16° 6	15°59	17° 7	W17
T 18	18 17 15	4°16'49	13°21	26°11	22°33	0 <sup>III</sup> 18	24°15	3° 6	0°22	1°41	17°50	14°D57	16° 2	16° 6	17° 8	T 18
F 19	18 21 11	5°14'00	25°17	27°45	23°47	1° 0	24° 8	3°11	0°25	1°42	17°52	14°57	15°59	16°13	17°10	F 19
S 20	18 25 8	6°11'10	7 <sup>II</sup> 25	29°16	25° 0	1°42	24° 1	3°16	0°28	1°44	17°53	14°R58	15°56	16°19	17°11	S 20
S 21	18 29 4	7° 8'21	19°51	0 <sup>II</sup> 45	26°13	2°25	23°54	3°21	0°31	1°45	17°55	14°57	15°53	16°26	17°12	S 21
M22	18 33 1	8° 5'31	2 <sup>III</sup> 40	2°11	27°27	3° 7	23°47	3°26	0°34	1°47	17°57	14°54	15°50	16°33	17°13	M22
T 23	18 36 57	9° 2'41	15°55	3°36	28°40	3°49	23°39	3°30	0°37	1°48	17°58	14°50	15°47	16°39	17°14	T 23
W24	18 40 54	9°59'52	29°38	4°58	29°53	4°31	23°32	3°35	0°40	1°50	18° 0	14°43	15°43	16°46	17°15	W24
T 25	18 44 51	10°57'02	13 <sup>III</sup> 49	6°17	1 <sup>II</sup> 7	5°13	23°25	3°39	0°43	1°51	18° 1	14°34	15°40	16°53	17°16	T 25
F 26	18 48 47	11°54'12	28°25	7°35	2°20	5°55	23°17	3°44	0°46	1°53	18° 3	14°25	15°37	16°59	17°17	F 26
S 27	18 52 44	12°51'23	13 <sup>III</sup> 18	8°49	3°33	6°37	23°10	3°48	0°49	1°54	18° 5	14°16	15°34	17° 6	17°18	S 27
S 28	18 56 40	13°48'34	28°21	10° 2	4°46	7°19	23° 2	3°52	0°52	1°56	18° 6	14° 8	15°31	17°13	17°19	S 28
M29	19 0 37	14°45'46	13 <sup>III</sup> 23	11°12	5°59	8° 0	22°55	3°57	0°54	1°58	18° 8	14° 3	15°28	17°19	17°20	M29
T 30	19 4 33	15°42'58	28 <sup>III</sup> 16	12 <sup>II</sup> 19	7 <sup>II</sup> 13	8 <sup>II</sup> 42	22°347	4 <sup>II</sup> 1	0 <sup>III</sup> 57	1 <sup>III</sup> 59	18° 9	13 <sup>III</sup> 59	15 <sup>III</sup> 24	17 <sup>II</sup> 26	17 <sup>V</sup> 21	T 30

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	22n58	16s 1	3n25	24n55	1n31	24n26	0n56	5n43	1s30	21s25	0s23	9n52	2s19	19n56	0s10	11n48
T 2	23 3	13 5	2 23	25 5	1 37	24 27	0 58	6 0	1 30	21 26	0 24	9 54	2 19	19 57	0 10	11 48
W 3	23 8	9 23	1 12	25 12	1 42	24 27	1 0	6 16	1 29	21 27	0 24	9 56	2 19	19 58	0 10	11 47
T 4	23 12	5 13	0s 2	25 17	1 47	24 26	1 2	6 33	1 29	21 28	0 24	9 58	2 19	19 58	0 10	11 47
F 5	23 16	0 50	1 15	25 19	1 50	24 24	1 4	6 49	1 29	21 29	0 24	10 0	2 20	19 59	0 10	11 47
S 6	23 19	3n31	2 22	25 18	1 53	24 22	1 6	7 6	1 29	21 30	0 24	10 2	2 20	20 0	0 10	11 46
S 7	23 22	7 36	3 20	25 15	1 55	24 19	1 7	7 22	1 29	21 32	0 24	10 3	2 20	20 0	0 10	11 46
M 8	23 24	11 15	4 6	25 10	1 57	24 15	1 9	7 39	1 28	21 33	0 25	10 5	2 20	20 1	0 10	11 46
T 9	23 26	14 18	4 39	25 2	1 57	24 11	1 11	7 55	1 28	21 34	0 25	10 7	2 20	20 2	0 10	11 45
W10	23 28	16 37	4 57	24 52	1 57	24 6	1 12	8 11	1 28	21 35	0 25	10 9	2 20	20 3	0 10	11 45
T 11	23 29	18 5	5 0	24 40	1 57	24 0	1 14	8 27	1 28	21 37	0 25	10 10	2 21	20 3	0 10	11 44
F 12	23 30	18 41	4 49	24 26	1 55	23 53	1 16	8 43	1 28	21 38	0 25	10 12	2 21	20 4	0 10	11 44
S 13	23 31	18 23	4 25	24 11	1 53	23 46	1 17	8 59	1 27	21 39	0 26	10 14	2 21	20 5	0 10	11 43
S 14	23 31	17 16	3 49	23 54	1 51	23 38	1 19	9 14	1 27	21 40	0 26	10 15	2 21	20 5	0 10	11 43
M15	23 30	15 23	3 3	23 35	1 47	23 30	1 20	9 30	1 27	21 42	0 26	10 17	2 21	20 6	0 10	11 42
T 16	23 29	12 53	2 10	23 15	1 43	23 20	1 21	9 45	1 26	21 43	0 26	10 19	2 22	20 7	0 10	11 42
W17	23 28	9 52	1 11	22 53	1 39	23 10	1 23	10 1	1 26	21 44	0 26	10 20	2 22	20 7	0 10	11 42
T 18	23 26	6 26	0 9	22 30	1 34	23 0	1 24	10 16	1 26	21 46	0 26	10 22	2 22	20 8	0 10	11 41
F 19	23 24	2 43	0n55	22 7	1 28	22 48	1 25	10 31	1 25	21 47	0 27	10 23	2 22	20 9	0 10	11 41
S 20	23 22	1s10	1 57	21 42	1 22	22 36	1 26	10 46	1 25	21 49	0 27	10 25	2 22	20 9	0 10	11 40
S 21	23 19	5 5	2 55	21 16	1 15	22 24	1 27	11 1	1 25	21 50	0 27	10 26	2 23	20 10	0 10	11 39
M22	23 16	8 54	3 46	20 50	1 8	22 10	1 28	11 16	1 24	21 51	0 27	10 27	2 23	20 10	0 10	11 39
T 23	23 12	12 24	4 27	20 23	1 0	21 56	1 29	11 31	1 24	21 53	0 27	10 29	2 23	20 11	0 10	11 38
W24	23 8	15 21	4 54	19 56	0 52	21 42	1 30	11 45	1 24	21 54	0 28	10 30	2 23	20 12	0 10	11 38
T 25	23 3	17 30	5 4	19 28	0 44	21 27	1 31	12 0	1 23	21 56	0 28	10 31	2 23	20 12	0 10	11 37
F 26	22 58	18 35	4 55	18 59	0 34	21 11	1 31	12 14	1 23	21 57	0 28	10 33	2 24	20 13	0 10	11 37
S 27	22 53	18 25	4 26	18 30	0 25	20 54	1 32	12 28	1 22	21 58	0 28	10 34	2 24	20 13	0 10	11 36
S 28	22 47	16 59	3 39	18 2	0 15	20 38	1 33	12 42	1 22	22 0	0 28	10 35	2 24	20 14	0 10	11 36
M29	22 41	14 21	2 36	17 33	0 5	20 20	1 33	12 56	1 22	22 1	0 28	10 36	2 24	20 15	0 10	11 35
T 30	22n35	10s49	1n23	17n 4	0s 6	20n 2	1n34	13n10	1s21	22s 3	0s28	10n38	2s24	20n15	0s10	11n34

Julian Day Number = 2246803.5, Delta T = 06m48s

Ecliptic obliquity = 23°30'34, Nutation = - 0°00'04, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°55'11, Lahiri = 16°02'11 Julian Calendar 1 June 1439 == Greg. Calendar 10 June 1439

## ASTRODIENST EPHEMERIS for the year 1439

geocentric

JULY 1439 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	19 8 30	16°40'10	12°54	13°23	8°26	9°23	22°R40	4°5	1°0	2°1	18°51	13°D59	15°21	17°23	17°V22	W 1
T 2	19 12 26	17°37'23	27°12	14°25	9°39	10°5	22°332	4°8	1°2	2°3	18°13	13°M59	15°18	17°39	17°22	T 2
F 3	19 16 23	18°34'37	11°Y 8	15°24	10°52	10°46	22°24	4°12	1°5	2°4	18°14	14°0	15°15	17°46	17°23	F 3
S 4	19 20 20	19°31'52	24°44	16°20	12°5	11°27	22°16	4°16	1°8	2°6	18°16	14°R 0	15°12	17°53	17°23	S 4
S 5	19 24 16	20°29'08	8°0	17°12	13°18	12°8	22°9	4°20	1°10	2°8	18°18	13°58	15°8	17°59	17°24	S 5
M 6	19 28 13	21°26'25	20°59	18°2	14°31	12°49	22°1	4°23	1°13	2°9	18°19	13°55	15°5	18°6	17°24	M 6
T 7	19 32 9	22°23'42	3°II43	18°48	15°44	13°30	21°53	4°27	1°15	2°11	18°21	13°49	15°2	18°13	17°25	T 7
W 8	19 36 6	23°21'00	16°14	19°30	16°57	14°10	21°45	4°30	1°18	2°13	18°22	13°41	14°59	18°19	17°25	W 8
T 9	19 40 2	24°18'20	28°34	20°9	18°11	14°51	21°38	4°33	1°20	2°15	18°24	13°33	14°56	18°26	17°25	T 9
F 10	19 43 59	25°15'40	10°345	20°44	19°24	15°31	21°30	4°36	1°23	2°17	18°26	13°24	14°53	18°33	17°25	F 10
S 11	19 47 55	26°13'01	22°47	21°14	20°37	16°12	21°22	4°39	1°25	2°19	18°27	13°15	14°49	18°39	17°26	S 11
S 12	19 51 52	27°10'22	4°J42	21°41	21°50	16°52	21°15	4°42	1°27	2°20	18°29	13°8	14°46	18°46	17°26	S 12
M13	19 55 49	28°7'44	16°32	22°3	23°3	17°32	21°7	4°45	1°30	2°22	18°31	13°3	14°43	18°53	17°R26	M13
T 14	19 59 45	29°5'08	28°20	22°21	24°16	18°12	20°59	4°48	1°32	2°24	18°32	13°0	14°40	18°59	17°26	T 14
W15	20 3 42	0°N 2'31	10°M 6	22°34	25°29	18°52	20°52	4°51	1°34	2°26	18°34	12°D58	14°37	19°6	17°26	W15
T 16	20 7 38	0°59'56	21°57	22°42	26°42	19°31	20°44	4°53	1°36	2°28	18°35	12°59	14°34	19°13	17°25	T 16
F 17	20 11 35	1°57'21	3°A54	22°R44	27°54	20°11	20°37	4°56	1°38	2°30	18°37	13°0	14°30	19°19	17°25	F 17
S 18	20 15 31	2°54'47	16°2	22°42	29°7	20°50	20°29	4°58	1°40	2°32	18°39	13°2	14°27	19°26	17°25	S 18
S 19	20 19 28	3°52'13	28°27	22°35	0°M20	21°30	20°22	5°1	1°43	2°34	18°40	13°R 3	14°24	19°33	17°25	S 19
M20	20 23 24	4°49'41	11°M.13	22°22	1°33	22°9	20°14	5°3	1°45	2°36	18°42	13°3	14°21	19°39	17°24	M20
T 21	20 27 21	5°47'09	24°23	22°4	2°46	22°48	20°7	5°5	1°47	2°38	18°43	13°1	14°18	19°46	17°24	T 21
W22	20 31 18	6°44'38	8°M 2	21°40	3°59	23°27	20°0	5°7	1°48	2°40	18°45	12°58	14°14	19°53	17°24	W22
T 23	20 35 14	7°42'08	22°9	21°12	5°11	24°6	19°53	5°9	1°50	2°42	18°46	12°54	14°11	19°59	17°23	T 23
F 24	20 39 11	8°39'39	6°343	20°39	6°24	24°44	19°46	5°11	1°52	2°44	18°48	12°49	14°8	20°6	17°22	F 24
S 25	20 43 7	9°37'10	21°39	20°2	7°37	25°23	19°39	5°12	1°54	2°46	18°49	12°44	14°5	20°13	17°22	S 25
S 26	20 47 4	10°34'43	6°A49	19°20	8°50	26°1	19°32	5°14	1°56	2°48	18°51	12°40	14°2	20°19	17°21	S 26
M27	20 51 0	11°32'17	22°2	18°35	10°2	26°40	19°26	5°15	1°57	2°51	18°53	12°38	13°59	20°26	17°20	M27
T 28	20 54 57	12°29'52	7°H 10	17°48	11°15	27°18	19°19	5°17	1°59	2°53	18°54	12°D36	13°55	20°32	17°20	T 28
W29	20 58 53	13°27'29	22°3	16°58	12°28	27°56	19°13	5°18	2°1	2°55	18°56	12°37	13°52	20°39	17°19	W29
T 30	21 2 50	14°25'07	6°Y36	16°8	13°40	28°33	19°6	5°19	2°2	2°57	18°57	12°38	13°49	20°46	17°18	T 30
F 31	21 6 47	15°22'46	20°Y44	15°J17	14°M53	29°811	19°30	5°20	2°II 4	2°M59	18°59	12°M39	13°M46	20°J52	17°Y17	F 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
W 1	22n28	6s39	On 6	16n35	0s17	19n43	1n34	13n23	1s21	22s 4	0s29	10n39	2s25	20n16	0s10	11n34
T 2	22 21	2 12	1s10	16 6	0 28	19 24	1 34	13 37	1 20	22 6	0 29	10 40	2 25	20 16	0 10	11 33
F 3	22 13	2n16	2 21	15 38	0 40	19 4	1 34	13 50	1 20	22 7	0 29	10 41	2 25	20 17	0 10	11 33
S 4	22 5	6 29	3 21	15 10	0 52	18 44	1 35	14 3	1 19	22 8	0 29	10 42	2 25	20 17	0 10	11 32
S 5	21 57	10 17	4 9	14 43	1 4	18 23	1 35	14 16	1 19	22 10	0 29	10 43	2 26	20 18	0 10	11 31
M 6	21 48	13 30	4 43	14 16	1 16	18 2	1 35	14 29	1 18	22 11	0 29	10 44	2 26	20 18	0 10	11 31
T 7	21 39	16 0	5 2	13 50	1 29	17 40	1 35	14 42	1 18	22 13	0 30	10 45	2 26	20 19	0 10	11 30
W 8	21 29	17 43	5 7	13 24	1 42	17 18	1 35	14 55	1 17	22 14	0 30	10 46	2 26	20 19	0 10	11 29
T 9	21 19	18 34	4 57	13 0	1 54	16 55	1 34	15 7	1 17	22 15	0 30	10 47	2 27	20 20	0 10	11 29
F 10	21 9	18 32	4 33	12 37	2 7	16 32	1 34	15 19	1 16	22 17	0 30	10 47	2 27	20 20	0 10	11 28
S 11	20 58	17 40	3 58	12 15	2 21	16 9	1 34	15 32	1 15	22 18	0 30	10 48	2 27	20 21	0 10	11 27
S 12	20 47	16 2	3 12	11 54	2 34	15 45	1 33	15 44	1 15	22 19	0 30	10 49	2 27	20 21	0 10	11 27
M13	20 36	13 44	2 18	11 34	2 47	15 20	1 33	15 55	1 14	22 21	0 30	10 50	2 27	20 22	0 10	11 26
T 14	20 24	10 52	1 19	11 17	2 59	14 55	1 32	16 7	1 14	22 22	0 30	10 50	2 28	20 22	0 10	11 25
W15	20 12	7 34	0 16	11 0	3 12	14 30	1 32	16 19	1 13	22 23	0 31	10 51	2 28	20 23	0 10	11 25
T 16	20 0	3 57	0n49	10 46	3 24	14 5	1 31	16 30	1 12	22 25	0 31	10 52	2 28	20 23	0 10	11 24
F 17	19 47	0 9	1 51	10 34	3 36	13 39	1 30	16 41	1 12	22 26	0 31	10 52	2 28	20 24	0 10	11 23
S 18	19 34	3s42	2 50	10 24	3 48	13 13	1 29	16 52	1 11	22 27	0 31	10 53	2 29	20 24	0 10	11 22
S 19	19 21	7 29	3 43	10 16	3 59	12 46	1 28	17 3	1 11	22 28	0 31	10 53	2 29	20 25	0 10	11 22
M20	19 7	11 2	4 25	10 10	4 9	12 19	1 27	17 14	1 10	22 30	0 31	10 54	2 29	20 25	0 9	11 21
T 21	18 53	14 8	4 56	10 7	4 18	11 52	1 26	17 25	1 9	22 31	0 31	10 54	2 29	20 25	0 9	11 20
W22	18 39	16 36	5 11	10 7	4 27	11 24	1 25	17 35	1 8	22 32	0 31	10 55	2 30	20 26	0 9	11 19
T 23	18 24	18 9	5 8	10 9	4 34	10 56	1 24	17 45	1 8	22 33	0 31	10 55	2 30	20 26	0 9	11 19
F 24	18 9	18 35	4 46	10 14	4 40	10 28	1 23	17 56	1 7	22 34	0 32	10 56	2 30	20 26	0 9	11 18
S 25	17 54	17 45	4 3	10 21	4 44	10 0	1 21	18 6	1 6	22 35	0 32	10 56	2 30	20 27	0 9	11 17
S 26	17 38	15 40	3 4	10 31	4 47	9 31	1 20	18 15	1 6	22 36	0 32	10 56	2 31	20 27	0 9	11 16
M27	17 22	12 28	1 50	10 44	4 48	9 2	1 18	18 25	1 5	22 37	0 32	10 56	2 31	20 28	0 9	11 16
T 28	17 6	8 27	0 30	10 59	4 48	8 33	1 17	18 34	1 4	22 38	0 32	10 57	2 31	20 28	0 9	11 15
W29	16 50	3 57	0s52	11 16	4 45	8 4	1 15	18 44	1 3	22 39	0 32	10 57	2 31	20 28	0 9	11 14
T 30	16 33	0n40	2 8	11 35	4 41	7 34	1 13	18 53	1 2	22 40	0 32	10 57	2 32	20 29	0 9	11 13
F 31	16n16	5n 7	3s14	11n55	4s35	7n 4	1n12	19n 2	1s 2	22s41	0s32	10n57	2s32	20n29	0s 9	11n13

Julian Day Number = 2246833.5, Delta T = 06m48s

Ecliptic obliquity = 23°30'34", Nutation = - 0°00'04", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°55'15", Lahiri = 16°02'15" Julian Calendar 1 July 1439 == Greg. Calendar 10 July 1439



ASTRODIENST EPHEMERIS for the year 1439  
geocentric

AUGUST 1439 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	21 10 43	16♂20'28	4♂26	14°R28	16♂ 5	29♂49	18°R54	5♂21	2♂ 5	3♂ 1	19♂ 0	12♂40	13♂43	20♂59	17°R16	S 1
S 2	21 14 40	17°18'10	17°45	13♂40	17°18	0♂26	18♂48	5°22	2° 7	3° 3	19° 2	12°R41	13°40	21° 6	17°Y15	S 2
M 3	21 18 36	18°15'55	0♂41	12°55	18°30	1° 3	18°42	5°23	2° 8	3° 5	19° 3	12°40	13°36	21°12	17°14	M 3
T 4	21 22 33	19°13'41	13°18	12°14	19°43	1°40	18°36	5°24	2°10	3° 8	19° 4	12°38	13°33	21°19	17°13	T 4
W 5	21 26 29	20°11'29	25°40	11°38	20°55	2°17	18°31	5°24	2°11	3°10	19° 6	12°36	13°30	21°26	17°12	W 5
T 6	21 30 26	21° 9'19	7♂50	11° 7	22° 8	2°54	18°25	5°25	2°12	3°12	19° 7	12°33	13°27	21°32	17°10	T 6
F 7	21 34 22	22° 7'10	19°51	10°42	23°20	3°30	18°20	5°25	2°13	3°14	19° 9	12°29	13°24	21°39	17° 9	F 7
S 8	21 38 19	23° 5'03	1♂44	10°25	24°33	4° 6	18°15	5°25	2°14	3°16	19°10	12°26	13°20	21°46	17° 8	S 8
S 9	21 42 16	24° 2'58	13°34	10°15	25°45	4°43	18°10	5°25	2°16	3°19	19°11	12°24	13°17	21°52	17° 6	S 9
M10	21 46 12	25° 0'54	25°22	10°D12	26°57	5°19	18° 5	5°R25	2°17	3°21	19°13	12°22	13°14	21°59	17° 5	M10
T 11	21 50 9	25°58'52	7♂10	10°18	28°10	5°54	18° 0	5°R25	2°18	3°23	19°14	12°D21	13°11	22° 6	17° 3	T 11
W12	21 54 5	26°56'51	19° 0	10°31	29°22	6°30	17°56	5°25	2°19	3°25	19°16	12°21	13° 8	22°12	17° 2	W12
T 13	21 58 2	27°54'51	0♂55	10°53	0♂34	7° 5	17°51	5°25	2°20	3°27	19°17	12°22	13° 5	22°19	17° 0	T 13
F 14	22 1 58	28°52'54	12°58	11°23	1°46	7°41	17°47	5°24	2°20	3°30	19°18	12°23	13° 1	22°26	16°59	F 14
S 15	22 5 55	29°50'57	25°12	12° 1	2°58	8°16	17°43	5°24	2°21	3°32	19°20	12°24	12°58	22°32	16°57	S 15
S 16	22 9 51	0♂49'02	7♂40	12°47	4°11	8°50	17°39	5°23	2°22	3°34	19°21	12°25	12°55	22°39	16°55	S 16
M17	22 13 48	1°47'09	20°26	13°41	5°23	9°25	17°36	5°22	2°23	3°36	19°22	12°26	12°52	22°46	16°53	M17
T 18	22 17 44	2°45'17	3♂33	14°42	6°35	9°59	17°32	5°21	2°23	3°39	19°23	12°R26	12°49	22°52	16°51	T 18
W19	22 21 41	3°43'27	1♂ 5	15°49	7°47	10°34	17°29	5°20	2°24	3°41	19°25	12°26	12°45	22°59	16°50	W19
T 20	22 25 38	4°41'38	1♂ 3	17° 3	8°59	11° 8	17°26	5°19	2°24	3°43	19°26	12°25	12°42	23° 6	16°48	T 20
F 21	22 29 34	5°39'50	15°23	18°23	10°11	11°41	17°23	5°18	2°25	3°45	19°27	12°25	12°39	23°12	16°46	F 21
S 22	22 33 31	6°38'04	0♂ 6	19°48	11°23	12°15	17°20	5°17	2°25	3°47	19°28	12°24	12°36	23°19	16°44	S 22
S 23	22 37 27	7°36'20	15° 7	21°19	12°34	12°48	17°18	5°16	2°26	3°50	19°29	12°23	12°33	23°26	16°42	S 23
M24	22 41 24	8°34'37	0♂16	22°53	13°46	13°21	17°15	5°14	2°26	3°52	19°31	12°23	12°30	23°32	16°40	M24
T 25	22 45 20	9°32'56	15°25	24°31	14°58	13°54	17°13	5°12	2°27	3°54	19°32	12°D23	12°26	23°39	16°38	T 25
W26	22 49 17	10°31'17	0♂25	26°13	16°10	14°27	17°11	5°11	2°27	3°56	19°33	12°23	12°23	23°45	16°35	W26
T 27	22 53 13	11°29'40	15° 7	27°57	17°21	14°59	17° 9	5° 9	2°27	3°59	19°34	12°23	12°20	23°52	16°33	T 27
F 28	22 57 10	12°28'05	29°26	29°44	18°33	15°31	17° 8	5° 7	2°27	4° 1	19°35	12°R23	12°17	23°59	16°31	F 28
S 29	23 1 7	13°26'32	13♂19	1♂33	19°45	16° 3	17° 6	5° 5	2°27	4° 3	19°36	12°23	12°14	24° 5	16°29	S 29
S 30	23 5 3	14°25'01	26°44	3°22	20°56	16°35	17° 5	5° 3	2°R27	4° 5	19°37	12°23	12°11	24°12	16°26	S 30
M31	23 9 0	15♂23'33	9♂45	5♂13	22♂ 8	17♂ 7	17♂ 4	5♂ 1	2♂27	4♂ 7	19♂38	12°D23	12♂ 7	24♂19	16°Y24	M31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	15n59	9n 9	4 s 8	12n17	4s27	6n34	1n10	19n11	1 s 1	22s42	0s32	10n57	2s32	20n29	0 s 9	11n12	0n50
S 2	15 42	12 36	4 46	12 40	4 17	6 4	1 8	19 19	1 0	22 43	0 32	10 57	2 32	20 29	0 9	11 11	0 50
M 3	15 24	15 20	5 8	13 4	4 6	5 34	1 6	19 28	0 59	22 44	0 32	10 57	2 33	20 30	0 9	11 10	0 50
T 4	15 6	17 15	5 15	13 27	3 53	5 4	1 4	19 36	0 58	22 45	0 33	10 57	2 33	20 30	0 9	11 10	0 50
W 5	14 48	18 20	5 7	13 51	3 38	4 33	1 2	19 44	0 57	22 46	0 33	10 57	2 33	20 30	0 9	11 9	0 50
T 6	14 29	18 32	4 45	14 14	3 23	4 2	0 59	19 52	0 57	22 47	0 33	10 57	2 34	20 30	0 9	11 8	0 50
F 7	14 11	17 54	4 11	14 37	3 6	3 32	0 57	20 0	0 56	22 48	0 33	10 57	2 34	20 31	0 9	11 7	0 50
S 8	13 52	16 29	3 26	14 58	2 49	3 1	0 55	20 8	0 55	22 48	0 33	10 57	2 34	20 31	0 9	11 6	0 50
S 9	13 33	14 22	2 33	15 18	2 31	2 30	0 52	20 16	0 54	22 49	0 33	10 57	2 34	20 31	0 9	11 6	0 50
M10	13 13	11 39	1 33	15 36	2 13	1 59	0 50	20 23	0 53	22 50	0 33	10 56	2 35	20 31	0 9	11 5	0 50
T 11	12 54	8 28	0 29	15 52	1 55	1 28	0 47	20 30	0 52	22 50	0 33	10 56	2 35	20 32	0 9	11 4	0 50
W12	12 34	4 56	0n37	16 6	1 37	0 56	0 45	20 37	0 51	22 51	0 33	10 56	2 35	20 32	0 9	11 3	0 50
T 13	12 14	1 11	1 41	16 17	1 19	0 25	0 42	20 44	0 50	22 52	0 33	10 55	2 35	20 32	0 9	11 2	0 50
F 14	11 54	2s39	2 42	16 26	1 1	0s 6	0 40	20 51	0 49	22 52	0 33	10 55	2 36	20 32	0 9	11 2	0 50
S 15	11 33	6 26	3 36	16 32	0 44	0 37	0 37	20 57	0 48	22 53	0 33	10 55	2 36	20 32	0 9	11 1	0 50
S 16	11 13	9 59	4 21	16 35	0 27	1 9	0 34	21 4	0 47	22 53	0 33	10 54	2 36	20 32	0 9	11 0	0 50
M17	10 52	13 10	4 55	16 35	0 12	1 40	0 31	21 10	0 46	22 54	0 33	10 54	2 36	20 33	0 9	10 59	0 50
T 18	10 31	15 47	5 14	16 32	0n 4	2 11	0 28	21 16	0 45	22 54	0 33	10 53	2 37	20 33	0 9	10 58	0 50
W19	10 10	17 38	5 17	16 25	0 18	2 42	0 25	21 22	0 44	22 55	0 33	10 53	2 37	20 33	0 9	10 58	0 50
T 20	9 49	18 29	5 1	16 16	0 31	3 14	0 22	21 28	0 43	22 55	0 33	10 52	2 37	20 33	0 9	10 57	0 50
F 21	9 28	18 12	4 27	16 3	0 43	3 45	0 19	21 34	0 42	22 56	0 34	10 51	2 37	20 33	0 9	10 56	0 50
S 22	9 6	16 42	3 34	15 47	0 54	4 16	0 16	21 39	0 41	22 56	0 34	10 51	2 37	20 33	0 9	10 55	0 50
S 23	8 44	14 1	2 26	15 27	1 4	4 47	0 13	21 45	0 40	22 57	0 34	10 50	2 38	20 33	0 9	10 54	0 50
M24	8 23	10 22	1 7	15 5	1 13	5 18	0 10	21 50	0 38	22 57	0 34	10 49	2 38	20 33	0 9	10 54	0 50
T 25	8 1	6 1	0s17	14 40	1 21	5 49	0 7	21 55	0 37	22 57	0 34	10 49	2 38	20 33	0 9	10 53	0 50
W26	7 39	1 20	1 39	14 12	1 28	6 19	0 3	22 0	0 36	22 58	0 34	10 48	2 38	20 33	0 9	10 52	0 50
T 27	7 16	3n19	2 52	13 41	1 34	6 50	0 0	22 5	0 35	22 58	0 34	10 47	2 39	20 33	0 9	10 51	0 50
F 28	6 54	7 40	3 53	13 9	1 39	7 20	0s 3	22 10	0 34	22 58	0 34	10 46	2 39	20 33	0 9	10 50	0 50
S 29	6 32	11 27	4 38	12 34	1 43	7 51	0 7	22 14	0 32	22 58	0 34	10 45	2 39	20 33	0 9	10 50	0 50
S 30	6 9	14 31	5 6	11 57	1 46	8 21	0 10	22 19	0 31	22 58	0 34	10 45	2 39	20 34	0 9	10 49	0 50
M31	5n46	16n44	5s18	11n18	1n48	8s51	0s13	22n23	0s30	22s59	0s34	10n44	2s39	20n34	0s 9	10n48	0n50

Julian Day Number = 2246864.5, Delta T = 06m48s

Ecliptic obliquity = 23°30'35, Nutation = - 0°00'04, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°55'19, Lahiri = 16°02'20 Julian Calendar 1 Aug. 1439 == Greg. Calendar 10 Aug. 1439

# ASTRODIENST EPHEMERIS for the year 1439

## geocentric

SEPTEMBER 1439 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	23 12 56	16 <sup>m</sup> 22'07"	22 <sup>m</sup> 22'	7 <sup>m</sup> 5	23 <sup>m</sup> 19	17 <sup>m</sup> 38	17°R 3	4°R59	2°R27	4 <sup>m</sup> 10	19 <sup>m</sup> 39	12 <sup>m</sup> 23	12 <sup>m</sup> 4	24 <sup>m</sup> 25	16°R22	T 1
W 2	23 16 53	17°20'43"	4 <sup>m</sup> 42	8°57	24°31	18° 9	17 <sup>m</sup> 2	4 <sup>m</sup> 56	2 <sup>m</sup> 27	4°12	19°40	12°23	12° 1	24°32	16°Y19	W 2
T 3	23 20 49	18°19'21"	16°47	10°49	25°42	18°39	17° 2	4°54	2°27	4°14	19°41	12°24	11°58	24°39	16°17	T 3
F 4	23 24 46	19°18'01"	28°42	12°41	26°53	19°10	17° 2	4°51	2°27	4°16	19°42	12°24	11°55	24°45	16°15	F 4
S 5	23 28 42	20°16'44"	10 <sup>m</sup> 32	14°33	28° 5	19°40	17°D 2	4°49	2°26	4°18	19°43	12°25	11°51	24°52	16°12	S 5
S 6	23 32 39	21°15'29"	22°19	16°25	29°16	20° 9	17° 2	4°46	2°26	4°20	19°44	12°26	11°48	24°59	16°10	S 6
M 7	23 36 36	22°14'16"	4 <sup>m</sup> 8	18°16	0 <sup>m</sup> 27	20°39	17° 2	4°43	2°26	4°23	19°45	12°26	11°45	25° 5	16° 7	M 7
T 8	23 40 32	23°13'04"	16° 0	20° 6	1°38	21° 8	17° 3	4°40	2°25	4°25	19°46	12°R27	11°42	25°12	16° 4	T 8
W 9	23 44 29	24°11'55"	27°57	21°56	2°50	21°37	17° 3	4°37	2°25	4°27	19°46	12°26	11°39	25°19	16° 2	W 9
T 10	23 48 25	25°10'48"	10 <sup>m</sup> 3	23°45	4° 1	22° 6	17° 4	4°34	2°24	4°29	19°47	12°25	11°36	25°25	15°59	T 10
F 11	23 52 22	26° 9'43"	22°19	25°33	5°12	22°34	17° 5	4°31	2°24	4°31	19°48	12°23	11°32	25°32	15°57	F 11
S 12	23 56 18	27° 8'40"	4 <sup>m</sup> 45	27°21	6°23	23° 2	17° 7	4°27	2°23	4°33	19°49	12°21	11°29	25°39	15°54	S 12
S 13	0 0 15	28° 7'39"	17°25	29° 7	7°34	23°29	17° 8	4°24	2°23	4°35	19°50	12°19	11°26	25°45	15°51	S 13
M14	0 4 11	29° 6'39"	0 <sup>m</sup> 19	0 <sup>m</sup> 53	8°44	23°56	17°10	4°21	2°22	4°37	19°50	12°17	11°23	25°52	15°48	M14
T 15	0 8 8	0 <sup>m</sup> 542	13°29	2°38	9°55	24°23	17°12	4°17	2°21	4°39	19°51	12°15	11°20	25°58	15°46	T 15
W16	0 12 4	1° 4'46"	26°57	4°22	11° 6	24°50	17°14	4°14	2°20	4°41	19°52	12°D15	11°16	26° 5	15°43	W16
T 17	0 16 1	2° 3'52"	10 <sup>m</sup> 345	6° 5	12°17	25°16	17°16	4°10	2°19	4°43	19°52	12°15	11°13	26°12	15°40	T 17
F 18	0 19 58	3° 3'00"	24°51	7°47	13°27	25°42	17°19	4° 6	2°18	4°45	19°53	12°16	11°10	26°18	15°37	F 18
S 19	0 23 54	4° 2'10"	9 <sup>m</sup> 16	9°29	14°38	26° 7	17°21	4° 2	2°18	4°47	19°54	12°17	11° 7	26°25	15°35	S 19
S 20	0 27 51	5° 1'21"	23°56	11° 9	15°48	26°32	17°24	3°59	2°17	4°49	19°54	12°18	11° 4	26°32	15°32	S 20
M21	0 31 47	6° 0'34"	8 <sup>m</sup> 46	12°49	16°59	26°57	17°27	3°55	2°15	4°51	19°55	12°R19	11° 1	26°38	15°29	M21
T 22	0 35 44	6°59'49"	23°40	14°28	18° 9	27°21	17°30	3°51	2°14	4°53	19°55	12°19	10°57	26°45	15°26	T 22
W23	0 39 40	7°59'06"	8°Y31	16° 7	19°19	27°45	17°34	3°47	2°13	4°55	19°56	12°17	10°54	26°52	15°23	W23
T 24	0 43 37	8°58'25"	23°10	17°44	20°30	28° 8	17°37	3°42	2°12	4°57	19°56	12°14	10°51	26°58	15°21	T 24
F 25	0 47 33	9°57'46"	7 <sup>m</sup> 31	19°21	21°40	28°32	17°41	3°38	2°11	4°59	19°57	12°10	10°48	27° 5	15°18	F 25
S 26	0 51 30	10°57'10"	21°29	20°57	22°50	28°54	17°45	3°34	2° 9	5° 1	19°57	12° 6	10°45	27°12	15°15	S 26
S 27	0 55 27	11°56'36"	5 <sup>m</sup> 0	22°33	24° 0	29°16	17°49	3°30	2° 8	5° 3	19°58	12° 2	10°42	27°18	15°12	S 27
M28	0 59 23	12°56'04"	18° 6	24° 7	25°10	29°38	17°53	3°25	2° 7	5° 5	19°58	11°58	10°38	27°25	15° 9	M28
T 29	1 3 20	13°55'34"	0 <sup>m</sup> 47	25°41	26°19	29°59	17°58	3°21	2° 5	5° 7	19°58	11°56	10°35	27°32	15° 6	T 29
W30	1 7 16	14 <sup>m</sup> 55'07"	13 <sup>m</sup> 8	27 <sup>m</sup> 15	27 <sup>m</sup> 29	0 <sup>m</sup> 20	18 <sup>m</sup> 2	3 <sup>m</sup> 16	2 <sup>m</sup> 4	5 <sup>m</sup> 8	19 <sup>m</sup> 59	11°D55	10 <sup>m</sup> 32	27 <sup>m</sup> 38	15°Y 3	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
T 1	5n24	18n 5	5s13	10n38	1n49	9s21	0s17	22n27	0s29	22s59	0s34	10n43	2s40	20n33	0s 9	10n47	0n50	23n47	1n44	6n56	7n 3	11n57	7n42	1n21	
W 2	5 1	18 31	4 54	9 56	1 50	9 50	0 20	22 31	0 27	22 59	0 34	10 42	2 40	20 33	0 9	10 46	0 50	23 47	1 44	6 56	7 4	11 55	7 41	1 21	
T 3	4 38	18 6	4 23	9 13	1 50	10 20	0 24	22 35	0 26	22 59	0 34	10 41	2 40	20 33	0 9	10 46	0 50	23 47	1 44	6 56	7 6	11 54	7 40	1 21	
F 4	4 15	16 53	3 40	8 29	1 49	10 49	0 27	22 39	0 25	22 59	0 34	10 40	2 40	20 33	0 9	10 45	0 50	23 47	1 44	6 56	7 7	11 52	7 39	1 21	
S 5	3 52	14 57	2 48	7 45	1 47	11 18	0 31	22 43	0 24	22 59	0 34	10 39	2 41	20 33	0 9	10 44	0 50	23 47	1 45	6 55	7 8	11 51	7 38	1 21	
S 6	3 29	12 23	1 49	6 59	1 45	11 47	0 34	22 46	0 22	22 59	0 34	10 37	2 41	20 33	0 9	10 43	0 50	23 47	1 45	6 55	7 9	11 50	7 37	1 21	
M 7	3 5	9 19	0 46	6 13	1 42	12 15	0 38	22 50	0 21	22 59	0 34	10 36	2 41	20 33	0 9	10 43	0 50	23 47	1 45	6 55	7 11	11 48	7 36	1 21	
T 8	2 42	5 51	0n20	5 27	1 39	12 44	0 41	22 53	0 19	22 59	0 34	10 35	2 41	20 33	0 9	10 42	0 50	23 47	1 45	6 55	7 12	11 47	7 35	1 21	
W 9	2 19	2 7	1 25	4 40	1 36	13 12	0 45	22 57	0 18	22 59	0 34	10 34	2 41	20 33	0 9	10 41	0 50	23 47	1 45	6 55	7 13	11 45	7 34	1 21	
T 10	1 55	1s44	2 27	3 54	1 32	13 39	0 49	23 0	0 17	22 59	0 34	10 33	2 41	20 33	0 9	10 40	0 50	23 47	1 45	6 55	7 14	11 44	7 33	1 21	
F 11	1 32	5 34	3 23	3 7	1 27	14 7	0 52	23 3	0 15	22 59	0 34	10 32	2 42	20 33	0 9	10 40	0 50	23 47	1 45	6 56	7 15	11 42	7 32	1 21	
S 12	1 8	9 12	4 11	2 19	1 23	14 34	0 56	23 6	0 14	22 58	0 34	10 30	2 42	20 33	0 9	10 39	0 50	23 47	1 45	6 57	7 17	11 41	7 31	1 20	
S 13	0 45	12 29	4 47	1 32	1 18	15 1	0 59	23 9	0 12	22 58	0 34	10 29	2 42	20 33	0 9	10 38	0 50	23 47	1 45	6 58	7 18	11 40	7 30	1 20	
M14	0 21	15 14	5 9	0 45	1 12	15 27	1 3	23 12	0 11	22 58	0 34	10 28	2 42	20 32	0 9	10 37	0 50	23 47	1 46	6 58	7 19	11 38	7 28	1 20	
T 15	0s 2	17 15	5 16	0s 2	1 7	15 53	1 7	23 14	0 9	22 58	0 34	10 26	2 42	20 32	0 9	10 37	0 50	23 47	1 46	6 59	7 20	11 37	7 27	1 20	
W16	0 26	18 23	5 6	0 48	1 1	16 19	1 10	23 17	0 8	22 58	0 34	10 25	2 42	20 32	0 9	10 36	0 50	23 47	1 46	6 59	7 21	11 35	7 26	1 20	
T 17	0 49	18 27	4 38	1 35	0 55	16 44	1 14	23 19	0 6	22 57	0 34	10 24	2 43	20 32	0 9	10 35	0 50	23 47	1 46	6 59	7 23	11 34	7 25	1 20	
F 18	1 13	17 24	3 53	2 21	0 49	17 9	1 17	23 22	0 5	22 57	0 34	10 22	2 43	20 32	0 9	10 34	0 50	23 47	1 46	6 59	7 24	11 32	7 24	1 20	
S 19	1 37	15 13	2 52	3 7	0 43	17 34	1 21	23 24	0 3	22 57	0 34	10 21	2 43	20 32	0 9	10 34	0 50	23 47	1 46	6 58	7 25	11 31	7 23	1 20	
S 20	2 0	12 1	1 40	3 52	0 36	17 58	1 24	23 27	0 1	22 56	0 34	10 19	2 43	20 31	0 9	10 33	0 50	23 47	1 46	6 58	7 26	11 30	7 22	1 20	
M21	2 24	8 0	0 20	4 37	0 30	18 22	1 28	23 29	0n 0	22 56	0 34	10 18	2 43	20 31	0 9	10 32	0 50	23 47	1 46	6 58	7 27	11 28	7 21	1 20	
T 22	2 47	3 28	1s 2	5 22	0 23	18 45	1 31	23 31	0 2	22 56	0 34	10 17	2 43	20 31	0 9	10 32	0 50	23 47	1 46	6 58	7 29	11 27	7 19	1 20	
W23	3 11	1n15	2 19	6 6	0 17	19 8	1 35	23 33	0 4	22 55	0 34	10 15	2 43	20 31	0 9	10 31	0 50	23 47	1 46	6 58	7 30	11 25	7 18	1 20	
T 24	3 34	5 50	3 26	6 50	0 10	19 30	1 38	23 35	0 5	22 55	0 34	10 14	2 43	20 31	0 9	10 30	0 50	23 47	1 47	6 59	7 31	11 24	7 17	1 20	
F 25	3 57	9 59	4 18	7 33	0 3	19 52	1 42	23 37	0 7	22 54	0 34	10 12	2 44	20 30	0 9	10 30	0 50	23 47	1 47	7 1	7 32	11 22	7 16	1 20	
S 26	4 21	13 27	4 54	8 16	0s 4	20 14	1 45	23 39	0 9	22 54	0 34	10 11	2 44	20 30	0 9	10 29	0 50	23 47	1 47	7 3	7 34	11 21	7 15	1 20	
S 27	4 44	16 6	5 11	8 58	0 11	20 35	1 49	23 41	0 11	22 53	0 34	10 9	2 44	20 30	0 9	10 28	0 50	23 47	1 47	7 4	7 35	11 19	7 13	1 19	
M28	5 7	17 48	5 12	9 39	0 18	20 55	1 52	23 43	0 13	22 53	0 34	10 7	2 44	20 30	0 9	10 28	0 51	23 47	1 47	7 5	7 36	11 18	7 12	1 19	
T 29	5 31	18 34	4 57	10 20	0 25	21 15	1 55	23 45	0 14	22 52	0 34	10 6	2 44	20 29	0 9	10 27	0 51	23 47	1 47	7 6	7 37	11 16	7 11	1 19	
W30	5s54	18n24	4s28	11s 1	0s32	21s35	1s58	23n47	0n16	22s51	0s34	10n 4	2s44	20m29	0s 9	10n26	0n51	23n47	1n47	7n 7	7n38	11n15	7n10	1n19	

# ASTRODIENST EPHEMERIS for the year 1439

## geocentric

OCTOBER 1439 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	1 11 13	15°54'42	25°14	28°48	28°39	0°40	18°7	3°R12	2°R 2	5°10	19°59	11°56	10°29	27°45	15°R 1	T 1
F 2	1 15 9	16°54'19	7°8	0°20	29°48	1° 0	18°12	3° 7	2°II 1	5°12	19°59	11°57	10°26	27°52	14°Y58	F 2
S 3	1 19 6	17°53'59	18°56	1°51	0°58	1°20	18°17	3° 3	1°59	5°14	20° 0	11°59	10°22	27°58	14°55	S 3
S 4	1 23 2	18°53'41	0°43	3°22	2° 7	1°38	18°23	2°58	1°58	5°16	20° 0	12° 0	10°19	28° 5	14°52	S 4
M 5	1 26 59	19°53'25	12°34	4°52	3°17	1°57	18°28	2°54	1°56	5°17	20° 0	12°R 1	10°16	28°11	14°49	M 5
T 6	1 30 56	20°53'11	24°32	6°22	4°26	2°14	18°34	2°49	1°54	5°19	20° 0	12° 0	10°13	28°18	14°46	T 6
W 7	1 34 52	21°53'00	6°39	7°51	5°35	2°31	18°40	2°44	1°53	5°21	20° 0	11°57	10°10	28°25	14°43	W 7
T 8	1 38 49	22°52'50	18°59	9°20	6°44	2°48	18°46	2°39	1°51	5°22	20° 0	11°52	10° 7	28°31	14°40	T 8
F 9	1 42 45	23°52'42	1°31	10°47	7°53	3° 4	18°52	2°35	1°49	5°24	20° 1	11°46	10° 3	28°38	14°38	F 9
S 10	1 46 42	24°52'37	14°17	12°14	9° 2	3°20	18°58	2°30	1°47	5°25	20° 1	11°38	10° 0	28°45	14°35	S 10
S 11	1 50 38	25°52'33	27°17	13°41	10°10	3°34	19° 5	2°25	1°45	5°27	20° 1	11°30	9°57	28°51	14°32	S 11
M12	1 54 35	26°52'31	10°29	15° 7	11°19	3°49	19°12	2°20	1°43	5°29	20° 1	11°23	9°54	28°58	14°29	M12
T 13	1 58 31	27°52'31	23°54	16°32	12°27	4° 2	19°19	2°15	1°41	5°30	20°R 1	11°17	9°51	29° 5	14°26	T 13
W14	2 2 28	28°52'33	7°30	17°56	13°36	4°15	19°25	2°11	1°39	5°32	20° 1	11°12	9°48	29°11	14°24	W14
T 15	2 6 25	29°52'36	21°17	19°20	14°44	4°28	19°33	2° 6	1°37	5°33	20° 1	11°10	9°44	29°18	14°21	T 15
F 16	2 10 21	0°52'41	5°15	20°42	15°52	4°39	19°40	2° 1	1°35	5°35	20° 1	11°D10	9°41	29°25	14°18	F 16
S 17	2 14 18	1°52'47	19°23	22° 4	17° 0	4°50	19°47	1°56	1°33	5°36	20° 1	11°11	9°38	29°31	14°15	S 17
S 18	2 18 14	2°52'55	3°41	23°25	18° 8	5° 1	19°55	1°51	1°31	5°37	20° 0	11°R12	9°35	29°38	14°13	S 18
M19	2 22 11	3°53'04	18° 6	24°44	19°15	5°11	20° 3	1°46	1°29	5°39	20° 0	11°12	9°32	29°44	14°10	M19
T 20	2 26 7	4°53'15	2°Y35	26° 3	20°23	5°20	20°11	1°41	1°27	5°40	20° 0	11°10	9°28	29°51	14° 7	T 20
W21	2 30 4	5°53'28	17° 3	27°20	21°30	5°28	20°19	1°37	1°25	5°41	20° 0	11° 6	9°25	29°58	14° 5	W21
T 22	2 34 0	6°53'42	1°24	28°36	22°37	5°35	20°27	1°32	1°22	5°43	20° 0	10°59	9°22	0°4	14° 2	T 22
F 23	2 37 57	7°53'58	15°33	29°50	23°44	5°42	20°35	1°27	1°20	5°44	19°59	10°50	9°19	0°11	14° 0	F 23
S 24	2 41 53	8°54'16	29°24	1° 2	24°51	5°48	20°44	1°22	1°18	5°45	19°59	10°40	9°16	0°18	13°57	S 24
S 25	2 45 50	9°54'36	12°II53	2°13	25°58	5°54	20°52	1°17	1°16	5°46	19°59	10°30	9°13	0°24	13°55	S 25
M26	2 49 47	10°54'58	25°59	3°21	27° 4	5°58	21° 1	1°13	1°13	5°48	19°59	10°21	9° 9	0°31	13°52	M26
T 27	2 53 43	11°55'21	8°42	4°27	28°10	6° 2	21°10	1° 8	1°11	5°49	19°58	10°13	9° 6	0°38	13°50	T 27
W28	2 57 40	12°55'47	21° 5	5°30	29°16	6° 5	21°19	1° 3	1° 9	5°50	19°58	10° 9	9° 3	0°44	13°47	W28
T 29	3 1 36	13°56'14	3°II2	6°29	0°22	6° 7	21°28	0°58	1° 6	5°51	19°57	10° 6	9° 0	0°51	13°45	T 29
F 30	3 5 33	14°56'43	15° 6	7°26	1°28	6° 9	21°37	0°54	1° 4	5°52	19°57	10°D 5	8°57	0°58	13°42	F 30
S 31	3 9 29	15°57'14	26°II55	8°18	2°33	6°R 9	21°346	0°B49	1°II 1	5°53	19°57	10°10	8°53	1°4	13°Y40	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	6s17	17n24	3s48	11s41	0s38	21s54	2s 2	23n49	0n18	22s51	0s34	10n 3	2s44	20n29	0s 9	10n26
F 2	6 40	15 39	2 59	12 20	0 45	22 12	2 5	23 50	0 20	22 50	0 34	10 1	2 44	20 28	0 9	10 25
S 3	7 3	13 15	2 3	12 58	0 52	22 30	2 8	23 52	0 22	22 49	0 34	9 59	2 44	20 28	0 9	10 24
S 4	7 25	10 18	1 1	13 36	0 59	22 47	2 11	23 54	0 24	22 49	0 34	9 58	2 44	20 28	0 9	10 24
M 5	7 48	6 55	0n 3	14 13	1 5	23 4	2 14	23 56	0 26	22 48	0 34	9 56	2 44	20 27	0 9	10 23
T 6	8 11	3 13	1 8	14 49	1 12	23 20	2 17	23 57	0 28	22 47	0 34	9 55	2 44	20 27	0 9	10 23
W 7	8 33	0s40	2 10	15 24	1 18	23 35	2 20	23 59	0 30	22 46	0 34	9 53	2 44	20 27	0 9	10 22
T 8	8 55	4 34	3 7	15 59	1 25	23 50	2 23	24 1	0 32	22 45	0 34	9 51	2 44	20 26	0 9	10 21
F 9	9 18	8 20	3 56	16 33	1 31	24 5	2 25	24 3	0 34	22 45	0 34	9 50	2 44	20 26	0 9	10 21
S 10	9 40	11 48	4 34	17 6	1 37	24 18	2 28	24 5	0 36	22 44	0 34	9 48	2 45	20 26	0 9	10 20
S 11	10 2	14 45	4 59	17 38	1 43	24 31	2 31	24 6	0 39	22 43	0 34	9 46	2 45	20 25	0 9	10 20
M12	10 23	17 0	5 8	18 9	1 49	24 44	2 33	24 8	0 41	22 42	0 34	9 45	2 45	20 25	0 9	10 19
T 13	10 45	18 21	5 1	18 39	1 54	24 56	2 36	24 10	0 43	22 41	0 34	9 43	2 45	20 24	0 9	10 19
W14	11 6	18 41	4 37	19 9	2 0	25 7	2 38	24 12	0 45	22 40	0 34	9 41	2 45	20 24	0 9	10 18
T 15	11 28	17 56	3 56	19 37	2 5	25 17	2 40	24 14	0 48	22 39	0 34	9 40	2 45	20 24	0 9	10 18
F 16	11 49	16 5	3 1	20 4	2 10	25 27	2 43	24 16	0 50	22 38	0 34	9 38	2 44	20 23	0 9	10 17
S 17	12 10	13 14	1 55	20 30	2 15	25 36	2 45	24 18	0 52	22 37	0 34	9 36	2 44	20 23	0 9	10 17
S 18	12 30	9 33	0 40	20 55	2 19	25 45	2 47	24 19	0 55	22 36	0 34	9 35	2 44	20 22	0 9	10 16
M19	12 51	5 17	0s37	21 19	2 23	25 53	2 49	24 22	0 57	22 34	0 34	9 33	2 44	20 22	0 9	10 16
T 20	13 11	0 41	1 52	21 42	2 27	26 0	2 51	24 24	1 0	22 33	0 34	9 32	2 44	20 22	0 9	10 15
W21	13 31	3n57	3 0	22 4	2 30	26 6	2 53	24 26	1 2	22 32	0 34	9 30	2 44	20 21	0 9	10 15
T 22	13 51	8 19	3 56	22 24	2 33	26 12	2 54	24 28	1 4	22 31	0 34	9 28	2 44	20 21	0 9	10 14
F 23	14 11	12 8	4 36	22 43	2 36	26 17	2 56	24 30	1 7	22 30	0 34	9 27	2 44	20 20	0 9	10 14
S 24	14 31	15 13	4 59	23 0	2 38	26 22	2 57	24 32	1 10	22 28	0 34	9 25	2 44	20 20	0 9	10 13
S 25	14 50	17 22	5 5	23 16	2 40	26 25	2 59	24 35	1 12	22 27	0 34	9 24	2 44	20 19	0 9	10 13
M26	15 9	18 33	4 54	23 31	2 41	26 28	3 0	24 37	1 15	22 26	0 34	9 22	2 44	20 19	0 9	10 13
T 27	15 27	18 45	4 28	23 44	2 41	26 31	3 1	24 40	1 17	22 24	0 34	9 20	2 44	20 18	0 9	10 12
W28	15 46	18 3	3 51	23 56	2 41	26 32	3 2	24 42	1 20	22 23	0 34	9 19	2 44	20 18	0 9	10 12
T 29	16 4	16 31	3 4	24 5	2 40	26 33	3 3	24 45	1 23	22 21	0 34	9 17	2 44	20 17	0 9	10 11
F 30	16 22	14 17	2 9	24 14	2 39	26 34	3 4	24 47	1 26	22 20	0 34	9 16	2 44	20 17	0 9	10 11
S 31	16s40	11n29	1s10	24s20	2s36	26s33	3s 4	24n50	1n28	22s19	0s34	9n14	2s43	20n16	0s 9	10n11

Julian Day Number = 2246925.5, Delta T = 06m47s

Ecliptic obliquity = 23°30'35", Nutation = - 0°00'07", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°55'28", Lahiri = 16°02'28" Julian Calendar 1 Oct. 1439 == Greg. Calendar 10 Oct. 1439

## ASTRODIENST EPHEMERIS for the year 1439

geocentric

NOVEMBER 1439 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	3 13 26	16 <sup>11</sup> 5747	8 <sup>11</sup> 43	9 <sup>11</sup> 5	3 <sup>11</sup> 39	6 <sup>11</sup> R 9	21 <sup>11</sup> 56	0 <sup>11</sup> R45	0 <sup>11</sup> R59	5 <sup>11</sup> 54	19 <sup>11</sup> R56	10 <sup>11</sup> R 6	8 <sup>11</sup> 50	1 <sup>11</sup> 11	13 <sup>11</sup> R38	S 1
M 2	3 17 22	17 <sup>11</sup> 58'22	20 <sup>11</sup> 35	9 <sup>11</sup> 48	4 <sup>11</sup> 44	6 <sup>11</sup> 8	22 <sup>11</sup> 6	0 <sup>11</sup> 40	0 <sup>11</sup> 56	5 <sup>11</sup> 55	19 <sup>11</sup> 56	10 <sup>11</sup> 6	8 <sup>11</sup> 47	1 <sup>11</sup> 18	13 <sup>11</sup> Y36	M 2
T 3	3 21 19	18 <sup>11</sup> 58'58	2 <sup>11</sup> 37	10 <sup>11</sup> 25	5 <sup>11</sup> 48	6 <sup>11</sup> 6	22 <sup>11</sup> 15	0 <sup>11</sup> 36	0 <sup>11</sup> 54	5 <sup>11</sup> 56	19 <sup>11</sup> 55	10 <sup>11</sup> 3	8 <sup>11</sup> 44	1 <sup>11</sup> 24	13 <sup>11</sup> 33	T 3
W 4	3 25 16	19 <sup>11</sup> 59'36	14 <sup>11</sup> 52	10 <sup>11</sup> 55	6 <sup>11</sup> 53	6 <sup>11</sup> 3	22 <sup>11</sup> 25	0 <sup>11</sup> 31	0 <sup>11</sup> 52	5 <sup>11</sup> 57	19 <sup>11</sup> 55	9 <sup>11</sup> 58	8 <sup>11</sup> 41	1 <sup>11</sup> 31	13 <sup>11</sup> 31	W 4
T 5	3 29 12	21 <sup>11</sup> 0'16	27 <sup>11</sup> 24	11 <sup>11</sup> 18	7 <sup>11</sup> 57	5 <sup>11</sup> 59	22 <sup>11</sup> 35	0 <sup>11</sup> 27	0 <sup>11</sup> 49	5 <sup>11</sup> 58	19 <sup>11</sup> 54	9 <sup>11</sup> 50	8 <sup>11</sup> 38	1 <sup>11</sup> 37	13 <sup>11</sup> 29	T 5
F 6	3 33 9	22 <sup>11</sup> 0'57	10 <sup>11</sup> 13	11 <sup>11</sup> 33	9 <sup>11</sup> 1	5 <sup>11</sup> 54	22 <sup>11</sup> 45	0 <sup>11</sup> 22	0 <sup>11</sup> 47	5 <sup>11</sup> 58	19 <sup>11</sup> 53	9 <sup>11</sup> 40	8 <sup>11</sup> 34	1 <sup>11</sup> 44	13 <sup>11</sup> 27	F 6
S 7	3 37 5	23 <sup>11</sup> 1'40	23 <sup>11</sup> 21	11 <sup>11</sup> R39	10 <sup>11</sup> 5	5 <sup>11</sup> 49	22 <sup>11</sup> 56	0 <sup>11</sup> 18	0 <sup>11</sup> 44	5 <sup>11</sup> 59	19 <sup>11</sup> 53	9 <sup>11</sup> 28	8 <sup>11</sup> 31	1 <sup>11</sup> 51	13 <sup>11</sup> 25	S 7
S 8	3 41 2	24 <sup>11</sup> 2'25	6 <sup>11</sup> 45	11 <sup>11</sup> 36	11 <sup>11</sup> 8	5 <sup>11</sup> 43	23 <sup>11</sup> 6	0 <sup>11</sup> 14	0 <sup>11</sup> 42	6 <sup>11</sup> 0	19 <sup>11</sup> 52	9 <sup>11</sup> 15	8 <sup>11</sup> 28	1 <sup>11</sup> 57	13 <sup>11</sup> 23	S 8
M 9	3 44 58	25 <sup>11</sup> 3'10	20 <sup>11</sup> 23	11 <sup>11</sup> 23	12 <sup>11</sup> 12	5 <sup>11</sup> 35	23 <sup>11</sup> 16	0 <sup>11</sup> 10	0 <sup>11</sup> 39	6 <sup>11</sup> 1	19 <sup>11</sup> 52	9 <sup>11</sup> 3	8 <sup>11</sup> 25	2 <sup>11</sup> 4	13 <sup>11</sup> 21	M 9
T 10	3 48 55	26 <sup>11</sup> 3'57	4 <sup>11</sup> 11	10 <sup>11</sup> 59	13 <sup>11</sup> 15	5 <sup>11</sup> 27	23 <sup>11</sup> 27	0 <sup>11</sup> 6	0 <sup>11</sup> 37	6 <sup>11</sup> 1	19 <sup>11</sup> 51	8 <sup>11</sup> 52	8 <sup>11</sup> 22	2 <sup>11</sup> 11	13 <sup>11</sup> 19	T 10
W11	3 52 51	27 <sup>11</sup> 4'45	18 <sup>11</sup> 7	10 <sup>11</sup> 24	14 <sup>11</sup> 17	5 <sup>11</sup> 18	23 <sup>11</sup> 38	0 <sup>11</sup> 1	0 <sup>11</sup> 34	6 <sup>11</sup> 2	19 <sup>11</sup> 50	8 <sup>11</sup> 45	8 <sup>11</sup> 19	2 <sup>11</sup> 17	13 <sup>11</sup> 17	W11
T 12	3 56 48	28 <sup>11</sup> 5'34	2 <sup>11</sup> 8	9 <sup>11</sup> 39	15 <sup>11</sup> 19	5 <sup>11</sup> 9	23 <sup>11</sup> 48	29 <sup>11</sup> Y57	0 <sup>11</sup> 31	6 <sup>11</sup> 3	19 <sup>11</sup> 49	8 <sup>11</sup> 40	8 <sup>11</sup> 15	2 <sup>11</sup> 24	13 <sup>11</sup> 15	T 12
F 13	4 0 45	29 <sup>11</sup> 6'24	16 <sup>11</sup> 11	8 <sup>11</sup> 43	16 <sup>11</sup> 21	4 <sup>11</sup> 58	23 <sup>11</sup> 59	29 <sup>11</sup> 54	0 <sup>11</sup> 29	6 <sup>11</sup> 3	19 <sup>11</sup> 49	8 <sup>11</sup> 38	8 <sup>11</sup> 12	2 <sup>11</sup> 31	13 <sup>11</sup> 13	F 13
S 14	4 4 41	0 <sup>11</sup> 7'15	0 <sup>11</sup> 15	7 <sup>11</sup> 37	17 <sup>11</sup> 23	4 <sup>11</sup> 46	24 <sup>11</sup> 10	29 <sup>11</sup> 50	0 <sup>11</sup> 26	6 <sup>11</sup> 4	19 <sup>11</sup> 48	8 <sup>11</sup> 37	8 <sup>11</sup> 9	2 <sup>11</sup> 37	13 <sup>11</sup> 12	S 14
S 15	4 8 38	1 <sup>11</sup> 8'07	14 <sup>11</sup> 20	6 <sup>11</sup> 24	18 <sup>11</sup> 24	4 <sup>11</sup> 34	24 <sup>11</sup> 21	29 <sup>11</sup> 46	0 <sup>11</sup> 24	6 <sup>11</sup> 4	19 <sup>11</sup> 47	8 <sup>11</sup> 37	8 <sup>11</sup> 6	2 <sup>11</sup> 44	13 <sup>11</sup> 10	S 15
M16	4 12 34	2 <sup>11</sup> 8'59	28 <sup>11</sup> 25	5 <sup>11</sup> 5	19 <sup>11</sup> 25	4 <sup>11</sup> 21	24 <sup>11</sup> 32	29 <sup>11</sup> 42	0 <sup>11</sup> 21	6 <sup>11</sup> 5	19 <sup>11</sup> 46	8 <sup>11</sup> 36	8 <sup>11</sup> 3	2 <sup>11</sup> 51	13 <sup>11</sup> 8	M16
T 17	4 16 31	3 <sup>11</sup> 9'52	12 <sup>11</sup> Y29	3 <sup>11</sup> 43	20 <sup>11</sup> 25	4 <sup>11</sup> 7	24 <sup>11</sup> 44	29 <sup>11</sup> 39	0 <sup>11</sup> 19	6 <sup>11</sup> 5	19 <sup>11</sup> 46	8 <sup>11</sup> 33	7 <sup>11</sup> 59	2 <sup>11</sup> 57	13 <sup>11</sup> 7	T 17
W18	4 20 27	4 <sup>11</sup> 10'47	26 <sup>11</sup> 29	2 <sup>11</sup> 20	21 <sup>11</sup> 25	3 <sup>11</sup> 52	24 <sup>11</sup> 55	29 <sup>11</sup> 35	0 <sup>11</sup> 16	6 <sup>11</sup> 6	19 <sup>11</sup> 45	8 <sup>11</sup> 27	7 <sup>11</sup> 56	3 <sup>11</sup> 4	13 <sup>11</sup> 5	W18
T 19	4 24 24	5 <sup>11</sup> 11'42	10 <sup>11</sup> Y23	1 <sup>11</sup> 0	22 <sup>11</sup> 24	3 <sup>11</sup> 37	25 <sup>11</sup> 7	29 <sup>11</sup> 32	0 <sup>11</sup> 14	6 <sup>11</sup> 6	19 <sup>11</sup> 44	8 <sup>11</sup> 18	7 <sup>11</sup> 53	3 <sup>11</sup> 11	13 <sup>11</sup> 4	T 19
F 20	4 28 20	6 <sup>11</sup> 12'38	24 <sup>11</sup> 8	29 <sup>11</sup> Y44	23 <sup>11</sup> 23	3 <sup>11</sup> 21	25 <sup>11</sup> 18	29 <sup>11</sup> 28	0 <sup>11</sup> 11	6 <sup>11</sup> 7	19 <sup>11</sup> 43	8 <sup>11</sup> 6	7 <sup>11</sup> 50	3 <sup>11</sup> 17	13 <sup>11</sup> 2	F 20
S 21	4 32 17	7 <sup>11</sup> 13'34	7 <sup>11</sup> Y40	28 <sup>11</sup> 36	24 <sup>11</sup> 22	3 <sup>11</sup> 4	25 <sup>11</sup> 30	29 <sup>11</sup> 25	0 <sup>11</sup> 9	6 <sup>11</sup> 7	19 <sup>11</sup> 42	7 <sup>11</sup> 53	7 <sup>11</sup> 47	3 <sup>11</sup> 24	13 <sup>11</sup> 1	S 21
S 22	4 36 14	8 <sup>11</sup> 14'32	20 <sup>11</sup> 55	27 <sup>11</sup> 37	25 <sup>11</sup> 20	2 <sup>11</sup> 46	25 <sup>11</sup> 41	29 <sup>11</sup> 22	0 <sup>11</sup> 6	6 <sup>11</sup> 7	19 <sup>11</sup> 41	7 <sup>11</sup> 39	7 <sup>11</sup> 44	3 <sup>11</sup> 30	12 <sup>11</sup> 59	S 22
M23	4 40 10	9 <sup>11</sup> 15'31	3 <sup>11</sup> Y53	26 <sup>11</sup> 48	26 <sup>11</sup> 18	2 <sup>11</sup> 28	25 <sup>11</sup> 53	29 <sup>11</sup> 18	0 <sup>11</sup> 4	6 <sup>11</sup> 7	19 <sup>11</sup> 40	7 <sup>11</sup> 27	7 <sup>11</sup> 40	3 <sup>11</sup> 37	12 <sup>11</sup> 58	M23
T 24	4 44 7	10 <sup>11</sup> 16'31	16 <sup>11</sup> 31	26 <sup>11</sup> 10	27 <sup>11</sup> 15	2 <sup>11</sup> 9	26 <sup>11</sup> 5	29 <sup>11</sup> 15	0 <sup>11</sup> 1	6 <sup>11</sup> 8	19 <sup>11</sup> 39	7 <sup>11</sup> 17	7 <sup>11</sup> 37	3 <sup>11</sup> 44	12 <sup>11</sup> 57	T 24
W25	4 48 3	11 <sup>11</sup> 17'32	28 <sup>11</sup> 52	25 <sup>11</sup> 44	28 <sup>11</sup> 11	1 <sup>11</sup> 49	26 <sup>11</sup> 17	29 <sup>11</sup> 12	29 <sup>11</sup> Y59	6 <sup>11</sup> 8	19 <sup>11</sup> 38	7 <sup>11</sup> 9	7 <sup>11</sup> 34	3 <sup>11</sup> 50	12 <sup>11</sup> 56	W25
T 26	4 52 0	12 <sup>11</sup> 18'34	10 <sup>11</sup> Y58	25 <sup>11</sup> 29	29 <sup>11</sup> 7	1 <sup>11</sup> 29	26 <sup>11</sup> 29	29 <sup>11</sup> 10	29 <sup>11</sup> 56	6 <sup>11</sup> 8	19 <sup>11</sup> 37	7 <sup>11</sup> 4	7 <sup>11</sup> 31	3 <sup>11</sup> 57	12 <sup>11</sup> 55	T 26
F 27	4 55 56	13 <sup>11</sup> 19'37	22 <sup>11</sup> 52	25 <sup>11</sup> D24	0 <sup>11</sup> 3	1 <sup>11</sup> 8	26 <sup>11</sup> 41	29 <sup>11</sup> 7	29 <sup>11</sup> 54	6 <sup>11</sup> 8	19 <sup>11</sup> 36	7 <sup>11</sup> 2	7 <sup>11</sup> 28	4 <sup>11</sup> 4	12 <sup>11</sup> 53	F 27
S 28	4 59 53	14 <sup>11</sup> 20'41	4 <sup>11</sup> Y41	25 <sup>11</sup> 29	0 <sup>11</sup> 57	0 <sup>11</sup> 47	26 <sup>11</sup> 54	29 <sup>11</sup> 4	29 <sup>11</sup> 51	6 <sup>11</sup> 8	19 <sup>11</sup> 35	7 <sup>11</sup> D 1	7 <sup>11</sup> 25	4 <sup>11</sup> 10	12 <sup>11</sup> 52	S 28
S 29	5 3 50	15 <sup>11</sup> 21'46	16 <sup>11</sup> 28	25 <sup>11</sup> 44	1 <sup>11</sup> 51	0 <sup>11</sup> 25	27 <sup>11</sup> 6	29 <sup>11</sup> 1	29 <sup>11</sup> 49	6 <sup>11</sup> 8	19 <sup>11</sup> 34	7 <sup>11</sup> R 1	7 <sup>11</sup> 21	4 <sup>11</sup> 17	12 <sup>11</sup> 51	S 29
M30	5 7 46	16 <sup>11</sup> 22'51	28 <sup>11</sup> Y21	26 <sup>11</sup> 8	2 <sup>11</sup> 45	0 <sup>11</sup> 3	27 <sup>11</sup> Y18	28 <sup>11</sup> Y59	29 <sup>11</sup> Y47	6 <sup>11</sup> R 8	19 <sup>11</sup> Y33	7 <sup>11</sup> Y 1	7 <sup>11</sup> Y18	4 <sup>11</sup> Y24	12 <sup>11</sup> Y51	M30

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	
S 1	16s57	8n13	0s 7	24s24	2s33	26s32	3s 5	24n53	1n31	22s17	0s34	9n13	2s43	20n16	0s 9	10n10
M 2	17 14	4 36	0n56	24 26	2 29	26 30	3 5	24 56	1 34	22 15	0 34	9 11	2 43	20 15	0 9	10 10
T 3	17 31	0 45	1 57	24 26	2 23	26 28	3 5	24 59	1 37	22 14	0 34	9 10	2 43	20 15	0 9	10 10
W 4	17 47	3s12	2 54	24 24	2 17	26 25	3 5	25 2	1 40	22 12	0 34	9 9	2 43	20 14	0 9	10 10
T 5	18 4	7 6	3 44	24 20	2 9	26 21	3 5	25 5	1 42	22 11	0 34	9 7	2 43	20 14	0 9	10 9
F 6	18 20	10 46	4 23	24 13	2 0	26 17	3 5	25 8	1 45	22 9	0 34	9 6	2 43	20 13	0 9	10 9
S 7	18 35	13 59	4 50	24 3	1 49	26 12	3 5	25 11	1 48	22 7	0 34	9 4	2 42	20 13	0 9	10 9
S 8	18 50	16 33	5 1	23 51	1 37	26 6	3 4	25 14	1 51	22 6	0 34	9 3	2 42	20 12	0 9	10 8
M 9	19 5	18 15	4 55	23 35	1 23	26 0	3 4	25 17	1 54	22 4	0 35	9 2	2 42	20 12	0 9	10 8
T 10	19 20	18 54	4 33	23 17	1 8	25 53	3 3	25 21	1 57	22 2	0 35	9 1	2 42	20 11	0 9	10 8
W11	19 34	18 25	3 54	22 56	0 52	25 45	3 2	25 24	2 0	22 0	0 35	8 59	2 42	20 11	0 9	10 8
T 12	19 48	16 49	3 0	22 31	0 34	25 37	3 1	25 27	2 3	21 58	0 35	8 58	2 42	20 10	0 9	10 8
F 13	20 1	14 11	1 56	22 4	0 15	25 28	2 59	25 31	2 6	21 56	0 35	8 57	2 41	20 10	0 9	10 7
S 14	20 14	10 44	0 44	21 33	0n 5	25 19	2 58	25 34	2 9	21 55	0 35	8 56	2 41	20 9	0 9	10 7
S 15	20 27	6 39	0s30	21 1	0 26	25 9	2 56	25 37	2 12	21 53	0 35	8 55	2 41	20 9	0 9	10 7
M16	20 39	2 12	1 43	20 27	0 46	24 59	2 55	25 41	2 14	21 51	0 35	8 53	2 41	20 8	0 9	10 7
T 17	20 51	2n21	2 49	19 52	1 6	24 48	2 53	25 44	2 17	21 49	0 35	8 52	2 41	20 8	0 9	10 7
W18	21 3	6 46	3 44	19 18	1 25	24 36	2 50	25 47	2 20	21 47	0 35	8 51	2 40	20 7	0 9	10 7
T 19	21 14	10 46	4 26	18 44	1 43	24 24	2 48	25 51	2 23	21 45	0 35	8 50	2 40	20 7	0 9	10 7
F 20	21 25	14 9	4 51	18 13	1 59	24 12	2 46	25 54	2 26	21 42	0 35	8 49	2 40	20 6	0 9	10 6
S 21	21 35	16 43	5 0	17 45	2 12	23 59	2 43	25 57	2 29	21 40	0 35	8 48	2 40	20 6	0 9	10 6
S 22	21 45	18 20	4 52	17 21	2 24	23 45	2 40	26 0	2 32	21 38	0 35	8 47	2 40	20 5	0 9	10 6
M23	21 54	18 58	4 29	17 1	2 33	23 31	2 37	26 4	2 34	21 36	0 35	8 47	2 39	20 5	0 9	10 6
T 24	22 3	18 37	3 54	16 46	2 40	23 17	2 33	26 7	2 37	21 34	0 35	8 46	2 39	20 4	0 9	10 6</

## ASTRODIENST EPHEMERIS for the year 1439

geocentric

DECEMBER 1439 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	5 11 43	17°23'58	10°23	26°39	3°38	29°R41	27°31	28°R57	29°R44	6°R 8	19°R32	6°R58	7°15	4°30	12°R50	T 1
W 2	5 15 39	18°25'05	22°41	27°16	4°30	29°II18	27°43	28°R54	29°R42	6°R 8	19°R31	6°R54	7°12	4°37	12°R49	W 2
T 3	5 19 36	19°26'14	5°18	28° 0	5°21	28°55	27°56	28°52	29°39	6° 8	19°30	6°47	7° 9	4°44	12°48	T 3
F 4	5 23 32	20°27'23	18°18	28°50	6°12	28°31	28° 9	28°50	29°37	6° 8	19°29	6°37	7° 5	4°50	12°47	F 4
S 5	5 27 29	21°28'32	1°41	29°44	7° 2	28° 8	28°21	28°48	29°35	6° 8	19°28	6°25	7° 2	4°57	12°47	S 5
S 6	5 31 25	22°29'43	15°25	0°42	7°51	27°44	28°34	28°46	29°33	6° 8	19°27	6°13	6°59	5° 3	12°46	S 6
M 7	5 35 22	23°30'54	29°28	1°45	8°39	27°20	28°47	28°44	29°30	6° 7	19°25	6° 1	6°56	5°10	12°46	M 7
T 8	5 39 19	24°32'05	13°34	2°50	9°26	26°56	29° 0	28°43	29°28	6° 7	19°24	5°50	6°53	5°17	12°45	T 8
W 9	5 43 15	25°33'16	28° 7	3°58	10°12	26°32	29°13	28°41	29°26	6° 7	19°23	5°43	6°50	5°23	12°45	W 9
T 10	5 47 12	26°34'28	12°33	5° 9	10°58	26° 9	29°26	28°40	29°24	6° 7	19°22	5°38	6°46	5°30	12°44	T 10
F 11	5 51 8	27°35'39	26°55	6°22	11°42	25°45	29°39	28°38	29°21	6° 6	19°21	5°36	6°43	5°37	12°44	F 11
S 12	5 55 5	28°36'50	11°10	7°37	12°25	25°21	29°52	28°37	29°19	6° 6	19°19	5°D36	6°40	5°43	12°44	S 12
S 13	5 59 1	29°38'02	25°17	8°54	13° 7	24°58	0°6	28°36	29°17	6° 5	19°18	5°R36	6°37	5°50	12°44	S 13
M14	6 2 58	0°39'12	9°15	10°12	13°48	24°35	0°19	28°35	29°15	6° 5	19°17	5°36	6°34	5°57	12°44	M14
T 15	6 6 54	1°40'23	23° 4	11°32	14°28	24°12	0°32	28°34	29°13	6° 4	19°16	5°34	6°31	6° 3	12°D44	T 15
W16	6 10 51	2°41'34	6°43	12°53	15° 7	23°50	0°46	28°33	29°11	6° 4	19°14	5°29	6°27	6°10	12°44	W16
T 17	6 14 48	3°42'44	20°13	14°15	15°44	23°28	0°59	28°32	29° 9	6° 3	19°13	5°22	6°24	6°17	12°44	T 17
F 18	6 18 44	4°43'54	3°11	15°38	16°20	23° 6	1°13	28°32	29° 7	6° 3	19°12	5°13	6°21	6°23	12°44	F 18
S 19	6 22 41	5°45'04	16°38	17° 2	16°54	22°45	1°26	28°31	29° 5	6° 2	19°11	5° 2	6°18	6°30	12°44	S 19
S 20	6 26 37	6°46'14	29°32	18°26	17°27	22°24	1°40	28°31	29° 3	6° 2	19° 9	4°51	6°15	6°37	12°44	S 20
M21	6 30 34	7°47'24	12°53	19°52	17°58	22° 4	1°54	28°31	29° 2	6° 1	19° 8	4°40	6°11	6°43	12°45	M21
T 22	6 34 30	8°48'34	24°39	21°18	18°28	21°45	2° 7	28°31	29° 0	6° 0	19° 7	4°32	6° 8	6°50	12°45	T 22
W23	6 38 27	9°49'43	6°52	22°45	18°56	21°26	2°21	28°D31	28°58	5°59	19° 6	4°25	6° 5	6°56	12°45	W23
T 24	6 42 23	10°50'52	18°54	24°13	19°23	21° 8	2°35	28°31	28°56	5°59	19° 4	4°22	6° 2	7° 3	12°46	T 24
F 25	6 46 20	11°52'01	0°47	25°41	19°47	20°50	2°48	28°31	28°55	5°58	19° 3	4°D20	5°59	7°10	12°46	F 25
S 26	6 50 17	12°53'10	12°34	27°10	20°10	20°33	3° 2	28°31	28°53	5°57	19° 2	4°20	5°56	7°16	12°47	S 26
S 27	6 54 13	13°54'19	24°21	28°39	20°31	20°17	3°16	28°32	28°51	5°56	19° 0	4°22	5°52	7°23	12°48	S 27
M28	6 58 10	14°55'28	6°13	0°3	20°50	20° 1	3°30	28°32	28°50	5°55	18°59	4°23	5°49	7°30	12°48	M28
T 29	7 2 6	15°56'36	18°14	1°40	21° 7	19°46	3°44	28°33	28°48	5°54	18°58	4°R23	5°46	7°36	12°49	T 29
W30	7 6 3	16°57'44	0°10	3°11	21°22	19°32	3°58	28°34	28°47	5°53	18°56	4°22	5°43	7°43	12°50	W30
T 31	7 9 59	17°58'52	13°10	4°34	21°34	19°II19	4°12	28°R35	28°R46	5°52	18°55	4°19	5°40	7°50	12°51	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	22s55	1s34	2n47	16s52	2n40	21s24	2s 4	26n25	2n55	21s17	0s35	8n41	2s37	20n 0	0s 9	10n 6
W 2	23 0	5 29	3 37	17 5	2 35	21 7	1 59	26 28	2 57	21 15	0 35	8 40	2 37	20 0	0 9	10 6
T 3	23 5	9 16	4 18	17 21	2 30	20 49	1 53	26 30	2 59	21 13	0 35	8 40	2 37	20 0	0 9	10 6
F 4	23 10	12 44	4 47	17 37	2 24	20 31	1 48	26 32	3 2	21 10	0 35	8 39	2 37	19 59	0 9	10 6
S 5	23 14	15 39	5 1	17 55	2 17	20 13	1 42	26 33	3 4	21 7	0 35	8 39	2 36	19 59	0 9	10 7
S 6	23 18	17 47	4 58	18 14	2 10	19 54	1 36	26 35	3 6	21 5	0 35	8 38	2 36	19 58	0 9	10 7
M 7	23 21	18 53	4 37	18 34	2 3	19 35	1 30	26 36	3 7	21 2	0 35	8 38	2 36	19 58	0 9	10 7
T 8	23 24	18 50	3 59	18 54	1 55	19 17	1 23	26 38	3 9	21 0	0 35	8 38	2 35	19 57	0 9	10 7
W 9	23 26	17 34	3 5	19 15	1 47	18 57	1 16	26 39	3 11	20 57	0 35	8 37	2 35	19 57	0 9	10 7
T 10	23 28	15 11	1 59	19 36	1 39	18 38	1 9	26 40	3 13	20 54	0 35	8 37	2 35	19 56	0 9	10 7
F 11	23 29	11 51	0 46	19 56	1 31	18 19	1 2	26 41	3 14	20 52	0 35	8 37	2 35	19 56	0 9	10 7
S 12	23 30	7 51	0s30	20 17	1 23	17 59	0 54	26 41	3 16	20 49	0 35	8 37	2 34	19 55	0 9	10 8
S 13	23 31	3 27	1 43	20 37	1 15	17 40	0 46	26 42	3 17	20 46	0 35	8 36	2 34	19 55	0 9	10 8
M14	23 30	1n 5	2 49	20 57	1 7	17 20	0 38	26 42	3 18	20 43	0 35	8 36	2 34	19 54	0 9	10 8
T 15	23 30	5 30	3 45	21 16	0 59	17 0	0 29	26 42	3 19	20 40	0 36	8 36	2 33	19 54	0 9	10 8
W16	23 29	9 35	4 27	21 35	0 50	16 40	0 20	26 42	3 21	20 37	0 36	8 36	2 33	19 54	0 9	10 8
T 17	23 27	13 8	4 54	21 53	0 42	16 21	0 11	26 42	3 22	20 35	0 36	8 36	2 33	19 53	0 9	10 9
F 18	23 25	15 57	5 4	22 10	0 34	16 1	0 2	26 42	3 22	20 32	0 36	8 36	2 33	19 53	0 9	10 9
S 19	23 23	17 54	4 58	22 26	0 26	15 41	0n 8	26 42	3 23	20 29	0 36	8 37	2 32	19 52	0 9	10 9
S 20	23 20	18 54	4 37	22 42	0 18	15 22	0 18	26 41	3 24	20 26	0 36	8 37	2 32	19 52	0 9	10 9
M21	23 17	18 56	4 2	22 57	0 11	15 2	0 28	26 41	3 25	20 23	0 36	8 37	2 32	19 52	0 9	10 10
T 22	23 13	18 2	3 16	23 10	0 3	14 43	0 39	26 40	3 25	20 20	0 36	8 37	2 31	19 51	0 9	10 10
W23	23 9	16 19	2 22	23 23	0s 4	14 24	0 50	26 39	3 26	20 17	0 36	8 37	2 31	19 51	0 9	10 10
T 24	23 4	13 54	1 22	23 35	0 12	14 5	1 1	26 38	3 26	20 13	0 36	8 38	2 31	19 50	0 9	10 11
F 25	22 59	10 56	0 19	23 45	0 19	13 46	1 13	26 37	3 26	20 10	0 36	8 38	2 30	19 50	0 9	10 11
S 26	22 53	7 33	0n44	23 55	0 26	13 28	1 24	26 36	3 27	20 7	0 36	8 39	2 30	19 50	0 9	10 11
S 27	22 47	3 52	1 46	24 3	0 33	13 10	1 37	26 35	3 27	20 4	0 36	8 39	2 30	19 49	0 9	10 12
M28	22 40	0 2	2 44	24 10	0 40	12 52	1 49	26 34	3 27	20 1	0 36	8 39	2 30	19 49	0 9	10 12
T 29	22 33	3s51	3 35	24 16	0 46	12 35	2 2	26 33	3 27	19 58	0 36	8 40	2 29	19 49	0 9	10 12
W30	22 26	7 40	4 17	24 21	0 53	12 18	2 15	26 32	3 27	19 54	0 36	8 41	2 29	19 48	0 9	10 13
T 31	22s18	11s14	4n49	24s24	0s59	12s 1	2n28	26n31	3n27	19s51	0s36	8n41	2s29	19n48	0s 9	10n13

Julian Day Number = 2246986.5, Delta T = 06m47s

Ecliptic obliquity = 23°30'34", Nutation = - 0°00'07", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 16°55'36", Lahiri = 16°02'36" Julian Calendar 1 Dec. 1439 == Greg. Calendar 10 Dec. 1439