



# Astrodienst Ephemeris Tables for the year 1770

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 1770

## geocentric

JANUARY 1770

00:00 UT

Day	Sid.t	☉	☾	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	6 42 40	10°34'49	22°55	5°35	20°13	15°47	11°45	0°R14	7°R37	11°R42	15°15	14°R38	13°28	24°45	20°17	M 1
T 2	6 46 37	11°45'00	5°19	7°10	21°28	16°30	11°58	0°R 9	7°R36	11°R42	15°17	14°R33	13°25	24°52	20° 8	T 2
W 3	6 50 33	12°46'11	17°57	8°46	22°43	17°14	12°10	0° 5	7°36	11°41	15°19	14°30	13°22	24°58	20°10	W 3
T 4	6 54 30	13°47'21	0°Y50	10°22	23°58	17°57	12°23	29°59	7°35	11°40	15°21	14°28	13°19	25° 5	20°12	T 4
F 5	6 58 26	14°48'31	14° 3	11°58	25°13	18°41	12°35	29°55	7°34	11°40	15°23	14°D27	13°15	25°12	20°14	F 5
S 6	7 2 23	15°49'40	27°37	13°35	26°28	19°24	12°47	29°51	7°34	11°39	15°25	14°27	13°12	25°18	20°16	S 6
S 7	7 6 20	16°50'49	11°R34	15°13	27°43	20° 8	13° 0	29°46	7°33	11°38	15°27	14°29	13° 9	25°25	20°18	S 7
M 8	7 10 16	17°51'57	25°54	16°51	28°59	20°51	13°12	29°41	7°33	11°37	15°29	14°30	13° 6	25°32	20°20	M 8
T 9	7 14 13	18°53'04	10°R35	18°29	0°R14	21°35	13°24	29°36	7°33	11°36	15°31	14°R31	13° 3	25°38	20°22	T 9
W10	7 18 9	19°54'11	25°34	20° 8	1°29	22°19	13°36	29°32	7°32	11°35	15°33	14°31	12°59	25°45	20°24	W10
T11	7 22 6	20°55'18	10°R41	21°47	2°44	23° 3	13°49	29°27	7°32	11°35	15°36	14°29	12°56	25°52	20°26	T11
F12	7 26 2	21°56'24	25°49	23°27	3°59	23°46	14° 1	29°22	7°32	11°34	15°38	14°25	12°53	25°58	20°29	F12
S13	7 29 59	22°57'29	10°R48	25° 7	5°14	24°30	14°12	29°17	7°32	11°33	15°40	14°19	12°50	26° 5	20°31	S13
S14	7 33 55	23°58'34	25°29	26°48	6°30	25°14	14°24	29°12	7°32	11°32	15°42	14°13	12°47	26°11	20°33	S14
M15	7 37 52	24°59'39	9°R45	28°29	7°45	25°58	14°36	29° 7	7°D32	11°31	15°44	14° 6	12°44	26°18	20°36	M15
T16	7 41 49	26° 0'43	23°32	0°R11	9° 0	26°42	14°48	29° 2	7°32	11°30	15°46	14° 1	12°40	26°25	20°38	T16
W17	7 45 45	27° 1'47	6°R50	1°53	10°15	27°26	15° 0	28°57	7°32	11°29	15°48	13°57	12°37	26°31	20°41	W17
T18	7 49 42	28° 2'50	19°42	3°36	11°30	28°10	15°11	28°52	7°32	11°28	15°50	13°55	12°34	26°38	20°43	T18
F19	7 53 38	29° 3'53	2°R10	5°19	12°45	28°54	15°23	28°47	7°32	11°26	15°52	13°D55	12°31	26°45	20°46	F19
S20	7 57 35	0°R45	14°20	7° 2	14° 1	29°38	15°34	28°42	7°32	11°25	15°54	13°55	12°28	26°51	20°48	S20
S21	8 1 31	1° 5'57	26°17	8°46	15°16	0°R22	15°46	28°37	7°33	11°24	15°56	13°57	12°25	26°58	20°51	S21
M22	8 5 28	2° 6'59	8°R 6	10°30	16°31	1° 6	15°57	28°33	7°33	11°23	15°58	13°R58	12°21	27° 5	20°54	M22
T23	8 9 24	3° 8'00	19°52	12°14	17°46	1°51	16° 8	28°28	7°33	11°22	16° 0	13°58	12°18	27°11	20°56	T23
W24	8 13 21	4° 9'00	1°R38	13°59	19° 1	2°35	16°19	28°23	7°34	11°20	16° 2	13°56	12°15	27°18	20°59	W24
T25	8 17 18	5° 9'59	13°30	15°43	20°17	3°19	16°30	28°18	7°34	11°19	16° 4	13°52	12°12	27°25	21° 2	T25
F26	8 21 14	6°10'58	25°28	17°27	21°32	4° 3	16°41	28°13	7°35	11°18	16° 6	13°45	12° 9	27°31	21° 5	F26
S27	8 25 11	7°11'55	7°R35	19°11	22°47	4°48	16°52	28° 8	7°35	11°17	16° 8	13°36	12° 5	27°38	21° 7	S27
S28	8 29 7	8°12'52	19°53	20°54	24° 2	5°32	17° 3	28° 3	7°36	11°15	16° 9	13°26	12° 2	27°45	21°10	S28
M29	8 33 4	9°13'47	2°R21	22°36	25°17	6°17	17°14	27°58	7°37	11°14	16°11	13°15	11°59	27°51	21°13	M29
T30	8 37 0	10°14'41	15° 1	24°18	26°32	7° 1	17°24	27°54	7°37	11°13	16°13	13° 4	11°56	27°58	21°16	T30
W31	8 40 57	11°15'34	27°R52	25°R58	27°R48	7°R46	17°R35	27°R49	7°R38	11°R11	16°R15	12°R55	11°R53	28°R 5	21°R19	W31

Day	☉	☾	♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉		
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat		
M 1	23s 2	9s18	4n52	24s47	1s26	22s30	0n37	22s57	0s15	21s38	0n36	20n26	0n19	13n40	0s26	8n 3	0n56	22s 3	0n33	22s35	22s27	22s21	0s20	3n54
T 2	22 57	4 46	5 10	24 47	1 30	22 37	0 34	23 3	0 16	21 40	0 36	20 27	0 19	13 40	0 26	8 3	0 56	22 3	0 32	22 34	22 26	22 21	0 19	3 54
W 3	22 51	0n 2	5 13	24 45	1 35	22 44	0 32	23 8	0 16	21 41	0 36	20 28	0 19	13 39	0 26	8 3	0 56	22 3	0 32	22 34	22 26	22 20	0 19	3 54
T 4	22 45	4 56	5 1	24 43	1 39	22 51	0 29	23 12	0 17	21 43	0 36	20 29	0 19	13 39	0 26	8 4	0 56	22 3	0 32	22 34	22 25	22 19	0 18	3 54
F 5	22 39	9 44	4 33	24 38	1 43	22 56	0 27	23 17	0 18	21 45	0 35	20 30	0 19	13 39	0 26	8 4	0 56	22 3	0 32	22 34	22 25	22 19	0 18	3 53
S 6	22 32	14 12	3 49	24 33	1 47	23 1	0 24	23 21	0 18	21 46	0 35	20 31	0 19	13 39	0 25	8 4	0 56	22 3	0 32	22 34	22 25	22 18	0 17	3 53
S 7	22 24	18 2	2 51	24 25	1 50	23 5	0 21	23 25	0 19	21 48	0 35	20 33	0 19	13 39	0 25	8 4	0 56	22 2	0 32	22 34	22 24	22 18	0 17	3 53
M 8	22 16	20 53	1 40	24 17	1 53	23 9	0 19	23 29	0 20	21 50	0 35	20 34	0 20	13 39	0 25	8 5	0 56	22 2	0 32	22 34	22 24	22 17	0 16	3 53
T 9	22 8	22 25	0 22	24 6	1 56	23 12	0 16	23 32	0 20	21 51	0 35	20 35	0 20	13 39	0 25	8 5	0 56	22 2	0 32	22 34	22 23	22 16	0 16	3 52
W10	21 59	22 24	1s 0	23 55	1 58	23 14	0 14	23 36	0 21	21 53	0 35	20 36	0 20	13 39	0 25	8 6	0 56	22 2	0 32	22 34	22 23	22 16	0 15	3 52
T11	21 50	20 45	2 18	23 41	2 1	23 15	0 11	23 39	0 22	21 54	0 35	20 37	0 20	13 39	0 25	8 6	0 56	22 2	0 32	22 34	22 23	22 15	0 14	3 52
F12	21 41	17 38	3 26	23 26	2 2	23 16	0 9	23 42	0 22	21 56	0 35	20 38	0 20	13 39	0 25	8 6	0 56	22 2	0 32	22 33	22 22	22 14	0 14	3 52
S13	21 31	13 23	4 19	23 10	2 4	23 16	0 6	23 44	0 23	21 57	0 35	20 39	0 20	13 39	0 25	8 7	0 56	22 2	0 31	22 33	22 22	22 14	0 13	3 51
S14	21 20	8 25	4 54	22 52	2 5	23 15	0 3	23 47	0 24	21 58	0 35	20 40	0 20	13 39	0 25	8 7	0 56	22 1	0 31	22 32	22 21	22 13	0 12	3 51
M15	21 10	3 9	5 10	22 32	2 5	23 14	0 1	23 49	0 24	22 0	0 35	20 42	0 20	13 39	0 25	8 8	0 56	22 1	0 31	22 31	22 21	22 12	0 12	3 51
T16	20 58	2s 7	5 6	22 11	2 5	23 11	0s 2	23 51	0 25	22 1	0 35	20 43	0 20	13 39	0 25	8 8	0 57	22 1	0 31	22 31	22 21	22 12	0 11	3 51
W17	20 47	7 6	4 46	21 48	2 5	23 9	0 4	23 52	0 26	22 2	0 35	20 44	0 21	13 39	0 25	8 8	0 57	22 1	0 31	22 30	22 20	22 11	0 10	3 50
T18	20 35	11 36	4 12	21 23	2 5	23 5	0 7	23 54	0 27	22 4	0 35	20 45	0 21	13 39	0 25	8 9	0 57	22 1	0 31	22 30	22 20	22 10	0 9	3 50
F19	20 22	15 29	3 27	20 57	2 3	23 1	0 9	23 55	0 27	22 5	0 35	20 46	0 21	13 39	0 25	8 9	0 57	22 1	0 31	22 30	22 19	22 10	0 8	3 50
S20	20 9	18 36	2 34	20 30	2 2	22 56	0 12	23 56	0 28	22 6	0 35	20 47	0 21	13 39	0 25	8 10	0 57	22 1	0 31	22 30	22 19	22 9	0 8	3 50
S21	19 56	20 52	1 34	20 1	1 59	22 50	0 14	23 57	0 29	22 7	0 35	20 48	0 21	13 39	0 25	8 10	0 57	22 0	0 31	22 30	22 19	22 8	0 7	3 50
M22	19 43	22 12	0 32	19 30	1 57	22 43	0 17	23 57	0 29	22 9	0 35	20 49	0 21	13 39	0 25	8 11	0 57	22 0	0 31	22 30	22 18	22 8	0 6	3 49
T23	19 29	22 33	0n32	18 58	1 53	22 36	0 19	23 57	0 30	22 10	0 35	20 50	0 21	13 39	0 25	8 11	0 57	22 0	0 31	22 30	22 18	22 7	0 5	3 49
W24	19 15	21 54	1 34	18 24	1 49	22 28	0 22	23 57	0 31	22 11	0 35	20 52	0 21	13 39	0 25	8 12	0 57	22 0	0 31	22 30	22 17	22 6	0 4	3 49
T25	19 0	20 15	2 32	17 49	1 45	22 20	0 24	23 57	0 31	22 12	0 35	20 53	0 21	13 40	0 25	8 12	0 57	22 0	0 30	22 30	22 17	22 5	0 3	3 49
F26	18 45	17 43	3 24	17 12	1 39	22 11	0 26	23 56	0 32	22 13	0 35	20 54	0 22	13 40	0 25	8 13	0 57	22 0	0 30	22 29	22 17	22 5	0 2	3 48
S27	18 30	14 24	4 8	16 34	1 34	22 1	0 29	23 56	0 33	22 14	0 35	20 55	0 22	13 40	0 25	8 13	0 57	22 0	0 30	22 28	22 16	22 4	0 2	3 48
S28	18 14	10 26	4 40	15 55	1 27	21 50	0 31	23 55	0 33	22 15	0 35	20 56	0 22	13 40	0 25	8 14	0 57	21 59	0 30	22 26	22 16	22 3	0 1	3 48
M29	17 58	5 59	5 0	15 15	1 20	21 39	0 33	23 53	0 34	22 16	0 35	20 57	0 22	13 41	0 25	8 14	0 57	21 59	0 30	22 25	22 15	22 2	0n 0	3 48
T30	17 42	1 14	5 5	14 34	1 12	21 27	0 35	23 52	0 35	22 17	0 35	20 58	0 22	13 41	0 25	8 15	0 57	21 59	0 30	22 24	22 15	22 2	0 1	3 48
W31	17s25	3n39	4n55	13s52	1s 3	21s15	0s38	23s50	0s35	22s18	0n35	20n59	0n22	13n41	0s25	8n15	0n57	21s59	0n30	22s23	22s14	22s 1	0n 2	3n47

# ASTRODIENST EPHEMERIS for the year 1770

## geocentric

FEBRUARY 1770

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	8 44 53	12°16'26"	10°55'	27°36'	29°3'	8°30'	17°45'	27°R44	7°39'	11°R10	16°17'	12°R48	11°50'	28°11'	21°22'	T 1
F 2	8 48 50	13°17'16"	24°12'	29°12'	0°18'	9°15'	17°55'	27°39'	7°40'	11°8'	16°19'	12°44'	11°46'	28°18'	21°25'	F 2
S 3	8 52 47	14°18'04"	7°43'	0°45'	1°33'	9°59'	18°6'	27°35'	7°41'	11°7'	16°21'	12°43'	11°43'	28°24'	21°28'	S 3
S 4	8 56 43	15°18'51"	21°30'	2°14'	2°48'	10°44'	18°16'	27°30'	7°42'	11°5'	16°23'	12°D42	11°40'	28°31'	21°32'	S 4
M 5	9 0 40	16°19'37"	5°13'	3°40'	4°3'	11°29'	18°26'	27°26'	7°43'	11°4'	16°25'	12°R43	11°37'	28°38'	21°35'	M 5
T 6	9 4 36	17°20'21"	19°54'	5°2'	5°18'	12°13'	18°36'	27°21'	7°44'	11°3'	16°26'	12°43'	11°34'	28°44'	21°38'	T 6
W 7	9 8 33	18°21'03"	4°29'	6°18'	6°33'	12°58'	18°46'	27°17'	7°45'	11°1'	16°28'	12°41'	11°31'	28°51'	21°41'	W 7
T 8	9 12 29	19°21'44"	19°13'	7°28'	7°48'	13°43'	18°55'	27°12'	7°46'	11°0'	16°30'	12°37'	11°27'	28°58'	21°44'	T 8
F 9	9 16 26	20°22'23"	4°2'	8°31'	9°4'	14°28'	19°5'	27°8'	7°48'	10°58'	16°32'	12°30'	11°24'	29°4'	21°48'	F 9
S 10	9 20 22	21°23'01"	18°48'	9°27'	10°19'	15°12'	19°14'	27°4'	7°49'	10°56'	16°33'	12°20'	11°21'	29°11'	21°51'	S 10
S 11	9 24 19	22°23'37"	3°21'	10°15'	11°34'	15°57'	19°24'	27°0'	7°50'	10°55'	16°35'	12°9'	11°18'	29°18'	21°54'	S 11
M 12	9 28 16	23°24'12"	17°35'	10°54'	12°49'	16°42'	19°33'	26°55'	7°52'	10°53'	16°37'	11°58'	11°15'	29°24'	21°57'	M 12
T 13	9 32 12	24°24'45"	1°24'	11°24'	14°4'	17°27'	19°42'	26°51'	7°53'	10°52'	16°39'	11°47'	11°11'	29°31'	22°1'	T 13
W 14	9 36 9	25°25'17"	14°47'	11°44'	15°19'	18°12'	19°51'	26°47'	7°55'	10°50'	16°40'	11°39'	11°8'	29°38'	22°4'	W 14
T 15	9 40 5	26°25'48"	27°44'	11°R53	16°34'	18°57'	20°0'	26°43'	7°56'	10°49'	16°42'	11°33'	11°5'	29°44'	22°8'	T 15
F 16	9 44 2	27°26'17"	10°16'	11°53'	17°49'	19°42'	20°9'	26°39'	7°58'	10°47'	16°44'	11°30'	11°2'	29°51'	22°11'	F 16
S 17	9 47 58	28°26'45"	22°29'	11°42'	19°4'	20°27'	20°17'	26°36'	7°59'	10°45'	16°45'	11°28'	10°59'	29°58'	22°14'	S 17
S 18	9 51 55	29°27'12"	4°28'	11°21'	20°19'	21°12'	20°26'	26°32'	8°1'	10°44'	16°47'	11°D28	10°56'	0°3'	22°18'	S 18
M 19	9 55 51	0°27'37"	16°18'	10°51'	21°34'	21°57'	20°34'	26°28'	8°3'	10°42'	16°48'	11°R28	10°52'	0°11'	22°21'	M 19
T 20	9 59 48	1°28'01"	28°5'	10°13'	22°49'	22°42'	20°42'	26°25'	8°5'	10°40'	16°50'	11°27'	10°49'	0°18'	22°25'	T 20
W 21	10 3 45	2°28'24"	9°53'	9°26'	24°4'	23°27'	20°51'	26°21'	8°6'	10°39'	16°52'	11°24'	10°46'	0°24'	22°28'	W 21
T 22	10 7 41	3°28'45"	21°48'	8°33'	25°19'	24°13'	20°59'	26°18'	8°8'	10°37'	16°53'	11°18'	10°43'	0°31'	22°32'	T 22
F 23	10 11 38	4°29'04"	3°54'	7°36'	26°34'	24°58'	21°6'	26°14'	8°10'	10°35'	16°55'	11°10'	10°40'	0°38'	22°35'	F 23
S 24	10 15 34	5°29'22"	16°12'	6°34'	27°49'	25°43'	21°14'	26°11'	8°12'	10°34'	16°56'	10°58'	10°37'	0°44'	22°39'	S 24
S 25	10 19 31	6°29'38"	28°44'	5°31'	29°4'	26°28'	21°22'	26°8'	8°14'	10°32'	16°58'	10°45'	10°33'	0°51'	22°43'	S 25
M 26	10 23 27	7°29'53"	11°30'	4°27'	0°19'	27°14'	21°29'	26°5'	8°16'	10°30'	16°59'	10°31'	10°30'	0°57'	22°46'	M 26
T 27	10 27 24	8°30'05"	24°31'	3°25'	1°34'	27°59'	21°37'	26°2'	8°18'	10°29'	17°1'	10°18'	10°27'	1°4'	22°50'	T 27
W 28	10 31 20	9°30'16"	7°43'	2°42'	2°49'	28°44'	21°44'	25°59'	8°20'	10°27'	17°2'	10°17'	10°24'	1°11'	22°53'	W 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
T 1	17s 8	8n27	4n29	13s 9	0s53	21s 1	0s40	23s48	0s36	22s19	0n35	21n 0	0n22	13n41	0s25	8n16	0n57	21s59	0n30	22s22	22s14	22s 0	0n 3	3n47			
F 2	16 51	12 57	3 49	12 26	0 43	20 48	0 42	23 46	0 37	22 20	0 35	21 1	0 22	13 42	0 25	8 17	0 57	21 59	0 30	22 21	22 14	21 59	0 4	3 47			
S 3	16 34	16 52	2 56	11 43	0 31	20 33	0 44	23 43	0 38	22 21	0 35	21 2	0 22	13 42	0 25	8 17	0 57	21 59	0 30	22 21	22 13	21 59	0 5	3 47			
S 4	16 16	19 57	1 51	11 0	0 20	20 18	0 46	23 40	0 38	22 22	0 35	21 3	0 22	13 42	0 25	8 18	0 57	21 58	0 30	22 21	22 13	21 58	0 6	3 47			
M 5	15 58	21 53	0 38	10 17	0 7	20 3	0 48	23 37	0 39	22 23	0 35	21 4	0 23	13 43	0 25	8 18	0 57	21 58	0 29	22 21	22 12	21 57	0 8	3 47			
T 6	15 39	22 27	0s38	9 35	0n 7	19 47	0 50	23 34	0 40	22 24	0 35	21 5	0 23	13 43	0 25	8 19	0 57	21 58	0 29	22 21	22 12	21 56	0 9	3 46			
W 7	15 21	21 30	1 53	8 54	0 21	19 30	0 52	23 30	0 40	22 25	0 35	21 6	0 23	13 44	0 25	8 19	0 57	21 58	0 29	22 21	22 11	21 56	0 10	3 46			
T 8	15 2	19 6	3 1	8 14	0 35	19 13	0 54	23 27	0 41	22 26	0 35	21 7	0 23	13 44	0 25	8 20	0 57	21 58	0 29	22 20	22 11	21 55	0 11	3 46			
F 9	14 43	15 25	3 58	7 36	0 50	18 55	0 56	23 22	0 42	22 26	0 35	21 8	0 23	13 44	0 24	8 21	0 57	21 58	0 29	22 19	22 11	21 54	0 12	3 46			
S 10	14 23	10 48	4 38	7 1	1 6	18 36	0 58	23 18	0 42	22 27	0 35	21 9	0 23	13 45	0 24	8 21	0 57	21 58	0 29	22 18	22 10	21 53	0 13	3 46			
S 11	14 4	5 39	4 59	6 28	1 22	18 17	0 59	23 14	0 43	22 28	0 35	21 10	0 23	13 45	0 24	8 22	0 57	21 57	0 29	22 17	22 10	21 52	0 14	3 46			
M12	13 44	0 18	5 1	5 59	1 38	17 58	1 1	23 9	0 44	22 29	0 35	21 11	0 23	13 46	0 24	8 22	0 57	21 57	0 29	22 15	22 9	21 52	0 15	3 45			
T 13	13 24	4s55	4 45	5 33	1 54	17 38	1 3	23 4	0 45	22 29	0 35	21 11	0 23	13 46	0 24	8 23	0 57	21 57	0 29	22 14	22 9	21 51	0 17	3 45			
W14	13 4	9 44	4 14	5 11	2 10	17 17	1 4	22 59	0 45	22 30	0 35	21 12	0 23	13 47	0 24	8 24	0 57	21 57	0 29	22 13	22 8	21 50	0 18	3 45			
T 15	12 43	13 57	3 30	4 53	2 25	16 56	1 6	22 53	0 46	22 31	0 35	21 13	0 23	13 47	0 24	8 24	0 57	21 57	0 29	22 12	22 8	21 49	0 19	3 45			
F 16	12 23	17 25	2 38	4 39	2 40	16 35	1 8	22 47	0 47	22 31	0 35	21 14	0 23	13 48	0 24	8 25	0 57	21 57	0 29	22 11	22 7	21 48	0 20	3 45			
S 17	12 2	20 1	1 39	4 31	2 53	16 13	1 9	22 41	0 47	22 32	0 35	21 15	0 24	13 48	0 24	8 26	0 57	21 57	0 28	22 11	22 7	21 47	0 21	3 45			
S 18	11 41	21 40	0 37	4 27	3 6	15 51	1 10	22 35	0 48	22 33	0 35	21 16	0 24	13 49	0 24	8 26	0 57	21 57	0 28	22 11	22 7	21 47	0 23	3 44			
M19	11 19	22 20	0n26	4 28	3 17	15 28	1 12	22 29	0 49	22 33	0 35	21 16	0 24	13 50	0 24	8 27	0 57	21 57	0 28	22 11	22 6	21 46	0 24	3 44			
T 20	10 58	22 0	1 27	4 34	3 26	15 5	1 13	22 22	0 49	22 34	0 35	21 17	0 24	13 50	0 24	8 28	0 57	21 56	0 28	22 11	22 6	21 45	0 25	3 44			
W21	10 36	20 42	2 25	4 44	3 34	14 41	1 14	22 15	0 50	22 34	0 35	21 18	0 24	13 51	0 24	8 28	0 57	21 56	0 28	22 11	22 5	21 44	0 26	3 44			
T 22	10 15	18 28	3 16	4 59	3 39	14 17	1 15	22 8	0 51	22 35	0 35	21 19	0 24	13 51	0 24	8 29	0 57	21 56	0 28	22 10	22 5	21 43	0 28	3 44			
F 23	9 53	15 25	4 0	5 17	3 43	13 52	1 17	22 0	0 51	22 35	0 35	21 19	0 24	13 52	0 24	8 29	0 57	21 56	0 28	22 9	22 4	21 42	0 29	3 44			
S 24	9 31	11 39	4 33	5 39	3 44	13 28	1 18	21 53	0 52	22 36	0 35	21 20	0 24	13 53	0 24	8 30	0 57	21 56	0 28	22 7	22 4	21 41	0 30	3 44			
S 25	9 8	7 20	4 54	6 3	3 43	13 2	1 19	21 45	0 53	22 36	0 35	21 21	0 24	13 53	0 24	8 31	0 57	21 56	0 28	22 5	22 3	21 41	0 32	3 44			
M26	8 46	2 38	5 0	6 29	3 40	12 37	1 20	21 37	0 53	22 37	0 35	21 21	0 24	13 54	0 24	8 31	0 57	21 56	0 28	22 3	22 3	21 40	0 33	3 43			
T 27	8 24	2n16	4 51	6 56	3 34	12 11	1 20	21 28	0 54	22 37	0 35	21 22	0 24	13 55	0 24	8 32	0 57	21 56	0 28	22 1	22 3	21 39	0 34	3 43			
W28	8s 1	7n 9	4n26	7s24	3n27	11s45	1s21	21s20	0s55	22s38	0n35	21n23	0n24	13n55	0s24	8n33	0n57	21s56	0n28	21s59	22s 2	21s38	0n35	3n43			

Julian Day Number = 2367570.5, Delta T = 21.15 sec

Ecliptic obliquity = 23°28'06", Nutation = 0°00'18", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 21°31'49", Lahiri = 20°38'50"Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1770

## geocentric

MARCH 1770

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	10 35 17	10°30'24	21°17' 7	1°R28	4°H 4	29°30'30	21°17'51	25°R56	8°B23	10°R25	17°3 3	9°R57	10°17'21	1°B17	22°H57	T 1
F 2	10 39 14	11°30'31	4°B41	0°H36	5°19	0°15	21°58	25°B53	8°25	10°17'24	17° 5	9°151	10°17	1°24	23° 1	F 2
S 3	10 43 10	12°30'36	18°23	29°50	6°33	1° 0	22° 4	25°51	8°27	10°22	17° 6	9°48	10°14	1°31	23° 4	S 3
S 4	10 47 7	13°30'38	2°II13	29° 9	7°48	1°46	22°11	25°48	8°29	10°20	17° 7	9°46	10°11	1°37	23° 8	S 4
M 5	10 51 3	14°30'39	16°13	28°35	9° 3	2°31	22°17	25°46	8°32	10°19	17° 9	9°46	10° 8	1°44	23°11	M 5
T 6	10 55 0	15°30'37	0°B20	28° 8	10°18	3°17	22°24	25°43	8°34	10°17	17°10	9°46	10° 5	1°51	23°15	T 6
W 7	10 58 56	16°30'33	14°35	27°47	11°33	4° 2	22°30	25°41	8°36	10°15	17°11	9°44	10° 2	1°57	23°19	W 7
T 8	11 2 53	17°30'26	28°55	27°33	12°48	4°48	22°36	25°39	8°39	10°14	17°12	9°39	9°58	2° 4	23°22	T 8
F 9	11 6 49	18°30'17	13°B17	27°25	14° 2	5°33	22°42	25°37	8°41	10°12	17°14	9°32	9°55	2°11	23°26	F 9
S 10	11 10 46	19°30'07	27°36	27°D24	15°17	6°19	22°47	25°35	8°44	10°10	17°15	9°21	9°52	2°17	23°30	S 10
S 11	11 14 43	20°29'54	11°B47	27°29	16°32	7° 4	22°53	25°33	8°46	10° 9	17°16	9°10	9°49	2°24	23°34	S 11
M12	11 18 39	21°29'39	25°43	27°39	17°47	7°50	22°58	25°32	8°49	10° 7	17°17	8°58	9°46	2°31	23°37	M12
T 13	11 22 36	22°29'22	9°B20	27°56	19° 1	8°35	23° 3	25°30	8°51	10° 6	17°18	8°46	9°42	2°37	23°41	T 13
W14	11 26 32	23°29'03	22°36	28°17	20°16	9°21	23° 8	25°29	8°54	10° 4	17°19	8°37	9°39	2°44	23°45	W14
T 15	11 30 29	24°28'42	5°B30	28°43	21°31	10° 7	23°13	25°27	8°57	10° 2	17°20	8°30	9°36	2°51	23°48	T 15
F 16	11 34 25	25°28'20	18° 3	29°14	22°45	10°52	23°18	25°26	8°59	10° 1	17°21	8°26	9°33	2°57	23°52	F 16
S 17	11 38 22	26°27'55	0°B17	29°49	24° 0	11°38	23°23	25°25	9° 2	9°59	17°22	8°24	9°30	3° 4	23°56	S 17
S 18	11 42 18	27°27'29	12°18	0°H29	25°15	12°24	23°27	25°24	9° 5	9°58	17°23	8°D24	9°27	3°11	23°59	S 18
M19	11 46 15	28°27'02	24°10	1°12	26°29	13° 9	23°31	25°23	9° 8	9°56	17°24	8°R24	9°23	3°17	24° 3	M19
T 20	11 50 11	29°26'32	5°B58	1°59	27°44	13°55	23°35	25°22	9°11	9°54	17°25	8°24	9°20	3°24	24° 7	T 20
W21	11 54 8	0°Y26'01	17°49	2°49	28°59	14°41	23°39	25°21	9°13	9°53	17°26	8°22	9°17	3°31	24°10	W21
T 22	11 58 5	1°25'28	29°47	3°42	0°Y13	15°27	23°43	25°20	9°16	9°51	17°27	8°19	9°14	3°37	24°14	T 22
F 23	12 2 1	2°24'53	11°B57	4°39	1°28	16°12	23°46	25°20	9°19	9°50	17°27	8°12	9°11	3°44	24°18	F 23
S 24	12 5 58	3°24'16	24°22	5°38	2°43	16°58	23°49	25°19	9°22	9°48	17°28	8° 4	9° 8	3°51	24°21	S 24
S 25	12 9 54	4°23'37	7°H 5	6°40	3°57	17°44	23°53	25°19	9°25	9°47	17°29	7°53	9° 4	3°57	24°25	S 25
M26	12 13 51	5°22'56	20° 7	7°44	5°12	18°30	23°56	25°19	9°28	9°45	17°30	7°42	9° 1	4° 4	24°29	M26
T 27	12 17 47	6°22'13	3°Y26	8°51	6°26	19°15	23°58	25°D19	9°31	9°44	17°30	7°32	8°58	4°10	24°32	T 27
W28	12 21 44	7°21'29	17° 2	10° 0	7°41	20° 1	24° 1	25°19	9°34	9°42	17°31	7°22	8°55	4°17	24°36	W28
T 29	12 25 40	8°20'42	0°B51	11°12	8°55	20°47	24° 3	25°19	9°37	9°41	17°32	7°15	8°52	4°24	24°40	T 29
F 30	12 29 37	9°19'53	14°59	12°25	10°10	21°33	24° 6	25°19	9°40	9°40	17°32	7°10	8°48	4°30	24°43	F 30
S 31	12 33 34	10°Y19'02	28°B54	13°H41	11°Y24	22°19	24° 8	25°B20	9°B43	9°17'38	17°B33	7°1 8	8°145	4°B37	24°H47	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	7s38	11n45	3n47	7s52	3n19	11s18	1s22	21s11	0s56	22s38	0n35	21n23	0n24	13n56	0s24	8n33
F 2	7 15	15 50	2 54	8 20	3 8	10 51	1 23	21 2	0 56	22 39	0 35	21 24	0 25	13 57	0 24	8 34
S 3	6 52	19 5	1 51	8 47	2 57	10 24	1 23	20 53	0 57	22 39	0 35	21 24	0 25	13 58	0 24	8 35
S 4	6 29	21 17	0 40	9 13	2 44	9 57	1 24	20 44	0 58	22 39	0 35	21 25	0 25	13 58	0 24	8 35
M 5	6 6	22 11	0s34	9 37	2 31	9 29	1 24	20 34	0 58	22 40	0 35	21 25	0 25	13 59	0 24	8 36
T 6	5 43	21 42	1 46	9 59	2 17	9 1	1 25	20 24	0 59	22 40	0 35	21 26	0 25	14 0	0 24	8 37
W 7	5 20	19 48	2 53	10 20	2 3	8 33	1 25	20 14	1 0	22 40	0 35	21 26	0 25	14 1	0 24	8 37
T 8	4 57	16 40	3 49	10 38	1 49	8 5	1 26	20 4	1 0	22 41	0 35	21 27	0 25	14 2	0 24	8 38
F 9	4 33	12 32	4 30	10 54	1 35	7 36	1 26	19 53	1 1	22 41	0 35	21 27	0 25	14 2	0 24	8 38
S 10	4 10	7 42	4 55	11 8	1 20	7 8	1 26	19 43	1 2	22 41	0 35	21 28	0 25	14 3	0 24	8 39
S 11	3 46	2 31	5 1	11 20	1 6	6 39	1 26	19 32	1 2	22 42	0 35	21 28	0 25	14 4	0 24	8 40
M12	3 23	2s42	4 48	11 29	0 52	6 10	1 26	19 21	1 3	22 42	0 35	21 28	0 25	14 5	0 24	8 40
T 13	2 59	7 41	4 20	11 37	0 38	5 40	1 26	19 9	1 3	22 42	0 35	21 29	0 25	14 6	0 24	8 41
W14	2 35	12 10	3 38	11 42	0 25	5 11	1 26	18 58	1 4	22 43	0 35	21 29	0 25	14 7	0 24	8 42
T 15	2 12	15 58	2 45	11 45	0 12	4 41	1 26	18 46	1 5	22 43	0 35	21 29	0 25	14 7	0 24	8 42
F 16	1 48	18 55	1 46	11 46	0s 0	4 11	1 26	18 34	1 5	22 43	0 35	21 30	0 25	14 8	0 24	8 43
S 17	1 24	20 56	0 43	11 45	0 13	3 42	1 26	18 22	1 6	22 43	0 35	21 30	0 25	14 9	0 24	8 43
S 18	1 1	21 57	0n21	11 42	0 24	3 12	1 25	18 10	1 7	22 43	0 35	21 30	0 26	14 10	0 24	8 44
M19	0 37	21 57	1 23	11 37	0 35	2 42	1 25	17 58	1 7	22 44	0 35	21 30	0 26	14 11	0 24	8 45
T 20	0 13	20 59	2 21	11 30	0 46	2 11	1 24	17 45	1 8	22 44	0 35	21 31	0 26	14 12	0 24	8 45
W21	0n10	19 5	3 14	11 21	0 56	1 41	1 24	17 33	1 9	22 44	0 35	21 31	0 26	14 13	0 24	8 46
T 22	0 34	16 20	3 58	11 11	1 6	1 11	1 23	17 20	1 9	22 44	0 35	21 31	0 26	14 14	0 23	8 46
F 23	0 58	12 52	4 33	10 59	1 15	0 41	1 23	17 6	1 10	22 44	0 35	21 31	0 26	14 15	0 23	8 47
S 24	1 21	8 47	4 55	10 45	1 23	0 10	1 22	16 53	1 10	22 44	0 35	21 31	0 26	14 16	0 23	8 47
S 25	1 45	4 13	5 3	10 30	1 32	0n20	1 21	16 40	1 11	22 45	0 35	21 31	0 26	14 17	0 23	8 48
M26	2 8	0n37	4 57	10 13	1 39	0 50	1 20	16 26	1 12	22 45	0 35	21 32	0 26	14 18	0 23	8 49
T 27	2 32	5 33	4 33	9 54	1 46	1 21	1 19	16 12	1 12	22 45	0 35	21 32	0 26	14 19	0 23	8 49
W28	2 55	10 19	3 55	9 34	1 53	1 51	1 19	15 59	1 13	22 45	0 35	21 32	0 26	14 20	0 23	8 50
T 29	3 19	14 37	3 1	9 12	1 59	2 21	1 18	15 45	1 13	22 45	0 35	21 32	0 26	14 21	0 23	8 50
F 30	3 42	18 10	1 57	8 49	2 4	2 51	1 16	15 30	1 14	22 45	0 35	21 32	0 26	14 22	0 23	8 51
S 31	4n 5	20n39	0n44	8s25	2s 9	3n22	1s15	15s16	1s15	22s45	0n35	21n32	0n26	14n23	0s23	8n51

Julian Day Number = 2367598.5, Delta T = 21.17 sec  
 Ecliptic obliquity = 23°28'07, Nutation = 0°00'17, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 21°31'53, Lahiri = 20°38'54Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1770

## geocentric

APRIL 1770

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	12 37 30	11°18'08"	13°11' 2	14°58'39"	12°39'39"	23°55' 5	24°57' 9	25°20'20"	9°47'47"	9°R37	17°33'33"	7°D 8	8°42'42"	4°44'44"	24°50'50"	S 1
M 2	12 41 27	12°17'13"	27°11' 1	16°18'18"	13°53'53"	23°50'50"	24°11'11"	25°21'21"	9°50'50"	9°R35	17°34'34"	7°9' 9	8°39'39"	4°50'50"	24°54'54"	M 2
T 3	12 45 23	13°16'15"	11°26'19"	17°39'39"	15°7' 7	24°36'36"	24°13'13"	25°21'21"	9°53'53"	9°34'34"	17°34'34"	7°R 9	8°36'36"	4°57'57"	24°57'57"	T 3
W 4	12 49 20	14°15'14"	25°26'19"	19°2' 2	16°22'22"	25°22'22"	24°14'14"	25°22'22"	9°56'56"	9°33'33"	17°35'35"	7°9' 9	8°33'33"	5°4' 4	25°1' 1	W 4
T 5	12 53 16	15°14'12"	9°23'30"	20°27'27"	17°36'36"	26°8' 8	24°15'15"	25°23'23"	9°59'59"	9°31'31"	17°35'35"	7°6' 6	8°29'29"	5°10'10"	25°4' 4	T 5
F 6	12 57 13	16°13'06"	23°30'30"	21°54'54"	18°51'51"	26°54'54"	24°16'16"	25°24'24"	10°3' 3	9°30'30"	17°36'36"	7°2' 2	8°26'26"	5°17'17"	25°8' 8	F 6
S 7	13 1 9	17°11'59"	7°22'22"	23°22'22"	20°5' 5	27°39'39"	24°17'17"	25°25'25"	10°6' 6	9°29'29"	17°36'36"	6°55'55"	8°23'23"	5°24'24"	25°11'11"	S 7
S 8	13 5 6	18°10'49"	21°5' 5	24°52'52"	21°19'19"	28°25'25"	24°17'17"	25°27'27"	10°9' 9	9°28'28"	17°36'36"	6°47'47"	8°20'20"	5°30'30"	25°15'15"	S 8
M 9	13 9 3	19°9'37"	4°23'35"	26°24'24"	22°33'33"	29°11'11"	24°18'18"	25°28'28"	10°12'12"	9°26'26"	17°37'37"	6°39'39"	8°17'17"	5°37'37"	25°18'18"	M 9
T 10	13 12 59	20°8'23"	17°50'50"	27°57'57"	23°48'48"	29°57'57"	24°R18	25°29'29"	10°16'16"	9°25'25"	17°37'37"	6°31'31"	8°13'13"	5°44'44"	25°22'22"	T 10
W11	13 16 56	21°7'08"	0°24'49"	29°32'32"	25°2' 2	0°43'43"	24°18'18"	25°31'31"	10°19'19"	9°24'24"	17°37'37"	6°25'25"	8°10'10"	5°50'50"	25°25'25"	W11
T 12	13 20 52	22°5'50"	13°31'31"	1°9' 9	26°16'16"	1°29'29"	24°18'18"	25°33'33"	10°22'22"	9°23'23"	17°37'37"	6°21'21"	8°7' 7	5°57'57"	25°29'29"	T 12
F 13	13 24 49	23°4'30"	25°57'57"	2°47'47"	27°30'30"	2°14'14"	24°17'17"	25°34'34"	10°26'26"	9°22'22"	17°38'38"	6°18'18"	8°4' 4	6°4' 4	25°32'32"	F 13
S 14	13 28 45	24°3'09"	8°27'27"	4°26'26"	28°45'45"	3°0' 0	24°17'17"	25°36'36"	10°29'29"	9°21'21"	17°38'38"	6°D18	8°1' 1	6°10'10"	25°35'35"	S 14
S 15	13 32 42	25°1'46"	20°8' 8	6°8' 8	29°59'59"	3°46'46"	24°16'16"	25°38'38"	10°32'32"	9°20'20"	17°38'38"	6°18'18"	7°58'58"	6°17'17"	25°39'39"	S 15
M16	13 36 38	26°0'21"	2°3' 0	7°51'51"	1°18'18"	4°32'32"	24°15'15"	25°40'40"	10°36'36"	9°19'19"	17°38'38"	6°20'20"	7°54'54"	6°24'24"	25°42'42"	M16
T 17	13 40 35	26°58'54"	13°50'50"	9°36'36"	2°27'27"	5°18'18"	24°14'14"	25°43'43"	10°39'39"	9°18'18"	17°38'38"	6°21'21"	7°51'51"	6°30'30"	25°45'45"	T 17
W18	13 44 31	27°57'26"	25°41'41"	11°22'22"	3°41'41"	6°4' 4	24°13'13"	25°45'45"	10°42'42"	9°17'17"	17°38'38"	6°R22	7°48'48"	6°37'37"	25°48'48"	W18
T 19	13 48 28	28°55'56"	7°44'44"	13°10'10"	4°55'55"	6°49'49"	24°11'11"	25°47'47"	10°46'46"	9°16'16"	17°R38	6°22'22"	7°45'45"	6°44'44"	25°52'52"	T 19
F 20	13 52 25	29°54'25"	19°51'51"	14°59'59"	6°9' 9	7°35'35"	24°9' 9	25°50'50"	10°49'49"	9°15'15"	17°38'38"	6°20'20"	7°42'42"	6°50'50"	25°55'55"	F 20
S 21	13 56 21	0°52'51"	2°31'31"	16°51'51"	7°23'23"	8°21'21"	24°8' 8	25°52'52"	10°53'53"	9°14'14"	17°38'38"	6°17'17"	7°39'39"	6°57'57"	25°58'58"	S 21
S 22	14 0 18	1°51'16"	15°5' 5	18°44'44"	8°38'38"	9°7' 7	24°6' 6	25°55'55"	10°56'56"	9°13'13"	17°38'38"	6°12'12"	7°35'35"	7°4' 4	26°1' 1	S 22
M23	14 4 14	2°49'40"	28°15'15"	20°38'38"	9°52'52"	9°53'53"	24°3' 3	25°58'58"	11°0' 0	9°12'12"	17°38'38"	6°7' 7	7°32'32"	7°10'10"	26°4' 4	M23
T 24	14 8 11	3°48'02"	11°46'46"	22°35'35"	11°6' 6	10°38'38"	24°1' 1	26°1' 1	11°3' 3	9°11'11"	17°38'38"	6°1' 1	7°29'29"	7°17'17"	26°7' 7	T 24
W25	14 12 7	4°46'22"	25°39'39"	24°32'32"	12°20'20"	11°24'24"	23°58'58"	26°4' 4	11°6' 6	9°10'10"	17°38'38"	5°57'57"	7°26'26"	7°24'24"	26°10'10"	W25
T 26	14 16 4	5°44'40"	9°50'50"	26°32'32"	13°34'34"	12°10'10"	23°55'55"	26°7' 7	11°10'10"	9°10'10"	17°37'37"	5°53'53"	7°23'23"	7°30'30"	26°13'13"	T 26
F 27	14 20 0	6°42'57"	24°14'14"	28°33'33"	14°48'48"	12°56'56"	23°53'53"	26°10'10"	11°13'13"	9°9' 9	17°37'37"	5°52'52"	7°19'19"	7°37'37"	26°16'16"	F 27
S 28	14 23 57	7°41'12"	8°24'24"	0°36'36"	16°2' 2	13°41'41"	23°49'49"	26°13'13"	11°17'17"	9°8' 8	17°37'37"	5°D51	7°16'16"	7°44'44"	26°19'19"	S 28
S 29	14 27 54	8°39'25"	23°17'17"	2°40'40"	17°16'16"	14°27'27"	23°46'46"	26°17'17"	11°20'20"	9°8' 8	17°37'37"	5°52'52"	7°13'13"	7°50'50"	26°22'22"	S 29
M30	14 31 50	9°37'36"	7°24'24"	4°45'45"	18°29'29"	15°13'13"	23°43'43"	26°20'20"	11°24'24"	9°R 7	17°36'36"	5°51'51"	7°10'10"	7°57'57"	26°25'25"	M30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	4n29	21n52	0s32	7s59	2s14	3n52	1s14	1s5 2	1s15	22s45	0n35	21n32	0n26	14n24	0s23	S 1
M 2	4 52	21 41	1 46	7 32	2 18	4 22	1 13	14 47	1 16	22 45	0 35	21 32	0 26	14 25	0 23	M 2
T 3	5 15	20 7	2 53	7 3	2 22	4 52	1 12	14 32	1 16	22 45	0 35	21 31	0 26	14 26	0 23	T 3
W 4	5 38	17 19	3 50	6 34	2 25	5 22	1 10	14 17	1 17	22 46	0 35	21 31	0 26	14 27	0 23	W 4
T 5	6 0	13 31	4 32	6 2	2 27	5 51	1 9	14 2	1 17	22 46	0 35	21 31	0 26	14 28	0 23	T 5
F 6	6 23	9 0	4 59	5 30	2 29	6 21	1 8	13 47	1 18	22 46	0 35	21 31	0 27	14 29	0 23	F 6
S 7	6 46	4 4	5 7	4 56	2 31	6 50	1 6	13 32	1 18	22 46	0 35	21 31	0 27	14 30	0 23	S 7
S 8	7 8	1s 1	4 58	4 22	2 32	7 20	1 5	13 16	1 19	22 46	0 35	21 31	0 27	14 31	0 23	S 8
M 9	7 31	5 59	4 32	3 46	2 32	7 49	1 3	13 1	1 20	22 46	0 35	21 31	0 27	14 32	0 23	M 9
T 10	7 53	10 34	3 52	3 8	2 32	8 18	1 1	12 45	1 20	22 46	0 35	21 30	0 27	14 33	0 23	T 10
W11	8 15	14 35	3 0	2 30	2 31	8 47	1 0	12 29	1 21	22 46	0 35	21 30	0 27	14 34	0 23	W11
T 12	8 37	17 50	2 0	1 51	2 30	9 15	0 58	12 14	1 21	22 46	0 35	21 30	0 27	14 35	0 23	T 12
F 13	8 59	20 10	0 56	1 10	2 29	9 43	0 56	11 58	1 22	22 46	0 35	21 30	0 27	14 36	0 23	F 13
S 14	9 20	21 32	0n10	0 29	2 27	10 12	0 54	11 41	1 22	22 46	0 35	21 29	0 27	14 37	0 23	S 14
S 15	9 42	21 52	1 15	0n14	2 24	10 40	0 52	11 25	1 23	22 46	0 35	21 29	0 27	14 38	0 23	S 15
M16	10 3	21 12	2 15	0 57	2 21	11 7	0 51	11 9	1 23	22 46	0 35	21 29	0 27	14 39	0 23	M16
T 17	10 25	19 36	3 10	1 42	2 17	11 35	0 49	10 53	1 24	22 46	0 35	21 28	0 27	14 40	0 23	T 17
W18	10 46	17 9	3 57	2 27	2 13	12 2	0 47	10 36	1 24	22 46	0 35	21 28	0 27	14 41	0 23	W18
T 19	11 6	13 58	4 34	3 14	2 9	12 29	0 45	10 20	1 25	22 46	0 35	21 27	0 27	14 42	0 23	T 19
F 20	11 27	10 9	4 59	4 1	2 3	12 55	0 43	10 3	1 25	22 45	0 35	21 27	0 27	14 44	0 23	F 20
S 21	11 48	5 50	5 11	4 49	1 58	13 21	0 41	9 46	1 25	22 45	0 35	21 27	0 27	14 45	0 23	S 21
S 22	12 8	1 9	5 8	5 38	1 52	13 47	0 38	9 29	1 26	22 45	0 35	21 26	0 27	14 46	0 23	S 22
M23	12 28	3n43	4 49	6 27	1 45	14 13	0 36	9 12	1 26	22 45	0 35	21 26	0 27	14 47	0 23	M23
T 24	12 48	8 33	4 14	7 17	1 38	14 38	0 34	8 56	1 27	22 45	0 35	21 25	0 27	14 48	0 23	T 24
W25	13 8	13 4	3 22	8 7	1 30	15 3	0 32	8 38	1 27	22 45	0 35	21 25	0 27	14 49	0 23	W25
T 26	13 27	16 57	2 18	8 58	1 22	15 27	0 30	8 21	1 28	22 45	0 35	21 24	0 27	14 50	0 23	T 26
F 27	13 46	19 52	1 3	9 50	1 14	15 52	0 27	8 4	1 28	22 45	0 35	21 24	0 27	14 51	0 23	F 27
S 28	14 5	21 31	0s16	10 41	1 5	16 15	0 25	7 47	1 28	22 45	0 35	21 23	0 28	14 52	0 23	S 28
S 29	14 24	21 44	1 34	11 33	0 56	16 39	0 23	7 30	1 29	22 45	0 35	21 22	0 28	14 53	0 23	S 29
M30	14n43	20n28	2s47	12n24	0s46	17n 1	0s20	7s12	1s29	22s45	0n35	21n22	0n28	14n54	0s23	M30

Julian Day Number = 2367629.5, Delta T = 21.18 sec  
 Ecliptic obliquity = 23°28'06", Nutation = 0°00'16", out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 21°31'57", Lahiri = 20°38'58"Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1770

## geocentric

MAY 1770

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	14 35 47	10°35'45	22°09	6°52	19°43	15°58	23°R39	26°24	11°27	9°R 6	17°R36	5°55	7°7	8°4	26°28	T 1
W 2	14 39 43	11°33'51	6°21	9° 0	20°57	16°44	23°R35	26°27	11°31	9°R 6	17°R36	5°R55	7° 4	8°10	26°31	W 2
T 3	14 43 40	12°31'56	20°21	11° 9	22°11	17°29	23°31	26°31	11°34	9° 5	17°35	5°55	7° 0	8°17	26°34	T 3
F 4	14 47 36	13°29'59	4°08	13°18	23°25	18°15	23°27	26°35	11°38	9° 5	17°35	5°54	6°57	8°24	26°37	F 4
S 5	14 51 33	14°28'00	17°41	15°28	24°39	19° 1	23°23	26°39	11°41	9° 4	17°34	5°52	6°54	8°30	26°39	S 5
S 6	14 55 29	15°25'59	1°1	17°39	25°53	19°46	23°18	26°43	11°45	9° 4	17°34	5°49	6°51	8°37	26°42	S 6
M 7	14 59 26	16°23'56	14° 6	19°49	27° 6	20°32	23°14	26°47	11°48	9° 3	17°33	5°46	6°48	8°44	26°45	M 7
T 8	15 3 23	17°21'52	26°58	22° 0	28°20	21°17	23° 9	26°51	11°52	9° 3	17°33	5°44	6°45	8°50	26°47	T 8
W 9	15 7 19	18°19'46	9°37	24° 9	29°34	22° 2	23° 4	26°56	11°55	9° 2	17°32	5°42	6°41	8°57	26°50	W 9
T 10	15 11 16	19°17'38	22° 2	26°18	0°48	22°48	22°59	27° 0	11°58	9° 2	17°32	5°40	6°38	9° 4	26°52	T 10
F 11	15 15 12	20°15'29	4°16	28°26	2° 1	23°33	22°54	27° 4	12° 2	9° 2	17°31	5°D40	6°35	9°10	26°55	F 11
S 12	15 19 9	21°13'19	16°20	0°33	3°15	24°19	22°48	27° 9	12° 5	9° 1	17°30	5°40	6°32	9°17	26°57	S 12
S 13	15 23 5	22°11'07	28°16	2°38	4°29	25° 4	22°43	27°13	12° 9	9° 1	17°30	5°41	6°29	9°24	27° 0	S 13
M14	15 27 2	23° 8'54	10°3	4°41	5°42	25°49	22°37	27°18	12°12	9° 1	17°29	5°42	6°25	9°30	27° 2	M14
T 15	15 30 58	24° 6'39	21°56	6°42	6°56	26°35	22°31	27°23	12°16	9° 1	17°28	5°43	6°22	9°37	27° 4	T 15
W16	15 34 55	25° 4'24	3°48	8°41	8°10	27°20	22°25	27°28	12°19	9° 1	17°28	5°44	6°19	9°44	27° 7	W16
T 17	15 38 52	26° 2'07	15°47	10°38	9°23	28° 5	22°19	27°33	12°22	9° 1	17°27	5°45	6°16	9°50	27° 9	T 17
F 18	15 42 48	26°59'49	27°57	12°31	10°37	28°50	22°13	27°38	12°26	9° 0	17°26	5°R45	6°13	9°57	27°11	F 18
S 19	15 46 45	27°57'30	10°23	14°23	11°50	29°35	22° 7	27°43	12°29	9° 0	17°25	5°45	6°10	10° 4	27°13	S 19
S 20	15 50 41	28°55'11	23° 8	16°11	13° 4	0°Y21	22° 1	27°48	12°33	9°D 0	17°24	5°44	6° 6	10°10	27°16	S 20
M21	15 54 38	29°52'50	6°Y17	17°57	14°17	1° 6	21°54	27°53	12°36	9° 0	17°24	5°44	6° 3	10°17	27°18	M21
T 22	15 58 34	0°II50'28	19°51	19°39	15°31	1°51	21°47	27°58	12°39	9° 0	17°23	5°43	6° 0	10°24	27°20	T 22
W23	16 2 31	1°48'05	3°Y50	21°19	16°45	2°36	21°41	28° 4	12°43	9° 0	17°22	5°43	5°57	10°30	27°22	W23
T 24	16 6 27	2°45'41	18°12	22°56	17°58	3°21	21°34	28° 9	12°46	9° 1	17°21	5°42	5°54	10°37	27°24	T 24
F 25	16 10 24	3°43'16	2°II52	24°29	19°12	4° 6	21°27	28°15	12°49	9° 1	17°20	5°D42	5°51	10°44	27°26	F 25
S 26	16 14 21	4°40'50	17°45	26° 0	20°25	4°50	21°20	28°20	12°52	9° 1	17°19	5°42	5°47	10°50	27°28	S 26
S 27	16 18 17	5°38'23	2°42	27°27	21°38	5°35	21°13	28°26	12°56	9° 1	17°18	5°R42	5°44	10°57	27°29	S 27
M28	16 22 14	6°35'54	17°35	28°51	22°52	6°20	21° 6	28°32	12°59	9° 1	17°17	5°42	5°41	11° 4	27°31	M28
T 29	16 26 10	7°33'25	2°Y17	0°12	24° 5	7° 5	20°59	28°37	13° 2	9° 2	17°16	5°42	5°38	11°10	27°33	T 29
W30	16 30 7	8°30'54	16°44	1°30	25°19	7°49	20°51	28°43	13° 5	9° 2	17°15	5°42	5°35	11°17	27°35	W30
T 31	16 34 3	9°II28'21	0°Y50	2°44	26°II32	8°Y34	20°Y44	28°49	13°Y 9	9°Y 2	17°Y14	5°Y42	5°Y31	11°Y24	27°Y36	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	15n 1	17n54	3s48	13n15	0s36	17n24	0s18	6s55	1s30	22s44	0n35	21n21	0n28	14n55	0s23	9n 3
W 2	15 19	14 17	4 34	14 6	0 26	17 46	0 16	6 38	1 30	22 44	0 35	21 20	0 28	14 56	0 23	9 3
T 3	15 37	9 55	5 3	14 57	0 16	18 7	0 13	6 20	1 30	22 44	0 35	21 20	0 28	14 58	0 23	9 3
F 4	15 55	5 7	5 15	15 46	0 5	18 28	0 11	6 3	1 31	22 44	0 34	21 19	0 28	14 59	0 23	9 3
S 5	16 12	0 8	5 8	16 35	0n 5	18 49	0 9	5 45	1 31	22 44	0 34	21 18	0 28	15 0	0 23	9 4
S 6	16 29	4s46	4 45	17 22	0 16	19 9	0 6	5 28	1 31	22 44	0 34	21 18	0 28	15 1	0 23	9 4
M 7	16 46	9 22	4 7	18 8	0 27	19 29	0 4	5 10	1 32	22 43	0 34	21 17	0 28	15 2	0 23	9 4
T 8	17 2	13 29	3 18	18 53	0 37	19 48	0 1	4 52	1 32	22 43	0 34	21 16	0 28	15 3	0 23	9 4
W 9	17 18	16 54	2 19	19 36	0 47	20 6	0n 1	4 35	1 32	22 43	0 34	21 15	0 28	15 4	0 23	9 4
T 10	17 34	19 30	1 15	20 16	0 57	20 24	0 4	4 17	1 33	22 43	0 34	21 15	0 28	15 5	0 23	9 4
F 11	17 50	21 9	0 8	20 55	1 7	20 41	0 6	3 59	1 33	22 43	0 34	21 14	0 28	15 6	0 23	9 4
S 12	18 5	21 47	0n59	21 31	1 16	20 58	0 9	3 41	1 33	22 42	0 34	21 13	0 28	15 7	0 23	9 4
S 13	18 20	21 25	2 2	22 5	1 24	21 15	0 11	3 24	1 34	22 42	0 34	21 12	0 28	15 8	0 23	9 5
M14	18 35	20 6	3 0	22 37	1 32	21 30	0 14	3 6	1 34	22 42	0 34	21 11	0 28	15 9	0 23	9 5
T 15	18 49	17 54	3 49	23 6	1 40	21 45	0 16	2 48	1 34	22 42	0 34	21 10	0 28	15 10	0 23	9 5
W16	19 3	14 57	4 29	23 32	1 47	22 0	0 18	2 30	1 34	22 41	0 34	21 9	0 28	15 11	0 23	9 5
T 17	19 17	11 22	4 58	23 56	1 53	22 14	0 21	2 13	1 35	22 41	0 34	21 8	0 28	15 12	0 23	9 5
F 18	19 31	7 17	5 14	24 17	1 58	22 27	0 23	1 55	1 35	22 41	0 34	21 8	0 28	15 13	0 23	9 5
S 19	19 44	2 48	5 16	24 35	2 3	22 40	0 26	1 37	1 35	22 40	0 34	21 7	0 28	15 14	0 23	9 5
S 20	19 57	1n55	5 3	24 51	2 7	22 52	0 28	1 19	1 35	22 40	0 34	21 6	0 29	15 15	0 23	9 5
M21	20 9	6 41	4 33	25 5	2 10	23 3	0 31	1 1	1 36	22 40	0 33	21 5	0 29	15 17	0 23	9 5
T 22	20 21	11 17	3 48	25 16	2 13	23 14	0 33	0 44	1 36	22 39	0 33	21 4	0 29	15 18	0 23	9 5
W23	20 33	15 27	2 48	25 25	2 14	23 24	0 35	0 26	1 36	22 39	0 33	21 3	0 29	15 19	0 23	9 5
T 24	20 44	18 48	1 36	25 31	2 15	23 33	0 38	0 8	1 36	22 39	0 33	21 2	0 29	15 20	0 23	9 5
F 25	20 55	21 1	0 16	25 36	2 15	23 42	0 40	0n 9	1 36	22 38	0 33	21 0	0 29	15 21	0 23	9 4
S 26	21 6	21 48	1s 6	25 38	2 14	23 50	0 42	0 27	1 36	22 38	0 33	20 59	0 29	15 22	0 23	9 4
S 27	21 16	21 2	2 24	25 39	2 12	23 57	0 45	0 45	1 37	22 38	0 33	20 58	0 29	15 23	0 23	9 4
M28	21 26	18 48	3 32	25 37	2 10	24 3	0 47	1 2	1 37	22 37	0 33	20 57	0 29	15 24	0 23	9 4
T 29	21 36	15 22	4 25	25 34	2 6	24 9	0 49	1 20	1 37	22 37	0 33	20 56	0 29	15 24	0 23	9 4
W30	21 45	11 4	5 0	25 30	2 2	24 14	0 51	1 37	1 37	22 37	0 33	20 55	0 29	15 25	0 23	9 4
T 31	21n54	6n15	5s16	25n24	1n57	24n19	0n53	1n55	1s37	22s36	0n33	20n54	0n29	15n26	0s23	9n 4

Julian Day Number = 2367659.5, Delta T = 21.20 sec  
 Ecliptic obliquity = 23°28'05, Nutation = 0°00'15, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 21°32'01, Lahiri = 20°39'02Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1770  
geocentric

JUNE 1770

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	16 38 0	10II25'48	14♍36	3♊55	27II45	9♍19	20°R37	28♊55	13♋12	9♍3	17°R13	5°D42	5♊28	11♋30	27♋38	F 1
S 2	16 41 56	11°23'13	28° 0	5° 3	28°59	10° 3	20♊29	29° 1	13°15	9° 3	17♋12	5♊42	5°25	11°37	27°39	S 2
S 3	16 45 53	12°20'36	11♊6	6° 7	0♊12	10°48	20°22	29° 7	13°18	9° 3	17°10	5°42	5°22	11°44	27°41	S 3
M 4	16 49 50	13°17'59	23°54	7° 8	1°25	11°32	20°14	29°13	13°21	9° 4	17° 9	5°43	5°19	11°50	27°42	M 4
T 5	16 53 46	14°15'21	6♍27	8° 5	2°39	12°16	20° 7	29°19	13°24	9° 4	17° 8	5°44	5°16	11°57	27°44	T 5
W 6	16 57 43	15°12'42	18°48	8°58	3°52	13° 1	19°59	29°26	13°27	9° 5	17° 7	5°45	5°12	12° 4	27°45	W 6
T 7	17 1 39	16°10'02	0♊58	9°48	5° 5	13°45	19°52	29°32	13°31	9° 6	17° 6	5°R45	5° 9	12°10	27°46	T 7
F 8	17 5 36	17° 7'21	13° 0	10°33	6°18	14°29	19°44	29°38	13°34	9° 6	17° 5	5°45	5° 6	12°17	27°47	F 8
S 9	17 9 32	18° 4'39	24°56	11°15	7°32	15°13	19°36	29°45	13°37	9° 7	17° 3	5°44	5° 3	12°24	27°49	S 9
S 10	17 13 29	19° 1'57	6♋48	11°53	8°45	15°57	19°29	29°51	13°40	9° 7	17° 2	5°43	5° 0	12°30	27°50	S 10
M 11	17 17 26	19°59'14	18°38	12°26	9°58	16°41	19°21	29°58	13°43	9° 8	17° 1	5°41	4°57	12°37	27°51	M 11
T 12	17 21 22	20°56'31	0♋28	12°56	11°11	17°25	19°13	0♊4	13°45	9° 9	17° 0	5°39	4°53	12°44	27°52	T 12
W 13	17 25 19	21°53'47	12°22	13°21	12°24	18° 9	19° 6	0°11	13°48	9°10	16°58	5°37	4°50	12°50	27°53	W 13
T 14	17 29 15	22°51'02	24°22	13°41	13°37	18°53	18°58	0°18	13°51	9°10	16°57	5°34	4°47	12°57	27°54	T 14
F 15	17 33 12	23°48'18	6♋32	13°57	14°50	19°37	18°50	0°24	13°54	9°11	16°56	5°33	4°44	13° 4	27°55	F 15
S 16	17 37 8	24°45'33	18°56	14° 9	16° 3	20°21	18°43	0°31	13°57	9°12	16°54	5°32	4°41	13°11	27°56	S 16
S 17	17 41 5	25°42'48	1♍38	14°16	17°16	21° 4	18°35	0°38	14° 0	9°13	16°53	5°D32	4°37	13°17	27°56	S 17
M 18	17 45 1	26°40'03	14°41	14°R18	18°29	21°48	18°28	0°45	14° 3	9°14	16°52	5°33	4°34	13°24	27°57	M 18
T 19	17 48 58	27°37'17	28°10	14°16	19°42	22°31	18°20	0°52	14° 5	9°15	16°50	5°34	4°31	13°31	27°58	T 19
W 20	17 52 54	28°34'32	12♋5	14° 9	20°55	23°15	18°13	0°59	14° 8	9°16	16°49	5°35	4°28	13°37	27°58	W 20
T 21	17 56 51	29°31'46	26°25	13°58	22° 8	23°58	18° 5	1° 6	14°11	9°17	16°48	5°36	4°25	13°44	27°59	T 21
F 22	18 0 48	0♊29'01	11II10	13°43	23°21	24°41	17°58	1°13	14°13	9°18	16°46	5°R36	4°22	13°51	27°59	F 22
S 23	18 4 44	1°26'15	26°11	13°24	24°34	25°24	17°51	1°20	14°16	9°19	16°45	5°35	4°18	13°57	28° 0	S 23
S 24	18 8 41	2°23'29	11♊22	13° 1	25°47	26° 8	17°43	1°27	14°18	9°20	16°43	5°33	4°15	14° 4	28° 0	S 24
M 25	18 12 37	3°20'43	26°33	12°35	27° 0	26°51	17°36	1°34	14°21	9°21	16°42	5°30	4°12	14°11	28° 1	M 25
T 26	18 16 34	4°17'56	11♊34	12° 5	28°13	27°34	17°29	1°41	14°24	9°22	16°40	5°26	4° 9	14°17	28° 1	T 26
W 27	18 20 30	5°15'09	26°16	11°33	29°26	28°16	17°22	1°48	14°26	9°23	16°39	5°22	4° 6	14°24	28° 1	W 27
T 28	18 24 27	6°12'21	10♍34	10°59	0♊39	28°59	17°15	1°55	14°29	9°24	16°38	5°19	4° 3	14°31	28° 1	T 28
F 29	18 28 24	7° 9'33	24°26	10°24	1°51	29°42	17° 8	2° 3	14°31	9°26	16°36	5°17	3°59	14°37	28° 1	F 29
S 30	18 32 20	8°♊6'45	7♊51	9°♊47	3♋4	0♋24	17°♊2	2♋10	14°♋33	9♍27	16°♋35	5°D16	3♊56	14°♋44	28°♋2	S 30

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	22n 2	1n15	5s14	25n16	1n51	24n23	0n56	2n12	1s37	22s36	0n32	20n53	0n29	15n27	0s23	9n 4	0n56	22s 2	0n20	21s17	21s14	19s57	2n31	3n46	
S 2	22 10	3s42	4 54	25 7	1 45	24 26	0 58	2 30	1 37	22 35	0 32	20 51	0 29	15 28	0 23	9 3	0 56	22 2	0 20	21 17	21 14	19 56	2 31	3 46	
S 3	22 18	8 22	4 19	24 57	1 38	24 28	1 0	2 47	1 37	22 35	0 32	20 50	0 29	15 29	0 23	9 3	0 56	22 2	0 20	21 17	21 13	19 54	2 32	3 46	
M 4	22 25	12 34	3 32	24 46	1 30	24 29	1 2	3 4	1 37	22 34	0 32	20 49	0 29	15 30	0 23	9 3	0 56	22 3	0 19	21 17	21 13	19 53	2 33	3 46	
T 5	22 32	16 8	2 36	24 34	1 21	24 30	1 4	3 22	1 37	22 34	0 32	20 48	0 29	15 31	0 23	9 3	0 56	22 3	0 19	21 17	21 12	19 52	2 33	3 46	
W 6	22 39	18 55	1 33	24 21	1 11	24 30	1 6	3 39	1 37	22 34	0 32	20 46	0 29	15 32	0 23	9 3	0 56	22 3	0 19	21 17	21 12	19 50	2 34	3 47	
T 7	22 45	20 49	0 26	24 7	1 1	24 30	1 8	3 56	1 37	22 33	0 32	20 45	0 29	15 33	0 23	9 2	0 56	22 3	0 19	21 17	21 11	19 49	2 35	3 47	
F 8	22 51	21 43	0n40	23 53	0 50	24 29	1 10	4 13	1 38	22 33	0 32	20 44	0 29	15 34	0 23	9 2	0 56	22 4	0 19	21 17	21 11	19 48	2 35	3 47	
S 9	22 56	21 38	1 44	23 37	0 38	24 27	1 11	4 30	1 38	22 32	0 31	20 43	0 30	15 35	0 23	9 2	0 56	22 4	0 19	21 17	21 10	19 47	2 36	3 47	
S 10	23 1	20 34	2 44	23 22	0 26	24 24	1 13	4 47	1 38	22 32	0 31	20 41	0 30	15 36	0 23	9 2	0 56	22 4	0 19	21 17	21 9	19 45	2 36	3 47	
M11	23 5	18 37	3 36	23 6	0 13	24 20	1 15	5 4	1 38	22 31	0 31	20 40	0 30	15 37	0 23	9 1	0 56	22 4	0 19	21 17	21 9	19 44	2 37	3 47	
T 12	23 9	15 52	4 18	22 49	0s 1	24 16	1 17	5 21	1 37	22 31	0 31	20 39	0 30	15 37	0 23	9 1	0 56	22 5	0 19	21 16	21 8	19 43	2 38	3 47	
W13	23 13	12 28	4 50	22 33	0 15	24 11	1 18	5 38	1 37	22 30	0 31	20 37	0 30	15 38	0 23	9 1	0 56	22 5	0 19	21 16	21 8	19 41	2 38	3 48	
T 14	23 16	8 33	5 10	22 16	0 30	24 6	1 20	5 54	1 37	22 30	0 31	20 36	0 30	15 39	0 23	9 0	0 56	22 5	0 19	21 16	21 7	19 40	2 39	3 48	
F 15	23 19	4 14	5 16	21 59	0 45	23 59	1 21	6 11	1 37	22 29	0 31	20 34	0 30	15 40	0 23	9 0	0 56	22 5	0 18	21 15	21 6	19 39	2 39	3 48	
S 16	23 22	0n20	5 7	21 43	1 1	23 52	1 23	6 27	1 37	22 29	0 31	20 33	0 30	15 41	0 23	9 0	0 56	22 6	0 18	21 15	21 6	19 37	2 40	3 48	
S 17	23 24	4 59	4 44	21 26	1 17	23 45	1 24	6 44	1 37	22 28	0 30	20 32	0 30	15 42	0 23	8 59	0 56	22 6	0 18	21 15	21 5	19 36	2 40	3 48	
M18	23 26	9 34	4 5	21 10	1 33	23 36	1 26	7 0	1 37	22 28	0 30	20 30	0 30	15 42	0 23	8 59	0 56	22 6	0 18	21 15	21 5	19 35	2 40	3 48	
T 19	23 27	13 49	3 12	20 54	1 49	23 27	1 27	7 16	1 37	22 27	0 30	20 29	0 30	15 43	0 23	8 59	0 56	22 6	0 18	21 15	21 4	19 33	2 41	3 48	
W20	23 28	17 29	2 6	20 38	2 6	23 17	1 28	7 33	1 37	22 27	0 30	20 27	0 30	15 44	0 23	8 58	0 56	22 7	0 18	21 16	21 4	19 32	2 41	3 49	
T 21	23 28	20 12	0 50	20 23	2 22	23 7	1 29	7 49	1 37	22 26	0 30	20 26	0 30	15 45	0 23	8 58	0 56	22 7	0 18	21 16	21 3	19 31	2 42	3 49	
F 22	23 28	21 38	0s13	20 8	2 38	22 56	1 31	8 5	1 37	22 26	0 30	20 24	0 30	15 46	0 23	8 58	0 56	22 7	0 18	21 16	21 2	19 29	2 42	3 49	
S 23	23 28	21 34	1 51	19 54	2 54	22 44	1 32	8 20	1 36	22 25	0 30	20 23	0 30	15 46	0 23	8 57	0 56	22 7	0 18	21 16	21 2	19 28	2 42	3 49	
S 24	23 27	19 55	3 4	19 41	3 9	22 32	1 33	8 36	1 36	22 25	0 29	20 21	0 30	15 47	0 23	8 57	0 56	22 8	0 18	21 15	21 1	19 27	2 43	3 49	
M25	23 26	16 52	4 4	19 29	3 24	22 19	1 34	8 52	1 36	22 24	0 29	20 20	0 30	15 48	0 23	8 56	0 56	22 8	0 17	21 15	21 1	19 25	2 43	3 49	
T 26	23 24	12 44	4 47	19 18	3 38	22 5	1 34	9 7	1 36	22 24	0 29	20 18	0 31	15 49	0 23	8 56	0 56	22 8	0 17	21 14	21 0	19 24	2 43	3 49	
W27	23 22	7 55	5 9	19 8	3 51	21 51	1 35	9 23	1 36	22 23	0 29	20 17	0 31	15 49	0 23	8 55	0 56	22 9	0 17	21 13	20 59	19 22	2 43	3 50	
T 28	23 19	2 48	5 12	18 58	4 3	21 36	1 36	9 38	1 36	22 23	0 29	20 15	0 31	15 50	0 23	8 55	0 56	22 9	0 17	21 13	20 59	19 21	2 43	3 50	
F 29	23 16	2s19	4 56	18 50	4 14	21 20	1 37	9 53	1 35	22 22	0 29	20 14	0 31	15 51	0 23	8 54	0 56	22 9	0 17	21 12	20 58	19 20	2 44	3 50	
S 30	23n13	7s10	4s24	18n43	4s24	21n 4	1n37	10n 9	1s35	22s22	0n28	20m12	0n31	15m52	0s23	8n54	0n56	22s 9	0n17	21s12	20s58	19s18	2n44	3n50	

# ASTRODIENST EPHEMERIS for the year 1770

## geocentric

JULY 1770

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	18 36 17	9°57'35"	20°52'52"	9°R10	4°L17	18°7	16°R55	2°L17	14°B36	9°M28	16°R33	5°A17	3°A53	14°B51	28°R 2	S 1
M 2	18 40 13	10° 1'08"	3°M31	8°B34	5°30	1°49	16°A49	2°25	14°38	9°29	16°B32	5°18	3°50	14°57	28°A 1	M 2
T 3	18 44 10	10°58'19"	15°54	7°58	6°42	2°32	16°42	2°32	14°40	9°31	16°30	5°20	3°47	15° 4	28° 1	T 3
W 4	18 48 6	11°55'30"	28° 3	7°24	7°55	3°14	16°36	2°39	14°42	9°32	16°29	5°21	3°43	15°11	28° 1	W 4
T 5	18 52 3	12°52'41"	10°A 3	6°52	9° 8	3°56	16°30	2°47	14°45	9°33	16°27	5°R21	3°40	15°17	28° 1	T 5
F 6	18 55 59	13°49'51"	21°57	6°23	10°20	4°38	16°24	2°54	14°47	9°35	16°26	5°20	3°37	15°24	28° 1	F 6
S 7	18 59 56	14°47'02"	3°B47	5°57	11°33	5°20	16°18	3° 2	14°49	9°36	16°25	5°17	3°34	15°31	28° 1	S 7
S 8	19 3 53	15°44'13"	15°37	5°35	12°45	6° 2	16°12	3° 9	14°51	9°38	16°23	5°12	3°31	15°37	28° 0	S 8
M 9	19 7 49	16°41'25"	27°28	5°17	13°58	6°44	16° 6	3°17	14°53	9°39	16°22	5° 5	3°28	15°44	28° 0	M 9
T 10	19 11 46	17°38'36"	9°A21	5° 3	15°10	7°25	16° 0	3°24	14°55	9°41	16°20	4°57	3°24	15°51	27°59	T 10
W 11	19 15 42	18°35'48"	21°20	4°55	16°23	8° 7	15°55	3°32	14°57	9°42	16°19	4°49	3°21	15°57	27°59	W 11
T 12	19 19 39	19°33'00"	3°K25	4°D51	17°35	8°48	15°50	3°39	14°59	9°44	16°17	4°42	3°18	16° 4	27°58	T 12
F 13	19 23 35	20°30'13"	15°39	4°52	18°48	9°30	15°45	3°47	15° 1	9°45	16°16	4°36	3°15	16°11	27°58	F 13
S 14	19 27 32	21°27'27"	28° 6	5° 0	20° 0	10°11	15°40	3°55	15° 3	9°47	16°14	4°31	3°12	16°18	27°57	S 14
S 15	19 31 28	22°24'41"	10°Y47	5°12	21°12	10°52	15°35	4° 2	15° 4	9°49	16°13	4°29	3° 8	16°24	27°56	S 15
M 16	19 35 25	23°21'56"	23°46	5°30	22°25	11°33	15°30	4°10	15° 6	9°50	16°11	4°D28	3° 5	16°31	27°55	M 16
T 17	19 39 22	24°19'11"	7°B 8	5°54	23°37	12°14	15°25	4°18	15° 8	9°52	16°10	4°29	3° 2	16°38	27°55	T 17
W 18	19 43 18	25°16'28"	20°53	6°24	24°49	12°55	15°21	4°25	15°10	9°54	16° 8	4°30	2°59	16°44	27°54	W 18
T 19	19 47 15	26°13'45"	5°II 4	6°59	26° 1	13°36	15°17	4°33	15°11	9°55	16° 7	4°R30	2°56	16°51	27°53	T 19
F 20	19 51 11	27°11'04"	19°40	7°40	27°14	14°16	15°13	4°41	15°13	9°57	16° 6	4°29	2°53	16°58	27°52	F 20
S 21	19 55 8	28° 8'23"	4°B36	8°26	28°26	14°57	15° 9	4°48	15°14	9°59	16° 4	4°26	2°49	17° 4	27°51	S 21
S 22	19 59 4	29° 5'43"	19°46	9°18	29°38	15°37	15° 5	4°56	15°16	10° 0	16° 3	4°21	2°46	17°11	27°50	S 22
M 23	20 3 1	0°L 3'03"	5°L 1	10°15	0°M50	16°17	15° 1	5° 4	15°17	10° 2	16° 1	4°14	2°43	17°18	27°49	M 23
T 24	20 6 57	1° 0'24"	20° 9	11°18	2° 2	16°57	14°58	5°11	15°19	10° 4	16° 0	4° 5	2°40	17°24	27°47	T 24
W 25	20 10 54	1°57'46"	5°M 1	12°26	3°14	17°37	14°55	5°19	15°20	10° 6	15°58	3°57	2°37	17°31	27°46	W 25
T 26	20 14 51	2°55'08"	19°29	13°39	4°26	18°17	14°52	5°27	15°21	10° 8	15°57	3°50	2°34	17°38	27°45	T 26
F 27	20 18 47	3°52'31"	3°A28	14°57	5°38	18°57	14°49	5°35	15°23	10°10	15°56	3°44	2°30	17°44	27°44	F 27
S 28	20 22 44	4°49'55"	16°58	16°20	6°50	19°36	14°46	5°42	15°24	10°11	15°54	3°40	2°27	17°51	27°42	S 28
S 29	20 26 40	5°47'19"	0°M 1	17°48	8° 2	20°16	14°44	5°50	15°25	10°13	15°53	3°39	2°24	17°58	27°41	S 29
M 30	20 30 37	6°44'43"	12° 39	19°21	9°14	20°55	14°41	5°58	15°26	10°15	15°52	3°D39	2°21	18° 4	27°39	M 30
T 31	20 34 33	7°L42'09"	24°M58	20°B57	10°M26	21°B34	14°A39	6°L 6	15°B27	10°M17	15°B50	3°A39	2°A18	18°B11	27°A38	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	23n 9	11s32	3s40	18n38	4s32	20n48	1n38	10n24	1s35	22s21	0n28	20n10	0n31	15n52	0s23	8n53
M 2	23 5	15 18	2 45	18 34	4 38	20 30	1 38	10 38	1 35	22 21	0 28	20 9	0 31	15 53	0 23	8 53
T 3	23 1	18 17	1 44	18 31	4 43	20 13	1 39	10 53	1 34	22 20	0 28	20 7	0 31	15 54	0 23	8 52
W 4	22 56	20 24	0 40	18 29	4 47	19 54	1 39	11 8	1 34	22 20	0 28	20 6	0 31	15 54	0 23	8 52
T 5	22 51	21 34	0n26	18 29	4 49	19 35	1 39	11 22	1 34	22 19	0 28	20 4	0 31	15 55	0 23	8 51
F 6	22 45	21 44	1 29	18 30	4 49	19 16	1 39	11 37	1 34	22 19	0 27	20 2	0 31	15 55	0 23	8 51
S 7	22 39	20 56	2 28	18 32	4 48	18 56	1 40	11 51	1 33	22 19	0 27	20 1	0 31	15 56	0 23	8 50
S 8	22 32	19 13	3 21	18 36	4 45	18 36	1 40	12 5	1 33	22 18	0 27	19 59	0 31	15 57	0 23	8 50
M 9	22 25	16 41	4 5	18 41	4 41	18 15	1 39	12 19	1 33	22 18	0 27	19 57	0 31	15 57	0 23	8 49
T 10	22 18	13 27	4 38	18 47	4 35	17 53	1 39	12 33	1 32	22 17	0 27	19 56	0 31	15 58	0 23	8 49
W 11	22 11	9 40	5 0	18 55	4 28	17 31	1 39	12 47	1 32	22 17	0 26	19 54	0 32	15 58	0 23	8 48
T 12	22 2	5 28	5 8	19 3	4 20	17 9	1 39	13 0	1 31	22 17	0 26	19 52	0 32	15 59	0 23	8 47
F 13	21 54	1 1	5 3	19 12	4 11	16 46	1 38	13 14	1 31	22 16	0 26	19 51	0 32	16 0	0 23	8 47
S 14	21 45	3n34	4 43	19 22	4 1	16 23	1 38	13 27	1 31	22 16	0 26	19 49	0 32	16 0	0 23	8 46
S 15	21 36	8 5	4 9	19 33	3 49	15 59	1 37	13 40	1 30	22 16	0 26	19 47	0 32	16 1	0 23	8 46
M 16	21 27	12 21	3 22	19 44	3 38	15 35	1 37	13 54	1 30	22 15	0 26	19 45	0 32	16 1	0 23	8 45
T 17	21 17	16 9	2 22	19 55	3 25	15 11	1 36	14 6	1 29	22 15	0 25	19 44	0 32	16 2	0 23	8 44
W 18	21 6	19 10	1 13	20 7	3 12	14 46	1 35	14 19	1 29	22 15	0 25	19 42	0 32	16 2	0 23	8 44
T 19	20 56	21 7	0s 3	20 19	2 58	14 20	1 35	14 32	1 28	22 14	0 25	19 40	0 32	16 2	0 23	8 43
F 20	20 45	21 43	1 21	20 31	2 44	13 55	1 34	14 44	1 28	22 14	0 25	19 38	0 32	16 3	0 23	8 42
S 21	20 34	20 49	2 34	20 43	2 30	13 29	1 33	14 57	1 28	22 14	0 25	19 37	0 32	16 3	0 23	8 42
S 22	20 22	18 25	3 38	20 54	2 15	13 3	1 32	15 9	1 27	22 14	0 24	19 35	0 32	16 4	0 23	8 41
M 23	20 10	14 43	4 27	21 4	2 0	12 36	1 30	15 21	1 27	22 13	0 24	19 33	0 32	16 4	0 23	8 40
T 24	19 57	10 6	4 56	21 14	1 45	12 9	1 29	15 33	1 26	22 13	0 24	19 31	0 33	16 5	0 23	8 40
W 25	19 45	4 57	5 5	21 23	1 31	11 42	1 28	15 44	1 25	22 13	0 24	19 29	0 33	16 5	0 23	8 39
T 26	19 32	0s20	4 54	21 31	1 16	11 14	1 26	15 56	1 25	22 13	0 24	19 28	0 33	16 5	0 23	8 38
F 27	19 18	5 26	4 25	21 37	1 1	10 46	1 25	16 7	1 24	22 13	0 24	19 26	0 33	16 6	0 23	8 37
S 28	19 5	10 6	3 43	21 42	0 47	10 18	1 23	16 19	1 24	22 13	0 23	19 24	0 33	16 6	0 23	8 37
S 29	18 51	14 8	2 50	21 44	0 33	9 50	1 22	16 30	1 23	22 12	0 23	19 22	0 33	16 6	0 23	8 36
M 30	18 37	17 24	1 50	21 45	0 19	9 21	1 20	16 41	1 23	22 12	0 23	19 20	0 33	16 7	0 23	8 35
T 31	18n22	19s47	0s46	21n44	0s 6	8n52	1n18	16n51	1s22	22s12	0n23	19n18	0n33	16n 7	0s23	8n35

Julian Day Number = 2367720.5, Delta T = 21.23 sec  
 Ecliptic obliquity = 23°28'04", Nutation = 0°00'16", out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 21°32'10", Lahiri = 20°39'10"Greg. Calendar



# ASTRODIENST EPHEMERIS for the year 1770

## geocentric

AUGUST 1770

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	20 38 30	8♂39'35	7♂ 3	22♂38	11♂37	22♂13	14°R37	6♂13	15♂28	10♂19	15°R49	3°R40	2♂14	18♂18	27°R36	W 1
T 2	20 42 26	9°37'01	18°58	24°22	12°49	22°52	14♂35	6°21	15°29	10°21	15♂48	3♂38	2°11	18°25	27♂35	T 2
F 3	20 46 23	10°34'29	0♂48	26°10	14° 1	23°31	14°34	6°29	15°30	10°23	15°46	3°35	2° 8	18°31	27°33	F 3
S 4	20 50 20	11°31'57	12°37	28° 1	15°12	24° 9	14°32	6°37	15°31	10°25	15°45	3°29	2° 5	18°38	27°31	S 4
S 5	20 54 16	12°29'27	24°27	29°54	16°24	24°48	14°31	6°44	15°32	10°27	15°44	3°21	2° 2	18°45	27°30	S 5
M 6	20 58 13	13°26'57	6♂22	1♂50	17°35	25°26	14°30	6°52	15°33	10°29	15°42	3°10	1°59	18°51	27°28	M 6
T 7	21 2 9	14°24'29	18°22	3°48	18°47	26° 4	14°29	7° 0	15°33	10°31	15°41	2°58	1°55	18°58	27°26	T 7
W 8	21 6 6	15°22'01	0♂30	5°48	19°58	26°42	14°28	7° 7	15°34	10°33	15°40	2°45	1°52	19° 5	27°24	W 8
T 9	21 10 2	16°19'35	12°45	7°48	21°10	27°20	14°28	7°15	15°35	10°35	15°39	2°33	1°49	19°11	27°22	T 9
F 10	21 13 59	17°17'10	25°10	9°50	22°21	27°57	14°28	7°23	15°35	10°37	15°38	2°22	1°46	19°18	27°20	F 10
S 11	21 17 55	18°14'46	7♂45	11°52	23°32	28°35	14°D27	7°30	15°36	10°39	15°36	2°14	1°43	19°25	27°18	S 11
S 12	21 21 52	19°12'24	20°33	13°55	24°44	29°12	14°27	7°38	15°36	10°41	15°35	2° 9	1°40	19°31	27°16	S 12
M13	21 25 49	20°10'04	3♂35	15°57	25°55	29°49	14°28	7°46	15°37	10°44	15°34	2° 6	1°36	19°38	27°14	M13
T 14	21 29 45	21° 7'45	16°54	17°59	27° 6	0♂26	14°28	7°53	15°37	10°46	15°33	2°D 5	1°33	19°45	27°12	T 14
W15	21 33 42	22° 5'27	0♂32	20° 1	28°17	1° 3	14°29	8° 1	15°37	10°48	15°32	2°R 5	1°30	19°51	27°10	W15
T 16	21 37 38	23° 3'12	14°32	22° 2	29°28	1°39	14°29	8° 8	15°38	10°50	15°31	2° 5	1°27	19°58	27° 8	T 16
F 17	21 41 35	24° 0'58	28°53	24° 2	0♂39	2°16	14°30	8°16	15°38	10°52	15°30	2° 3	1°24	20° 5	27° 6	F 17
S 18	21 45 31	24°58'46	13♂34	26° 1	1°50	2°52	14°32	8°23	15°38	10°54	15°29	1°59	1°20	20°12	27° 3	S 18
S 19	21 49 28	25°56'35	28°29	28° 0	3° 1	3°28	14°33	8°31	15°38	10°56	15°28	1°52	1°17	20°18	27° 1	S 19
M20	21 53 24	26°54'26	13♂31	29°57	4°12	4° 4	14°34	8°39	15°38	10°59	15°26	1°42	1°14	20°25	26°59	M20
T 21	21 57 21	27°52'18	28°32	1♂53	5°23	4°39	14°36	8°46	15°R38	11° 1	15°25	1°31	1°11	20°32	26°56	T 21
W22	22 1 18	28°50'12	13♂20	3°47	6°33	5°15	14°38	8°53	15°38	11° 3	15°25	1°20	1° 8	20°38	26°54	W22
T 23	22 5 14	29°48'08	27°48	5°41	7°44	5°50	14°40	9° 1	15°38	11° 5	15°24	1°10	1° 5	20°45	26°52	T 23
F 24	22 9 11	0♂46'04	11♂50	7°33	8°55	6°25	14°42	9° 8	15°38	11° 7	15°23	1° 1	1° 1	20°52	26°49	F 24
S 25	22 13 7	1°44'02	25°23	9°24	10° 5	7° 0	14°45	9°16	15°38	11°10	15°22	0°56	0°58	20°58	26°47	S 25
S 26	22 17 4	2°42'02	8♂29	11°14	11°16	7°34	14°48	9°23	15°38	11°12	15°21	0°52	0°55	21° 5	26°44	S 26
M27	22 21 0	3°40'03	21°10	13° 2	12°26	8° 9	14°50	9°30	15°37	11°14	15°20	0°51	0°52	21°12	26°42	M27
T 28	22 24 57	4°38'05	3♂30	14°49	13°37	8°43	14°53	9°38	15°37	11°16	15°19	0°51	0°49	21°18	26°39	T 28
W29	22 28 53	5°36'09	15°35	16°35	14°47	9°17	14°57	9°45	15°37	11°18	15°18	0°51	0°46	21°25	26°37	W29
T 30	22 32 50	6°34'14	27°30	18°19	15°57	9°50	15° 0	9°52	15°36	11°21	15°18	0°49	0°42	21°32	26°34	T 30
F 31	22 36 47	7♂32'20	9♂20	20♂ 3	17♂ 7	10♂24	15♂ 3	9♂59	15♂36	11♂23	15♂17	0♂46	0♂39	21♂39	26♂32	F 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
W 1	18n 7	21s13	0n18	21n41	0n 7	8n23	1n16	17n 2	1s21	22s12	0n23	19n17	0n33	16n 7	0s23	W 1
T 2	17 52	21 40	1 21	21 35	0 19	7 54	1 14	17 13	1 21	22 12	0 22	19 15	0 33	16 8	0 23	T 2
F 3	17 36	21 9	2 19	21 26	0 30	7 25	1 12	17 23	1 20	22 12	0 22	19 13	0 33	16 8	0 23	F 3
S 4	17 21	19 41	3 12	21 15	0 41	6 55	1 10	17 33	1 19	22 12	0 22	19 11	0 33	16 8	0 23	S 4
S 5	17 5	17 23	3 56	21 2	0 51	6 25	1 8	17 43	1 19	22 12	0 22	19 9	0 34	16 8	0 23	S 5
M 6	16 48	14 21	4 30	20 45	1 0	5 55	1 6	17 53	1 18	22 12	0 22	19 7	0 34	16 8	0 23	M 6
T 7	16 32	10 43	4 52	20 26	1 9	5 25	1 4	18 2	1 17	22 12	0 22	19 5	0 34	16 9	0 23	T 7
W 8	16 15	6 37	5 1	20 4	1 16	4 55	1 1	18 12	1 17	22 13	0 21	19 4	0 34	16 9	0 23	W 8
T 9	15 58	2 13	4 57	19 40	1 23	4 24	0 59	18 21	1 16	22 13	0 21	19 2	0 34	16 9	0 23	T 9
F 10	15 40	2n20	4 38	19 14	1 28	3 54	0 56	18 30	1 15	22 13	0 21	19 0	0 34	16 9	0 23	F 10
S 11	15 23	6 51	4 6	18 45	1 33	3 23	0 54	18 39	1 14	22 13	0 21	18 58	0 34	16 9	0 23	S 11
S 12	15 5	11 8	3 21	18 14	1 37	2 53	0 51	18 48	1 14	22 13	0 21	18 56	0 34	16 9	0 23	S 12
M13	14 47	15 0	2 25	17 41	1 41	2 22	0 48	18 57	1 13	22 13	0 20	18 54	0 34	16 10	0 23	M13
T 14	14 28	18 10	1 20	17 6	1 43	1 51	0 46	19 6	1 12	22 14	0 20	18 52	0 34	16 10	0 23	T 14
W15	14 10	20 25	0 8	16 29	1 45	1 20	0 43	19 14	1 11	22 14	0 20	18 50	0 34	16 10	0 23	W15
T 16	13 51	21 29	1s 5	15 51	1 46	0 49	0 40	19 22	1 10	22 14	0 20	18 49	0 35	16 10	0 23	T 16
F 17	13 32	21 21	2 17	15 11	1 46	0 18	0 37	19 30	1 10	22 14	0 20	18 47	0 35	16 10	0 23	F 17
S 18	13 13	19 27	3 20	14 31	1 45	0s13	0 34	19 38	1 9	22 15	0 20	18 45	0 35	16 10	0 23	S 18
S 19	12 53	16 23	4 12	13 49	1 44	0 44	0 31	19 46	1 8	22 15	0 19	18 43	0 35	16 10	0 23	S 19
M20	12 33	12 13	4 46	13 6	1 43	1 15	0 27	19 53	1 7	22 15	0 19	18 41	0 35	16 10	0 24	M20
T 21	12 14	7 18	5 0	12 23	1 41	1 46	0 24	20 1	1 6	22 16	0 19	18 39	0 35	16 10	0 24	T 21
W22	11 54	2 2	4 54	11 39	1 38	2 17	0 21	20 8	1 5	22 16	0 19	18 37	0 35	16 10	0 24	W22
T 23	11 33	3s14	4 29	10 54	1 35	2 48	0 18	20 15	1 4	22 17	0 19	18 36	0 35	16 10	0 24	T 23
F 24	11 13	8 11	3 48	10 9	1 31	3 19	0 14	20 22	1 3	22 17	0 18	18 34	0 35	16 10	0 24	F 24
S 25	10 52	12 33	2 56	9 24	1 27	3 50	0 11	20 29	1 2	22 18	0 18	18 32	0 36	16 10	0 24	S 25
S 26	10 31	16 10	1 55	8 38	1 22	4 21	0 7	20 36	1 1	22 18	0 18	18 30	0 36	16 10	0 24	S 26
M27	10 10	18 54	0 51	7 52	1 17	4 52	0 4	20 42	1 0	22 18	0 18	18 28	0 36	16 10	0 24	M27
T 28	9 49	20 39	0n14	7 6	1 12	5 22	0 0	20 48	0 59	22 19	0 18	18 26	0 36	16 10	0 24	T 28
W29	9 28	21 24	1 17	6 20	1 7	5 53	0s 3	20 55	0 58	22 19	0 18	18 24	0 36	16 9	0 24	W29
T 30	9 7	21 11	2 16	5 33	1 1	6 24	0 7	21 1	0 57	22 20	0 17	18 23	0 36	16 9	0 24	T 30
F 31	8n45	20s 0	3n 9	4n47	0n55	6s54	0s11	21n 7	0s56	22s21	0n17	18n21	0n36	16n 9	0s24	F 31

Julian Day Number = 2367751.5, Delta T = 21.24 sec  
 Ecliptic obliquity = 23°28'04, Nutation = 0°00'16, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 21°32'14, Lahiri = 20°39'15Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1770  
geocentric

SEPTEMBER 1770

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	22 40 43	8 <sup>h</sup> 30'28	21 <sup>h</sup> 30' 9	21 <sup>h</sup> 45	18 <sup>h</sup> 17	10 <sup>h</sup> 57	15 <sup>h</sup> 7	10 <sup>h</sup> 12	15°R35	11 <sup>h</sup> 25	15°R16	0°R40	0 <sup>h</sup> 36	21 <sup>h</sup> 34	26°R29	S 1
S 2	22 44 40	9°28'38	3 <sup>h</sup> 30' 3	23°26	19°27	11°30	15°11	10°13	15 <sup>h</sup> 35	11°27	15 <sup>h</sup> 35	0 <sup>h</sup> 31	0°33	21°52	26 <sup>h</sup> 26	S 2
M 3	22 48 36	10°26'49	15° 3	25° 5	20°37	12° 3	15°15	10°21	15°34	11°29	15°15	0°20	0°30	21°59	26°24	M 3
T 4	22 52 33	11°25'01	27°12	26°44	21°47	12°35	15°19	10°28	15°34	11°32	15°14	0° 7	0°26	22° 5	26°21	T 4
W 5	22 56 29	12°23'15	9 <sup>h</sup> 31	28°21	22°57	13° 7	15°24	10°35	15°33	11°34	15°13	29 <sup>h</sup> 54	0°23	22°12	26°18	W 5
T 6	23 0 26	13°21'32	22° 1	29°57	24° 7	13°39	15°28	10°42	15°32	11°36	15°13	29°11	0°20	22°19	26°16	T 6
F 7	23 4 22	14°19'49	4 <sup>h</sup> 42	1 <sup>h</sup> 32	25°16	14°11	15°33	10°48	15°31	11°38	15°12	29°30	0°17	22°25	26°13	F 7
S 8	23 8 19	15°18'09	17°34	3° 6	26°26	14°42	15°38	10°55	15°30	11°41	15°11	29°22	0°14	22°32	26°10	S 8
S 9	23 12 15	16°16'31	0 <sup>h</sup> 37	4°39	27°35	15°14	15°43	11° 2	15°30	11°43	15°11	29°16	0°11	22°39	26° 8	S 9
M10	23 16 12	17°14'55	13°51	6°11	28°45	15°44	15°48	11° 9	15°29	11°45	15°10	29°13	0° 7	22°45	26° 5	M10
T 11	23 20 9	18°13'21	27°17	7°41	29°54	16°15	15°53	11°16	15°28	11°47	15°10	29°D12	0° 4	22°52	26° 2	T 11
W12	23 24 5	19°11'50	10 <sup>h</sup> 58	9°11	1 <sup>h</sup> 3	16°45	15°59	11°22	15°27	11°49	15° 9	29°12	0° 1	22°59	25°59	W12
T 13	23 28 2	20°10'20	24°52	10°39	2°12	17°15	16° 4	11°29	15°25	11°52	15° 9	29°R13	29 <sup>h</sup> 58	23° 6	25°57	T 13
F 14	23 31 58	21° 8'53	9 <sup>h</sup> 1	12° 6	3°21	17°45	16°10	11°36	15°24	11°54	15° 9	29°11	29°55	23°12	25°54	F 14
S 15	23 35 55	22° 7'28	23°24	13°32	4°30	18°14	16°16	11°42	15°23	11°56	15° 8	29° 8	29°51	23°19	25°51	S 15
S 16	23 39 51	23° 6'05	7 <sup>h</sup> 58	14°57	5°39	18°43	16°22	11°49	15°22	11°58	15° 8	29° 2	29°48	23°26	25°48	S 16
M17	23 43 48	24° 4'44	22°37	16°21	6°48	19°12	16°29	11°55	15°21	12° 0	15° 8	28°54	29°45	23°32	25°45	M17
T 18	23 47 44	25° 3'26	7 <sup>h</sup> 16	17°43	7°56	19°40	16°35	12° 1	15°19	12° 3	15° 7	28°44	29°42	23°39	25°43	T 18
W19	23 51 41	26° 2'09	21°46	19° 4	9° 5	20° 8	16°42	12° 8	15°18	12° 5	15° 7	28°34	29°39	23°46	25°40	W19
T 20	23 55 38	27° 0'55	6 <sup>h</sup> 0	20°24	10°13	20°36	16°49	12°14	15°17	12° 7	15° 7	28°25	29°36	23°52	25°37	T 20
F 21	23 59 34	27°59'42	19°54	21°43	11°22	21° 3	16°55	12°20	15°15	12° 9	15° 7	28°17	29°32	23°59	25°34	F 21
S 22	0 3 31	28°58'31	3 <sup>h</sup> 23	23° 0	12°30	21°30	17° 2	12°26	15°14	12°11	15° 6	28°12	29°29	24° 6	25°31	S 22
S 23	0 7 27	29°57'23	16°28	24°16	13°38	21°57	17°10	12°32	15°12	12°13	15° 6	28°10	29°26	24°12	25°29	S 23
M24	0 11 24	0 <sup>h</sup> 56'16	29°10	25°30	14°46	22°23	17°17	12°38	15°11	12°16	15° 6	28°D 9	29°23	24°19	25°26	M24
T 25	0 15 20	1°55'10	11 <sup>h</sup> 32	26°43	15°54	22°49	17°24	12°44	15° 9	12°18	15° 6	28°10	29°20	24°26	25°23	T 25
W26	0 19 17	2°54'07	23°39	27°54	17° 2	23°14	17°32	12°50	15° 7	12°20	15° 6	28°11	29°17	24°33	25°20	W26
T 27	0 23 13	3°53'05	5 <sup>h</sup> 35	29° 3	18° 9	23°39	17°40	12°56	15° 6	12°22	15°D 6	28°R11	29°13	24°39	25°18	T 27
F 28	0 27 10	4°52'05	17°26	0 <sup>h</sup> 10	19°17	24° 4	17°48	13° 2	15° 4	12°24	15° 6	28°10	29°10	24°46	25°15	F 28
S 29	0 31 7	5°51'07	29°18	1°15	20°24	24°28	17°56	13° 8	15° 2	12°26	15° 6	28° 7	29° 7	24°53	25°12	S 29
S 30	0 35 3	6 <sup>h</sup> 50'11	11 <sup>h</sup> 14	2 <sup>h</sup> 18	21 <sup>h</sup> 32	24 <sup>h</sup> 52	18 <sup>h</sup> 4	13 <sup>h</sup> 13	15 <sup>h</sup> 8	12 <sup>h</sup> 28	15 <sup>h</sup> 6	28 <sup>h</sup> 2	29 <sup>h</sup> 4	24 <sup>h</sup> 59	25 <sup>h</sup> 9	S 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	8n23	17s58	3n53	4n 1	0n49	7s24	0s15	21n12	0s55	22s21	0n17	18n19	0n36	16n 9	0s24	8n 9	0n56	22s25	0n11	20s19	20s18	17s45	2n13	3n56						
S 2	8 2	15 10	4 27	3 15	0 42	7 54	0 18	21 18	0 54	22 22	0 17	18 17	0 36	16 9	0 24	8 8	0 56	22 25	0 11	20 17	20 17	17 43	2 12	3 56						
M 3	7 40	11 43	4 50	2 30	0 35	8 24	0 22	21 23	0 53	22 22	0 17	18 15	0 37	16 9	0 24	8 7	0 56	22 25	0 11	20 15	20 17	17 42	2 10	3 56						
T 4	7 17	7 45	5 0	1 44	0 28	8 54	0 26	21 29	0 52	22 23	0 17	18 14	0 37	16 8	0 24	8 6	0 56	22 25	0 10	20 12	20 16	17 40	2 9	3 56						
W 5	6 55	3 26	4 56	0 59	0 21	9 24	0 30	21 34	0 50	22 24	0 16	18 12	0 37	16 8	0 24	8 5	0 56	22 26	0 10	20 9	20 15	17 38	2 8	3 56						
T 6	6 33	1n 6	4 38	0 14	0 14	9 53	0 34	21 39	0 49	22 24	0 16	18 10	0 37	16 8	0 24	8 5	0 56	22 26	0 10	20 7	20 15	17 37	2 7	3 56						
F 7	6 10	5 38	4 6	0s31	0 7	10 22	0 38	21 44	0 48	22 25	0 16	18 8	0 37	16 8	0 24	8 4	0 56	22 26	0 10	20 4	20 14	17 35	2 6	3 56						
S 8	5 48	10 0	3 22	1 15	0s 1	10 51	0 42	21 49	0 47	22 26	0 16	18 6	0 37	16 8	0 24	8 3	0 56	22 26	0 10	20 2	20 13	17 34	2 5	3 56						
S 9	5 25	13 58	2 25	1 59	0 8	11 20	0 46	21 53	0 46	22 26	0 16	18 5	0 37	16 7	0 24	8 2	0 56	22 26	0 10	20 1	20 13	17 32	2 4	3 56						
M10	5 3	17 18	1 21	2 42	0 16	11 49	0 50	21 58	0 44	22 27	0 16	18 3	0 37	16 7	0 24	8 1	0 56	22 26	0 10	20 0	20 12	17 30	2 3	3 56						
T 11	4 40	19 45	0 10	3 25	0 24	12 17	0 54	22 2	0 43	22 28	0 15	18 1	0 37	16 7	0 24	8 0	0 56	22 27	0 10	20 0	20 11	17 29	2 2	3 56						
W12	4 17	21 5	1s 2	4 7	0 31	12 45	0 58	22 7	0 42	22 29	0 15	17 59	0 38	16 6	0 24	8 0	0 56	22 27	0 10	20 0	20 11	17 27	2 1	3 56						
T 13	3 54	21 10	2 12	4 49	0 39	13 13	1 2	22 11	0 41	22 29	0 15	17 58	0 38	16 6	0 24	7 59	0 56	22 27	0 10	20 0	20 10	17 26	1 59	3 56						
F 14	3 31	19 55	3 15	5 31	0 47	13 41	1 6	22 15	0 39	22 30	0 15	17 56	0 38	16 6	0 24	7 58	0 56	22 27	0 9	20 0	20 9	17 24	1 58	3 56						
S 15	3 8	17 23	4 7	6 11	0 55	14 8	1 10	22 19	0 38	22 31	0 15	17 54	0 38	16 5	0 24	7 57	0 56	22 27	0 9	19 59	20 9	17 22	1 57	3 56						
S 16	2 44	13 44	4 43	6 52	1 3	14 35	1 14	22 23	0 37	22 32	0 15	17 53	0 38	16 5	0 24	7 56	0 56	22 27	0 9	19 58	20 8	17 21	1 56	3 56						
M17	2 21	9 14	5 1	7 31	1 11	15 2	1 18	22 26	0 35	22 32	0 15	17 51	0 38	16 5	0 24	7 55	0 56	22 27	0 9	19 56	20 7	17 19	1 55	3 55						
T 18	1 58	4 13	5 0	8 10	1 18	15 28	1 22	22 30	0 34	22 33	0 14	17 49	0 38	16 4	0 24	7 55	0 56	22 28	0 9	19 54	20 7	17 17	1 54	3 55						
W19	1 35	1s 0	4 39	8 48	1 26	15 54	1 26	22 34	0 32	22 34	0 14	17 48	0 38	16 4	0 24	7 54	0 56	22 28	0 9	19 52	20 6	17 16	1 52	3 55						
T 20	1 11	6 4	4 1	9 26	1 34	16 20	1 30	22 37	0 31	22 35	0 14	17 46	0 39	16 3	0 24	7 53	0 56	22 28	0 9	19 50	20 5	17 14	1 51	3 55						
F 21	0 48	10 43	3 10	10 2	1 41	16 45	1 35	22 40	0 30	22 36	0 14	17 44	0 39	16 3	0 24	7 52	0 56	22 28	0 9	19 48	20 5	17 13	1 50	3 55						
S 22	0 24	14 40	2 8	10 38	1 49	17 10	1 39	22 44	0 28	22 36	0 14	17 43	0 39	16 3	0 24	7 51	0 56	22 28	0 9	19 47	20 4	17 11	1 49	3 55						
S 23	0 1	17 46	1 2	11 13	1 56	17 35	1 43	22 47	0 27	22 37	0 14	17 41	0 39	16 2	0 24	7 51	0 56	22 28	0 9	19 46	20 3	17 9	1 48	3 55						
M24	0s22	19 54	0n 5	11 48	2 4	17 59	1 47	22 50	0 25	22 38	0 13	17 40	0 39	16 2	0 24	7 50	0 56	22 28	0 8	19 46	20 3	17 8	1 47	3 55						
T 25	0 46	21 1	1 11	12 21	2 11	18 23	1 51	22 53	0 24	22 39	0 13	17 38	0 39	16 1	0 24	7 49	0 56	22 28	0 8	19 46	20 2	17 6	1 45	3 55						
W26	1 9	21 7	2 12	12 53	2 18	18 46	1 55	22 56	0 22	22 40	0 13	17 37	0 39	16 1	0 24	7 48	0 56	22 28	0 8	19 47	20 1	17 4	1 44	3 55						
T 27	1 33	20 14	3 7	13 24	2 25	19 9	1 59	22 59	0 20	22 41	0 13	17 35	0 40	16 0	0 24	7 47	0 56	22 29	0 8	19 47	20 0	17 3	1 43	3 55						
F 28	1 56	18 28	3 53	13 54	2 31	19 32	2 3	23 1	0 19	22 42	0 13	17 33	0 40	16 0	0 24	7 47	0 56	22 29	0 8	19 47	20 0	17 1	1 42	3 55						
S 29	2 20	15 56	4 29	14 23	2 38	19 54	2 7	23 4	0 17	22 42	0 13	17 32	0 40	15 59	0 24	7 46	0 56	22 29	0 8	19 46	19 59	16 59	1 41	3 54						
S 30	2s43	12s43	4n54	14s51	2s44	20s16	2s10	23n 7	0s15	22s43	0n13	17n31	0n40	15n59	0s24	7n45	0n56	22s29	0n 8	19s45	19s58	16s58	1n39	3n54						

ASTRODIENST EPHEMERIS for the year 1770  
geocentric

OCTOBER 1770

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
M 1	0 39 0	7♌49'16	23♋18	3♊19	22♊39	25♊15	18♊12	13♏19	14°R59	12♐30	15♑6	27°R55	29♊1	25♑6	25°R 7	M 1
T 2	0 42 56	8°48'24	5♋35	4°16	23°46	25°38	18°21	13°24	14♑57	12°32	15°6	27♊46	28°57	25°13	25♋4	T 2
W 3	0 46 53	9°47'33	18°5	5°11	24°52	26°0	18°29	13°30	14°55	12°34	15°7	27°37	28°54	25°19	25°1	W 3
T 4	0 50 49	10°46'44	0♊50	6°3	25°59	26°22	18°38	13°35	14°53	12°36	15°7	27°29	28°51	25°26	24°59	T 4
F 5	0 54 46	11°45'57	13°49	6°52	27°5	26°44	18°47	13°40	14°51	12°38	15°7	27°22	28°48	25°33	24°56	F 5
S 6	0 58 42	12°45'12	27°3	7°37	28°12	27°5	18°55	13°46	14°49	12°40	15°7	27°16	28°45	25°40	24°53	S 6
S 7	1 2 39	13°44'30	10♊28	8°17	29°18	27°25	19°5	13°51	14°47	12°42	15°7	27°13	28°42	25°46	24°51	S 7
M 8	1 6 35	14°43'49	24°5	8°54	0♊24	27°45	19°14	13°56	14°45	12°44	15°8	27°D11	28°38	25°53	24°48	M 8
T 9	1 10 32	15°43'11	7♊50	9°25	1°30	28°5	19°23	14°1	14°43	12°46	15°8	27°12	28°35	26°0	24°46	T 9
W10	1 14 29	16°42'36	21°44	9°51	2°35	28°24	19°32	14°6	14°41	12°48	15°8	27°13	28°32	26°6	24°43	W10
T 11	1 18 25	17°42'02	5♋46	10°11	3°41	28°42	19°42	14°10	14°39	12°50	15°9	27°14	28°29	26°13	24°41	T 11
F 12	1 22 22	18°41'31	19°53	10°25	4°46	29°0	19°51	14°15	14°37	12°52	15°9	27°R15	28°26	26°20	24°38	F 12
S 13	1 26 18	19°41'02	4♏5	10°R32	5°51	29°17	20°1	14°20	14°35	12°54	15°10	27°14	28°23	26°26	24°36	S 13
S 14	1 30 15	20°40'36	18°19	10°32	6°56	29°34	20°11	14°24	14°32	12°56	15°10	27°11	28°19	26°33	24°33	S 14
M15	1 34 11	21°40'12	2♊34	10°24	8°0	29°50	20°21	14°29	14°30	12°58	15°11	27°7	28°16	26°40	24°31	M15
T 16	1 38 8	22°39'50	16°44	10°8	9°5	0♋6	20°31	14°33	14°28	12°59	15°11	27°2	28°13	26°47	24°28	T 16
W17	1 42 4	23°39'30	0♋46	9°43	10°9	0°21	20°41	14°38	14°26	13°1	15°12	26°57	28°10	26°53	24°26	W17
T 18	1 46 1	24°39'12	14°36	9°9	11°13	0°35	20°51	14°42	14°23	13°3	15°12	26°52	28°7	27°0	24°24	T 18
F 19	1 49 58	25°38'57	28°10	8°26	12°16	0°49	21°2	14°46	14°21	13°5	15°13	26°48	28°3	27°7	24°21	F 19
S 20	1 53 54	26°38'43	11♊26	7°35	13°20	1°2	21°12	14°50	14°19	13°6	15°14	26°45	28°0	27°13	24°19	S 20
S 21	1 57 51	27°38'32	24°22	6°36	14°23	1°14	21°23	14°54	14°16	13°8	15°14	26°D44	27°57	27°20	24°17	S 21
M22	2 1 47	28°38'22	7♊0	5°30	15°26	1°26	21°33	14°58	14°14	13°10	15°15	26°45	27°54	27°27	24°15	M22
T 23	2 5 44	29°38'14	19°21	4°19	16°29	1°37	21°44	15°2	14°12	13°12	15°16	26°46	27°51	27°33	24°13	T 23
W24	2 9 40	0♊38'08	1♋28	3°4	17°31	1°47	21°55	15°5	14°9	13°13	15°17	26°48	27°48	27°40	24°10	W24
T 25	2 13 37	1°38'04	13°25	1°47	18°33	1°57	22°6	15°9	14°7	13°15	15°17	26°49	27°44	27°47	24°8	T 25
F 26	2 17 33	2°38'01	25°17	0°31	19°35	2°6	22°17	15°12	14°4	13°16	15°18	26°50	27°41	27°54	24°6	F 26
S 27	2 21 30	3°38'00	7♋9	29♊18	20°36	2°14	22°28	15°16	14°2	13°18	15°19	26°R51	27°38	28°0	24°4	S 27
S 28	2 25 27	4°38'01	19°5	28°10	21°37	2°21	22°39	15°19	14°0	13°20	15°20	26°50	27°35	28°7	24°2	S 28
M29	2 29 23	5°38'03	1♋11	27°10	22°38	2°28	22°51	15°22	13°57	13°21	15°21	26°48	27°32	28°14	24°0	M29
T 30	2 33 20	6°38'06	13°30	26°19	23°38	2°34	23°2	15°25	13°55	13°23	15°22	26°45	27°28	28°20	23°59	T 30
W31	2 37 16	7♊38'12	26♋5	25♊38	24♊38	2°39	23♊14	15♏28	13♑52	13♐24	15♑23	26♊42	27♊25	28♑27	23♋57	W31

Day	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
M 1	3s 6	8s57	5n 6	15s17	2s49	20s37	2s14	23n 9	0s14	22s44	0n13	17n29	0n40	15n58
T 2	3 30	4 45	5 4	15 42	2 55	20 58	2 18	23 12	0 12	22 45	0 12	17 28	0 40	15 58
W 3	3 53	0 18	4 48	16 5	3 0	21 18	2 22	23 14	0 10	22 46	0 12	17 26	0 40	15 57
T 4	4 16	4n16	4 17	16 27	3 4	21 38	2 26	23 17	0 8	22 47	0 12	17 25	0 41	15 56
F 5	4 39	8 43	3 33	16 47	3 9	21 57	2 29	23 19	0 7	22 48	0 12	17 23	0 41	15 56
S 6	5 3	12 51	2 36	17 6	3 12	22 16	2 33	23 21	0 5	22 49	0 12	17 22	0 41	15 55
S 7	5 26	16 24	1 29	17 22	3 15	22 34	2 37	23 24	0 3	22 49	0 12	17 21	0 41	15 55
M 8	5 49	19 5	0 17	17 36	3 18	22 52	2 40	23 26	0 1	22 50	0 12	17 19	0 41	15 54
T 9	6 12	20 42	0s58	17 48	3 19	23 9	2 44	23 28	0n 1	22 51	0 11	17 18	0 41	15 54
W10	6 35	21 3	2 9	17 57	3 20	23 26	2 47	23 30	0 3	22 52	0 11	17 17	0 41	15 53
T 11	6 57	20 7	3 14	18 3	3 20	23 42	2 51	23 32	0 5	22 53	0 11	17 16	0 42	15 52
F 12	7 20	17 55	4 8	18 6	3 19	23 58	2 54	23 35	0 7	22 54	0 11	17 14	0 42	15 52
S 13	7 43	14 37	4 46	18 7	3 17	24 13	2 57	23 37	0 9	22 55	0 11	17 13	0 42	15 51
S 14	8 5	10 29	5 7	18 3	3 13	24 27	3 0	23 39	0 11	22 56	0 11	17 12	0 42	15 50
M15	8 27	5 45	5 10	17 56	3 8	24 41	3 3	23 41	0 13	22 56	0 11	17 11	0 42	15 50
T 16	8 50	0 44	4 53	17 45	3 2	24 54	3 6	23 43	0 15	22 57	0 10	17 10	0 42	15 49
W17	9 12	4s16	4 19	17 29	2 54	25 7	3 9	23 45	0 17	22 58	0 10	17 9	0 43	15 48
T 18	9 34	8 59	3 30	17 9	2 44	25 19	3 12	23 47	0 19	22 59	0 10	17 7	0 43	15 48
F 19	9 56	13 10	2 30	16 44	2 33	25 31	3 15	23 49	0 22	23 0	0 10	17 6	0 43	15 47
S 20	10 17	16 36	1 23	16 15	2 19	25 42	3 17	23 52	0 24	23 1	0 10	17 5	0 43	15 46
S 21	10 39	19 6	0 13	15 42	2 4	25 52	3 20	23 54	0 26	23 1	0 10	17 4	0 43	15 46
M22	11 0	20 35	0n56	15 4	1 48	26 1	3 22	23 56	0 28	23 2	0 10	17 3	0 43	15 45
T 23	11 21	21 2	2 1	14 23	1 30	26 11	3 25	23 58	0 31	23 3	0 10	17 2	0 44	15 44
W24	11 43	20 28	2 59	13 39	1 10	26 19	3 27	24 0	0 33	23 4	0 10	17 2	0 44	15 43
T 25	12 3	18 59	3 49	12 53	0 50	26 27	3 29	24 3	0 35	23 5	0 9	17 1	0 44	15 43
F 26	12 24	16 42	4 29	12 7	0 29	26 34	3 31	24 5	0 38	23 5	0 9	17 0	0 44	15 42
S 27	12 45	13 43	4 57	11 22	0 9	26 41	3 33	24 7	0 40	23 6	0 9	16 59	0 44	15 41
S 28	13 5	10 10	5 12	10 39	0n12	26 46	3 35	24 10	0 43	23 7	0 9	16 58	0 44	15 41
M29	13 25	6 10	5 14	10 0	0 31	26 52	3 36	24 12	0 45	23 8	0 9	16 57	0 45	15 40
T 30	13 45	1 51	5 2	9 24	0 49	26 56	3 38	24 15	0 48	23 8	0 9	16 57	0 45	15 39
W31	14s 4	2n39	4n35	8s54	1n 6	27s 1	3s39	24n17	0n51	23s 9	0n 9	16n56	0n45	15n38

Julian Day Number = 2367812.5, Delta T = 21.27 sec  
Ecliptic obliquity = 23°28'05", Nutation = 0°00'15", out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 21°32'23", Lahiri = 20°39'23"Greg. Calendar



ASTRODIENST EPHEMERIS for the year 1770  
geocentric

DECEMBER 1770

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	4 39 29	8♂55'02	13♂45	28♂20	20♂41	28°R23	29♂43	16°R 8	12°R38	13♂55	16♂ 5	26♂37	25♂47	1♂55	23°R25	S 1
S 2	4 43 26	9°55'55	27°52	29°53	21°17	28♂ 3	29°56	16♂ 8	12♂36	13°56	16° 7	26°R37	25°44	2° 2	23♂24	S 2
M 3	4 47 23	10°56'50	12♂19	1♂26	21°51	27°42	0♂10	16° 7	12°34	13°56	16° 9	26°37	25°40	2° 8	23°24	M 3
T 4	4 51 19	11°57'45	27° 0	3° 0	22°24	27°21	0°23	16° 6	12°31	13°57	16°10	26°36	25°37	2°15	23°D24	T 4
W 5	4 55 16	12°58'41	11♂49	4°33	22°55	26°59	0°37	16° 5	12°29	13°57	16°12	26°34	25°34	2°22	23°24	W 5
T 6	4 59 12	13°59'39	26°38	6° 7	23°24	26°36	0°50	16° 4	12°27	13°58	16°14	26°32	25°31	2°29	23°24	T 6
F 7	5 3 9	15° 0'37	11♂20	7°40	23°53	26°14	1° 4	16° 3	12°25	13°58	16°16	26°29	25°28	2°35	23°24	F 7
S 8	5 7 5	16° 1'37	25°48	9°14	24°19	25°51	1°17	16° 2	12°23	13°58	16°18	26°27	25°25	2°42	23°25	S 8
S 9	5 11 2	17° 2'37	9♂59	10°47	24°43	25°28	1°31	16° 1	12°21	13°59	16°19	26°26	25°21	2°49	23°25	S 9
M10	5 14 58	18° 3'39	23°52	12°21	25° 6	25° 5	1°45	16° 0	12°20	13°59	16°21	26°D26	25°18	2°55	23°25	M10
T 11	5 18 55	19° 4'42	7♂25	13°55	25°27	24°41	1°58	15°58	12°18	13°59	16°23	26°27	25°15	3° 2	23°25	T 11
W12	5 22 52	20° 5'46	20°41	15°29	25°46	24°18	2°12	15°57	12°16	13°59	16°25	26°29	25°12	3° 9	23°26	W12
T 13	5 26 48	21° 6'50	3♂41	17° 3	26° 3	23°54	2°26	15°55	12°14	13°59	16°27	26°30	25° 9	3°16	23°26	T 13
F 14	5 30 45	22° 7'56	16°27	18°37	26°18	23°30	2°39	15°53	12°12	13°59	16°29	26°32	25° 6	3°22	23°27	F 14
S 15	5 34 41	23° 9'03	29° 0	20°11	26°31	23° 7	2°53	15°51	12°11	13°59	16°31	26°R32	25° 2	3°29	23°27	S 15
S 16	5 38 38	24°10'10	11♂23	21°45	26°41	22°43	3° 7	15°49	12° 9	13°R59	16°32	26°31	24°59	3°36	23°28	S 16
M17	5 42 34	25°11'18	23°37	23°20	26°50	22°20	3°21	15°47	12° 7	13°59	16°34	26°29	24°56	3°42	23°29	M17
T 18	5 46 31	26°12'26	5♂42	24°55	26°56	21°57	3°35	15°45	12° 6	13°59	16°36	26°24	24°53	3°49	23°29	T 18
W19	5 50 27	27°13'35	17°41	26°30	26°59	21°34	3°48	15°42	12° 4	13°59	16°38	26°19	24°50	3°56	23°30	W19
T 20	5 54 24	28°14'44	29°35	28° 5	27°R 1	21°11	4° 2	15°40	12° 3	13°59	16°40	26°13	24°46	4° 3	23°31	T 20
F 21	5 58 21	29°15'54	11♂26	29°40	26°59	20°49	4°16	15°37	12° 1	13°59	16°42	26° 7	24°43	4° 9	23°32	F 21
S 22	6 2 17	0♂17'03	23°17	1♂16	26°56	20°27	4°30	15°35	12° 0	13°59	16°44	26° 1	24°40	4°16	23°33	S 22
S 23	6 6 14	1°18'13	5♂11	2°52	26°50	20° 6	4°44	15°32	11°58	13°59	16°46	25°56	24°37	4°23	23°34	S 23
M24	6 10 10	2°19'23	17°11	4°28	26°41	19°45	4°58	15°29	11°57	13°58	16°48	25°53	24°34	4°29	23°35	M24
T 25	6 14 7	3°20'32	29°23	6° 4	26°30	19°24	5°11	15°26	11°56	13°58	16°50	25°D52	24°31	4°36	23°36	T 25
W26	6 18 3	4°21'42	11♂50	7°41	26°16	19° 5	5°25	15°23	11°54	13°58	16°52	25°52	24°27	4°43	23°37	W26
T 27	6 22 0	5°22'51	24°37	9°17	26° 0	18°45	5°39	15°20	11°53	13°57	16°54	25°53	24°24	4°50	23°39	T 27
F 28	6 25 56	6°24'01	7♂49	10°55	25°41	18°27	5°53	15°17	11°52	13°57	16°56	25°55	24°21	4°56	23°40	F 28
S 29	6 29 53	7°25'10	21°29	12°32	25°20	18° 9	6° 7	15°14	11°51	13°57	16°58	25°R56	24°18	5° 3	23°41	S 29
S 30	6 33 50	8°26'19	5♂37	14°10	24°57	17°51	6°21	15°10	11°50	13°56	17° 0	25°56	24°15	5°10	23°43	S 30
M31	6 37 46	9♂27'28	20♂11	15♂48	24♂32	17♂35	6♂35	15♂ 7	11♂49	13♂56	17♂ 2	25♂54	24♂12	5♂16	23♂44	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
S 1	21s49	17n 7	1n11	19s22	0n27	24s36	2s46	25n48	2n20	23s23	0n 5	16n49	0n50	15n16	0s23	7n13
S 2	21 58	19 36	0s 7	19 49	0 20	24 25	2 40	25 50	2 23	23 23	0 5	16 50	0 51	15 16	0 23	7 13
M 3	22 7	20 53	1 26	20 16	0 13	24 13	2 34	25 52	2 26	23 23	0 5	16 50	0 51	15 15	0 23	7 13
T 4	22 15	20 46	2 40	20 41	0 6	24 2	2 27	25 55	2 28	23 23	0 5	16 50	0 51	15 15	0 23	7 13
W 5	22 23	19 13	3 45	21 5	0s 1	23 50	2 20	25 57	2 31	23 23	0 5	16 51	0 51	15 14	0 23	7 13
T 6	22 30	16 22	4 34	21 29	0 8	23 37	2 13	25 59	2 33	23 23	0 5	16 51	0 51	15 13	0 23	7 13
F 7	22 37	12 31	5 5	21 51	0 15	23 25	2 5	26 1	2 36	23 23	0 5	16 52	0 52	15 13	0 23	7 13
S 8	22 44	7 59	5 15	22 13	0 21	23 12	1 57	26 2	2 38	23 23	0 5	16 52	0 52	15 12	0 23	7 13
S 9	22 50	3 6	5 7	22 33	0 28	23 0	1 49	26 4	2 41	23 23	0 5	16 53	0 52	15 12	0 23	7 13
M10	22 56	1s51	4 40	22 52	0 34	22 47	1 40	26 5	2 43	23 23	0 4	16 53	0 52	15 11	0 23	7 13
T 11	23 1	6 36	3 58	23 10	0 41	22 34	1 31	26 7	2 45	23 23	0 4	16 54	0 52	15 10	0 23	7 12
W12	23 6	10 56	3 5	23 27	0 47	22 21	1 21	26 8	2 47	23 23	0 4	16 55	0 52	15 10	0 23	7 12
T 13	23 10	14 41	2 2	23 43	0 53	22 8	1 11	26 9	2 49	23 23	0 4	16 55	0 53	15 9	0 23	7 12
F 14	23 14	17 39	0 55	23 57	0 59	21 55	1 1	26 10	2 51	23 22	0 4	16 56	0 53	15 9	0 23	7 12
S 15	23 17	19 44	0n14	24 11	1 4	21 42	0 50	26 10	2 53	23 22	0 4	16 57	0 53	15 8	0 23	7 12
S 16	23 20	20 50	1 21	24 23	1 10	21 29	0 39	26 11	2 55	23 22	0 4	16 58	0 53	15 8	0 23	7 13
M17	23 23	20 56	2 23	24 33	1 15	21 15	0 27	26 11	2 57	23 22	0 4	16 58	0 53	15 7	0 23	7 13
T 18	23 25	20 3	3 18	24 43	1 21	21 2	0 15	26 11	2 58	23 22	0 4	16 59	0 54	15 7	0 23	7 13
W19	23 26	18 16	4 4	24 51	1 26	20 49	0 2	26 12	3 0	23 21	0 4	17 0	0 54	15 7	0 23	7 13
T 20	23 27	15 43	4 39	24 58	1 30	20 36	0n11	26 12	3 1	23 21	0 3	17 1	0 54	15 6	0 23	7 13
F 21	23 28	12 32	5 1	25 3	1 35	20 24	0 24	26 11	3 3	23 21	0 3	17 2	0 54	15 6	0 23	7 13
S 22	23 28	8 52	5 11	25 7	1 39	20 11	0 38	26 11	3 4	23 20	0 3	17 3	0 54	15 5	0 23	7 13
S 23	23 28	4 51	5 7	25 9	1 43	19 58	0 52	26 11	3 5	23 20	0 3	17 4	0 54	15 5	0 23	7 13
M24	23 27	0 37	4 50	25 11	1 47	19 46	1 6	26 10	3 6	23 19	0 3	17 5	0 55	15 4	0 23	7 13
T 25	23 26	3n43	4 20	25 10	1 51	19 34	1 21	26 9	3 7	23 19	0 3	17 6	0 55	15 4	0 23	7 13
W26	23 24	8 0	3 37	25 8	1 54	19 22	1 35	26 9	3 8	23 19	0 3	17 7	0 55	15 4	0 23	7 14
T 27	23 21	12 3	2 42	25 5	1 57	19 10	1 51	26 8	3 9	23 18	0 3	17 8	0 55	15 3	0 23	7 14
F 28	23 19	15 40	1 37	25 0	2 0	18 58	2 6	26 7	3 10	23 18	0 3	17 9	0 55	15 3	0 23	7 14
S 29	23 16	18 33	0 24	24 54	2 2	18 47	2 21	26 6	3 11	23 17	0 3	17 10	0 55	15 3	0 23	7 14
S 30	23 12	20 25	0s52	24 46	2 4	18 35	2 37	26 5	3 11	23 16	0 2	17 11	0 56	15 2	0 23	7 14
M31	23s 8	20n59	2s 8	24s36	2s 5	18s24	2n53	26n 4	3n12	23s16	0n 2	17n13	0n56	15n 2	0s23	7n15

Julian Day Number = 2367873.5, Delta T = 21.30 sec  
Ecliptic obliquity = 23°28'03, Nutation = 0°00'13, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 21°32'31, Lahiri = 20°39'31Greg. Calendar