



# Astrodienst Ephemeris Tables for the year 1870

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 1870  
geocentric

JANUARY 1870

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	6 41 46	10°25'50	27°46	21°36	26°21	26°13	11°R 1	22°0	20°R21	16°46	16°R11	28°R28	29°22	13°40	29°40	S 1
S 2	6 45 43	11°27'02	11°324	22°44	27°12	27° 0	11°8 0	22° 6	20°219	16°47	16°810	28°26	29°19	13°47	29°41	S 2
M 3	6 49 39	12°28'13	24°45	24°21	28° 1	27°47	11° 0	22°13	20°16	16°47	16° 9	28°D25	29°16	13°53	29°43	M 3
T 4	6 53 36	13°29'24	7°48	25°59	28°50	28°34	10°59	22°20	20°13	16°47	16° 9	28°25	29°13	14° 0	29°44	T 4
W 5	6 57 32	14°30'35	20°31	27°36	29°38	29°21	10°D59	22°27	20°11	16°47	16° 8	28°26	29° 9	14° 7	29°45	W 5
T 6	7 1 29	15°31'45	2°58	29°12	0°25	0°8	10°59	22°34	20° 8	16°48	16° 8	28°28	29° 6	14°14	29°47	T 6
F 7	7 5 25	16°32'55	15°10	0°49	1°12	0°55	11° 0	22°40	20° 6	16°48	16° 7	28°29	29° 3	14°20	29°48	F 7
S 8	7 9 22	17°34'05	27°11	2°24	1°57	1°43	11° 0	22°47	20° 3	16°48	16° 7	28°30	29° 0	14°27	29°50	S 8
S 9	7 13 19	18°35'14	9°5	3°58	2°41	2°30	11° 1	22°54	20° 0	16°49	16° 6	28°30	28°57	14°34	29°52	S 9
M10	7 17 15	19°36'22	20°57	5°31	3°24	3°17	11° 2	23° 0	19°58	16°49	16° 6	28°R31	28°54	14°40	29°53	M10
T 11	7 21 12	20°37'30	2°51	7° 3	4° 6	4° 4	11° 3	23° 7	19°55	16°50	16° 6	28°30	28°50	14°47	29°55	T 11
W12	7 25 8	21°38'37	14°54	8°33	4°47	4°51	11° 4	23°13	19°53	16°50	16° 5	28°30	28°47	14°54	29°57	W12
T 13	7 29 5	22°39'44	27° 7	10° 0	5°26	5°38	11° 6	23°20	19°50	16°51	16° 5	28°29	28°44	15° 1	29°58	T 13
F 14	7 33 1	23°40'50	9°36	11°25	6° 5	6°26	11° 7	23°26	19°47	16°51	16° 4	28°28	28°41	15° 7	0°0	F 14
S 15	7 36 58	24°41'55	22°24	12°46	6°42	7°13	11° 9	23°33	19°45	16°52	16° 4	28°28	28°38	15°14	0° 2	S 15
S 16	7 40 54	25°42'59	5°30	14° 4	7°17	8° 0	11°11	23°39	19°42	16°53	16° 4	28°27	28°34	15°21	0° 4	S 16
M17	7 44 51	26°44'03	18°57	15°17	7°52	8°48	11°14	23°46	19°40	16°53	16° 3	28°27	28°31	15°27	0° 6	M17
T 18	7 48 48	27°45'07	2°41	16°25	8°24	9°35	11°16	23°52	19°37	16°54	16° 3	28°D27	28°28	15°34	0° 8	T 18
W19	7 52 44	28°46'09	16°41	17°26	8°55	10°22	11°19	23°58	19°34	16°55	16° 3	28°R27	28°25	15°41	0°10	W19
T 20	7 56 41	29°47'11	0°53	18°21	9°25	11°10	11°22	24° 4	19°32	16°55	16° 3	28°27	28°22	15°48	0°12	T 20
F 21	8 0 37	0°48'13	15°12	19° 8	9°53	11°57	11°25	24°10	19°29	16°56	16° 3	28°27	28°19	15°54	0°14	F 21
S 22	8 4 34	1°49'14	29°34	19°47	10°19	12°44	11°28	24°17	19°27	16°57	16° 2	28°27	28°15	16° 1	0°17	S 22
S 23	8 8 30	2°50'14	13°54	20°16	10°43	13°32	11°32	24°23	19°24	16°58	16° 2	28°26	28°12	16° 8	0°19	S 23
M24	8 12 27	3°51'14	28°10	20°35	11° 6	14°19	11°35	24°29	19°22	16°59	16° 2	28°D26	28° 9	16°14	0°21	M24
T 25	8 16 23	4°52'14	12°18	20°R43	11°26	15° 6	11°39	24°35	19°19	17° 0	16° 2	28°26	28° 6	16°21	0°23	T 25
W26	8 20 20	5°53'12	26°16	20°40	11°45	15°54	11°43	24°41	19°17	17° 1	16° 2	28°27	28° 3	16°28	0°26	W26
T 27	8 24 17	6°54'11	10°4	20°25	12° 2	16°41	11°48	24°47	19°14	17° 2	16° 2	28°27	27°59	16°35	0°28	T 27
F 28	8 28 13	7°55'08	23°41	19°59	12°16	17°29	11°52	24°52	19°12	17° 3	16° 2	28°28	27°56	16°41	0°31	F 28
S 29	8 32 10	8°56'05	7°35	19°23	12°29	18°16	11°57	24°58	19° 9	17° 4	16° 2	28°29	27°53	16°48	0°33	S 29
S 30	8 36 6	9°57'01	20°17	18°36	12°39	19° 4	12° 2	25° 4	19° 7	17° 5	16°D 2	28°30	27°50	16°55	0°36	S 30
M31	8 40 3	10°57'56	3°16	17°41	12°47	19°551	12°8 7	25°10	19°5	17°6	16°8 2	28°R30	27°547	17°2	0°38	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
S 1	23s 3	20s45	2n41	23s55	2s 9	13s18	0s36	22s 0	1s 6	14n 5	1s 6	22s 0	1n13	22n23	0n29	5n 4
S 2	22 58	21 26	1 33	23 39	2 8	12 54	0 29	21 51	1 6	14 5	1 6	22 0	1 13	22 24	0 29	5 4
M 3	22 52	20 51	0 20	23 21	2 7	12 30	0 21	21 42	1 6	14 6	1 6	22 0	1 13	22 24	0 29	5 4
T 4	22 46	19 10	0s52	23 1	2 5	12 6	0 14	21 32	1 6	14 6	1 6	22 1	1 13	22 25	0 29	5 4
W 5	22 40	16 33	1 59	22 40	2 3	11 42	0 6	21 22	1 6	14 6	1 5	22 1	1 13	22 25	0 29	5 4
T 6	22 33	13 13	3 0	22 17	2 0	11 18	0n 2	21 12	1 6	14 6	1 5	22 2	1 13	22 25	0 29	5 4
F 7	22 26	9 24	3 51	21 53	1 56	10 53	0 11	21 2	1 6	14 7	1 5	22 2	1 13	22 26	0 29	5 4
S 8	22 18	5 16	4 31	21 27	1 52	10 29	0 19	20 52	1 6	14 7	1 4	22 2	1 13	22 26	0 29	5 5
S 9	22 10	0 59	4 59	21 0	1 47	10 5	0 28	20 41	1 6	14 8	1 4	22 3	1 13	22 27	0 29	5 5
M10	22 1	3n19	5 14	20 32	1 41	9 41	0 37	20 30	1 6	14 8	1 4	22 3	1 13	22 27	0 29	5 5
T 11	21 52	7 31	5 16	20 3	1 35	9 17	0 47	20 19	1 6	14 9	1 3	22 4	1 13	22 27	0 29	5 5
W12	21 43	11 28	5 4	19 33	1 27	8 54	0 56	20 8	1 6	14 9	1 3	22 4	1 13	22 28	0 29	5 6
T 13	21 33	15 1	4 38	19 1	1 19	8 30	1 6	19 56	1 6	14 10	1 3	22 4	1 13	22 28	0 29	5 6
F 14	21 23	17 58	3 59	18 29	1 10	8 7	1 16	19 45	1 6	14 11	1 3	22 5	1 13	22 29	0 29	5 6
S 15	21 12	20 7	3 7	17 57	1 0	7 44	1 26	19 33	1 6	14 12	1 2	22 5	1 13	22 29	0 29	5 6
S 16	21 1	21 17	2 4	17 24	0 49	7 21	1 37	19 20	1 6	14 13	1 2	22 5	1 13	22 29	0 29	5 7
M17	20 49	21 15	0 53	16 51	0 37	6 58	1 47	19 8	1 6	14 14	1 2	22 5	1 13	22 30	0 29	5 7
T 18	20 37	19 57	0n23	16 19	0 24	6 36	1 58	18 55	1 6	14 15	1 1	22 6	1 13	22 30	0 29	5 7
W19	20 25	17 26	1 39	15 47	0 11	6 14	2 10	18 43	1 6	14 16	1 1	22 6	1 13	22 30	0 29	5 8
T 20	20 13	13 49	2 50	15 16	0n 4	5 52	2 21	18 30	1 6	14 17	1 1	22 6	1 13	22 31	0 29	5 8
F 21	19 59	9 23	3 51	14 47	0 19	5 31	2 33	18 16	1 6	14 18	1 0	22 7	1 13	22 31	0 29	5 8
S 22	19 46	4 25	4 38	14 20	0 36	5 10	2 45	18 3	1 6	14 20	1 0	22 7	1 13	22 32	0 29	5 9
S 23	19 32	0s46	5 7	13 54	0 53	4 50	2 57	17 49	1 6	14 21	1 0	22 7	1 13	22 32	0 29	5 9
M24	19 18	5 53	5 17	13 32	1 10	4 30	3 9	17 35	1 6	14 23	1 0	22 7	1 13	22 32	0 29	5 9
T 25	19 4	10 39	5 8	13 13	1 28	4 10	3 21	17 21	1 5	14 24	0 59	22 8	1 13	22 33	0 29	5 10
W26	18 49	14 47	4 41	12 57	1 46	3 52	3 34	17 7	1 5	14 25	0 59	22 8	1 13	22 33	0 29	5 10
T 27	18 34	18 4	3 57	12 44	2 3	3 33	3 47	16 53	1 5	14 27	0 59	22 8	1 13	22 33	0 29	5 11
F 28	18 18	20 17	3 1	12 36	2 20	3 16	4 0	16 38	1 5	14 29	0 58	22 8	1 13	22 34	0 29	5 11
S 29	18 2	21 20	1 56	12 32	2 37	2 59	4 13	16 24	1 5	14 30	0 58	22 8	1 13	22 34	0 29	5 12
S 30	17 46	21 10	0 45	12 32	2 52	2 43	4 26	16 9	1 5	14 32	0 58	22 9	1 13	22 34	0 29	5 12
M31	17s29	19s52	0s26	12s36	3n 5	2s27	4n40	15s54	1s 5	14n34	0s58	22s 9	1n13	22n35	0n29	5n13

Julian Day Number = 2404063.5, Delta T = 2.34 sec  
Ecliptic obliquity = 23°27'17, Nutation = - 0°00'15, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 22°55'30, Lahiri = 22°02'30

# ASTRODIENST EPHEMERIS for the year 1870

## geocentric

FEBRUARY 1870

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	8 43 59	11°58'50	16°2	16°R38	12°52	20°39	12°12	25°15	19°R 2	17°V 7	16°8 2	28°R29	27°544	17°V 8	0°V41	T 1
W 2	8 47 56	12°59'43	28°34	15°30	12°55	21°26	12°17	25°21	19°5 0	17° 8	16° 2	28°528	27°40	17°15	0°44	W 2
T 3	8 51 53	14° 0'35	10°54	14°19	12°R56	22°14	12°23	25°26	18°58	17°10	16° 2	28°25	27°37	17°22	0°46	T 3
F 4	8 55 49	15° 1'25	23° 3	13° 6	12°54	23° 1	12°28	25°32	18°55	17°11	16° 2	28°23	27°34	17°28	0°49	F 4
S 5	8 59 46	16° 2'14	5°V 3	11°54	12°50	23°48	12°34	25°37	18°53	17°12	16° 2	28°20	27°31	17°35	0°52	S 5
S 6	9 3 42	17° 3'01	16°57	10°44	12°43	24°36	12°40	25°42	18°51	17°14	16° 2	28°17	27°28	17°42	0°55	S 6
M 7	9 7 39	18° 3'47	28°49	9°39	12°34	25°23	12°46	25°48	18°49	17°15	16° 2	28°15	27°25	17°49	0°58	M 7
T 8	9 11 35	19° 4'31	10°542	8°39	12°22	26°11	12°53	25°53	18°47	17°16	16° 3	28°14	27°21	17°55	1° 0	T 8
W 9	9 15 32	20° 5'14	22°42	7°46	12° 8	26°58	12°59	25°58	18°44	17°18	16° 3	28°D14	27°18	18° 2	1° 3	W 9
T 10	9 19 28	21° 5'55	4°V53	7° 0	11°51	27°46	13° 6	26° 3	18°42	17°19	16° 3	28°14	27°15	18° 9	1° 6	T 10
F 11	9 23 25	22° 6'35	17°19	6°22	11°32	28°33	13°13	26° 8	18°40	17°20	16° 3	28°16	27°12	18°15	1° 9	F 11
S 12	9 27 21	23° 7'13	0°5 6	5°52	11°10	29°21	13°20	26°13	18°38	17°22	16° 4	28°18	27° 9	18°22	1°12	S 12
S 13	9 31 18	24° 7'49	13°16	5°29	10°46	0°H 8	13°27	26°18	18°36	17°23	16° 4	28°19	27° 5	18°29	1°15	S 13
M14	9 35 15	25° 8'24	26°51	5°15	10°20	0°56	13°34	26°22	18°34	17°25	16° 4	28°R20	27° 2	18°36	1°18	M14
T 15	9 39 11	26° 8'57	10°50	5°D 8	9°52	1°43	13°42	26°27	18°32	17°27	16° 5	28°19	26°59	18°42	1°21	T 15
W16	9 43 8	27° 9'28	25°12	5° 8	9°22	2°30	13°50	26°32	18°31	17°28	16° 5	28°17	26°56	18°49	1°25	W16
T 17	9 47 4	28° 9'58	9°V51	5°16	8°50	3°18	13°57	26°36	18°29	17°30	16° 5	28°14	26°53	18°56	1°28	T 17
F 18	9 51 1	29°10'26	24°40	5°29	8°17	4° 5	14° 5	26°41	18°27	17°31	16° 6	28° 9	26°50	19° 3	1°31	F 18
S 19	9 54 57	0°H10'53	9°531	5°48	7°43	4°52	14°13	26°45	18°25	17°33	16° 6	28° 5	26°46	19° 9	1°34	S 19
S 20	9 58 54	1°11'18	24°15	6°13	7° 7	5°40	14°22	26°49	18°23	17°35	16° 7	28° 0	26°43	19°16	1°37	S 20
M21	10 2 50	2°11'42	8°V48	6°44	6°30	6°27	14°30	26°54	18°22	17°36	16° 7	27°57	26°40	19°23	1°41	M21
T 22	10 6 47	3°12'05	23° 3	7°18	5°53	7°15	14°38	26°58	18°20	17°38	16° 8	27°55	26°37	19°29	1°44	T 22
W23	10 10 44	4°12'27	7°V 0	7°58	5°16	8° 2	14°47	27° 2	18°18	17°40	16° 8	27°D54	26°34	19°36	1°47	W23
T 24	10 14 40	5°12'47	20°37	8°41	4°38	8°49	14°56	27° 6	18°17	17°42	16° 9	27°55	26°31	19°43	1°50	T 24
F 25	10 18 37	6°13'05	3°5 7	9°28	4° 1	9°37	15° 5	27°10	18°15	17°43	16° 9	27°57	26°27	19°50	1°54	F 25
S 26	10 22 33	7°13'23	17° 0	10°19	3°24	10°24	15°14	27°14	18°14	17°45	16°10	27°58	26°24	19°56	1°57	S 26
S 27	10 26 30	8°13'38	29°50	11°12	2°48	11°11	15°23	27°17	18°13	17°47	16°10	27°R59	26°21	20° 3	2° 0	S 27
M28	10 30 26	9°H13'52	12°527	12°5 9	2°H12	11°H58	15°532	27°V21	18°511	17°V49	16°511	27°557	26°518	20°V10	2°V 4	M28

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	17s13	17s34	1s36	12s44	3n17	2s13	4n53	15s39	1s 5	14n36	0s57	22s 9	1n13	22n35	0n29	5n13	1s38	2n 5	15s10	20n29	20n38	2n 4	2n59	2n57	
W 2	16 56	14 28	2 39	12 55	3 26	1 59	5 7	15 23	1 5	14 38	0 57	22 9	1 13	22 35	0 29	5 14	1 38	2 5	15 10	20 29	20 38	2 6	3 0	2 57	
T 3	16 38	10 46	3 33	13 8	3 34	1 46	5 20	15 8	1 4	14 40	0 57	22 9	1 13	22 36	0 29	5 14	1 38	2 6	15 10	20 29	20 39	2 8	3 0	2 57	
F 4	16 20	6 42	4 17	13 24	3 38	1 35	5 34	14 52	1 4	14 42	0 57	22 10	1 13	22 36	0 29	5 15	1 38	2 6	15 9	20 30	20 40	2 11	3 1	2 56	
S 5	16 2	2 25	4 50	13 42	3 41	1 24	5 47	14 36	1 4	14 44	0 56	22 10	1 13	22 36	0 29	5 15	1 38	2 6	15 9	20 31	20 40	2 13	3 2	2 56	
S 6	15 44	1n54	5 9	14 1	3 40	1 14	6 1	14 20	1 4	14 46	0 56	22 10	1 13	22 37	0 29	5 16	1 38	2 7	15 9	20 31	20 41	2 16	3 3	2 56	
M 7	15 26	6 9	5 15	14 21	3 38	1 5	6 14	14 4	1 4	14 48	0 56	22 10	1 13	22 37	0 29	5 16	1 38	2 7	15 8	20 31	20 42	2 18	3 4	2 56	
T 8	15 7	10 10	5 8	14 40	3 34	0 57	6 27	13 48	1 4	14 50	0 55	22 10	1 13	22 37	0 29	5 17	1 38	2 8	15 8	20 32	20 42	2 20	3 5	2 56	
W 9	14 48	13 50	4 47	15 0	3 27	0 51	6 40	13 31	1 3	14 52	0 55	22 10	1 13	22 38	0 29	5 17	1 38	2 8	15 8	20 32	20 43	2 23	3 6	2 56	
T 10	14 28	16 58	4 13	15 19	3 20	0 46	6 52	13 15	1 3	14 54	0 55	22 10	1 13	22 38	0 29	5 18	1 38	2 8	15 7	20 32	20 43	2 25	3 7	2 55	
F 11	14 9	19 25	3 27	15 37	3 10	0 42	7 5	12 58	1 3	14 57	0 55	22 10	1 13	22 38	0 29	5 19	1 38	2 9	15 7	20 31	20 44	2 28	3 8	2 55	
S 12	13 49	20 58	2 29	15 54	3 0	0 39	7 16	12 41	1 3	14 59	0 54	22 11	1 14	22 38	0 29	5 19	1 38	2 9	15 7	20 31	20 45	2 30	3 9	2 55	
S 13	13 29	21 26	1 22	16 10	2 49	0 37	7 28	12 24	1 3	15 2	0 54	22 11	1 14	22 39	0 29	5 20	1 38	2 10	15 6	20 31	20 45	2 32	3 10	2 55	
M14	13 9	20 40	0 8	16 25	2 38	0 37	7 38	12 7	1 2	15 4	0 54	22 11	1 14	22 39	0 29	5 20	1 38	2 10	15 6	20 31	20 46	2 35	3 11	2 55	
T 15	12 49	18 37	1n 8	16 39	2 25	0 38	7 49	11 50	1 2	15 6	0 54	22 11	1 14	22 39	0 29	5 21	1 38	2 10	15 6	20 31	20 46	2 37	3 13	2 55	
W16	12 28	15 21	2 22	16 51	2 13	0 40	7 58	11 33	1 2	15 9	0 53	22 11	1 14	22 39	0 29	5 22	1 38	2 11	15 5	20 31	20 47	2 40	3 14	2 54	
T 17	12 7	11 5	3 28	17 1	2 0	0 44	8 7	11 16	1 2	15 12	0 53	22 11	1 14	22 40	0 29	5 22	1 37	2 11	15 5	20 32	20 48	2 42	3 15	2 54	
F 18	11 46	6 6	4 20	17 10	1 48	0 49	8 15	10 58	1 1	15 14	0 53	22 11	1 14	22 40	0 29	5 23	1 37	2 12	15 5	20 33	20 48	2 44	3 16	2 54	
S 19	11 25	0 46	4 56	17 18	1 35	0 54	8 22	10 41	1 1	15 17	0 53	22 11	1 14	22 40	0 29	5 24	1 37	2 12	15 4	20 34	20 49	2 47	3 17	2 54	
S 20	11 4	4s35	5 11	17 24	1 22	1 2	8 28	10 23	1 1	15 19	0 52	22 11	1 14	22 40	0 29	5 24	1 37	2 12	15 4	20 34	20 50	2 49	3 18	2 54	
M21	10 42	9 36	5 6	17 28	1 10	1 10	8 34	10 5	1 1	15 22	0 52	22 11	1 14	22 41	0 29	5 25	1 37	2 13	15 4	20 35	20 50	2 52	3 19	2 54	
T 22	10 20	13 59	4 42	17 31	0 58	1 19	8 38	9 47	1 0	15 25	0 52	22 11	1 14	22 41	0 29	5 26	1 37	2 13	15 3	20 36	20 51	2 54	3 21	2 54	
W23	9 58	17 31	4 2	17 33	0 46	1 29	8 42	9 29	1 0	15 28	0 52	22 11	1 14	22 41	0 29	5 26	1 37	2 14	15 3	20 36	20 51	2 57	3 22	2 53	
T 24	9 36	19 59	3 9	17 33	0 34	1 40	8 44	9 11	1 0	15 30	0 52	22 11	1 14	22 41	0 29	5 27	1 37	2 14	15 3	20 35	20 52	2 59	3 23	2 53	
F 25	9 14	21 17	2 7	17 32	0 23	1 52	8 46	8 53	0 59	15 33	0 51	22 11	1 14	22 41	0 29	5 28	1 37	2 15	15 2	20 35	20 53	3 1	3 24	2 53	
S 26	8 52	21 23	0 59	17 29	0 12	2 4	8 47	8 35	0 59	15 36	0 51	22 12	1 14	22 42	0 29	5 28	1 37	2 15	15 2	20 35	20 53	3 4	3 25	2 53	
S 27	8 29	20 22	0s10	17 24	0 1	2 17	8 46	8 17	0 59	15 39	0 51	22 12	1 14	22 42	0 29	5 29	1 37	2 16	15 2	20 35	20 54	3 6	3 27	2 53	
M28	8s 7	18s19	1s18	17s18	0s 9	2s31	8n45	7s59	0s59	15n42	0s51	22s12	1n14	22n42	0n29	5n30	1s37	2n16	15s 1	20n35	20n54	3n 9	3n28	2n53	

Julian Day Number = 2404094.5, Delta T = 2.24 sec

Ecliptic obliquity = 23°27'18", Nutation = - 0°00'14", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 22°55'34", Lahiri = 22°02'34"

# ASTRODIENST EPHEMERIS for the year 1870

## geocentric

MARCH 1870

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	10 34 23	10°14'04"	24°54'	13° 9	1°R38	12°46'	15°42'	27°25'	18°R10	17°51'	16°12'	27°R54	26°15'	20°Y16	2°Y 7	T 1
W 2	10 38 19	11°14'15"	7°12'	14°11	1°H 5	13°33'	15°51'	27°28'	18°9	17°53'	16°12'	27°49	26°11'	20°23'	2°11	W 2
T 3	10 42 16	12°14'24"	19°21'	15°16	0°33	14°20'	16° 1	27°32'	18° 7	17°55'	16°13'	27°42'	26° 8	20°30'	2°14	T 3
F 4	10 46 13	13°14'31"	1°Y24	16°23	0° 4	15° 7	16°11'	27°35'	18° 6	17°57'	16°14'	27°33'	26° 5	20°37'	2°18	F 4
S 5	10 50 9	14°14'35"	13°20'	17°32	29°36	15°54'	16°20'	27°38'	18° 5	17°58'	16°14'	27°24'	26° 2	20°43'	2°21	S 5
S 6	10 54 6	15°14'38"	25°13'	18°43	29°10	16°42'	16°31'	27°41'	18° 4	18° 0	16°15'	27°14'	25°59'	20°50'	2°25	S 6
M 7	10 58 2	16°14'39"	7° 4	19°56	28°46	17°29'	16°41'	27°44'	18° 3	18° 2	16°16'	27° 7	25°56'	20°57'	2°28	M 7
T 8	11 1 59	17°14'38"	18°57'	21°11	28°25	18°16'	16°51'	27°47'	18° 2	18° 4	16°16'	27° 0	25°52'	21° 4	2°32	T 8
W 9	11 5 55	18°14'34"	0°II54	22°28	28° 6	19° 3	17° 1	27°50'	18° 1	18° 6	16°17'	26°56'	25°49'	21°10'	2°35	W 9
T 10	11 9 52	19°14'29"	13° 2	23°46	27°49	19°50'	17°12'	27°53'	18° 0	18° 8	16°18'	26°55'	25°46'	21°17'	2°39	T 10
F 11	11 13 48	20°14'21"	25°23'	25° 6	27°34	20°37'	17°22'	27°56'	17°59	18°10	16°19'	26°D55	25°43'	21°24'	2°42	F 11
S 12	11 17 45	21°14'11"	8°4	26°27	27°22	21°24'	17°33'	27°58'	17°58	18°13	16°20'	26°55'	25°40'	21°30'	2°46	S 12
S 13	11 21 42	22°13'59"	21° 9	27°51	27°13	22°11'	17°44'	28° 1	17°58	18°15	16°21'	26°R56	25°37'	21°37'	2°49	S 13
M14	11 25 38	23°13'45"	4°41	29°15	27° 6	22°58'	17°55'	28° 3	17°57	18°17	16°21'	26°56'	25°33'	21°44'	2°53	M14
T 15	11 29 35	24°13'28"	18°42	0°H41	27° 1	23°45'	18° 5	28° 6	17°56	18°19	16°22'	26°54'	25°30'	21°51'	2°57	T 15
W16	11 33 31	25°13'10"	3°11	2° 8	26°D59	24°32'	18°17'	28° 8	17°56	18°21	16°23'	26°50'	25°27'	21°57'	3° 0	W16
T 17	11 37 28	26°12'49"	18° 4	3°37	26°59	25°18'	18°28'	28°10	17°55	18°23	16°24'	26°43'	25°24'	22° 4	3° 4	T 17
F 18	11 41 24	27°12'26"	3°12	5° 7	27° 2	26° 5	18°39	28°12	17°55	18°25	16°25'	26°34'	25°21'	22°11'	3° 7	F 18
S 19	11 45 21	28°12'00"	18°26	6°39	27° 7	26°52'	18°50'	28°14'	17°54	18°27	16°26'	26°25'	25°17'	22°17'	3°11	S 19
S 20	11 49 17	29°11'34"	3°13	8°11	27°14	27°39'	19° 2	28°16	17°54	18°29	16°27'	26°16'	25°14'	22°24'	3°15	S 20
M21	11 53 14	0°Y11'05"	18°28	9°46	27°24	28°25'	19°13'	28°18	17°54	18°32	16°28'	26° 8	25°11'	22°31'	3°18	M21
T 22	11 57 10	1°10'34"	3° 0	11°21	27°35	29°12'	19°25'	28°19	17°53	18°34	16°29'	26° 3	25° 8	22°38'	3°22	T 22
W23	12 1 7	2°10'02"	17° 6	12°58	27°49	29°59'	19°36'	28°21	17°53	18°36	16°30'	26° 0	25° 5	22°44'	3°26	W23
T 24	12 5 4	3° 9'28"	0°3	14°36	28° 5	0°Y45	19°48'	28°22	17°53	18°38	16°31'	25°D59	25° 2	22°51'	3°29	T 24
F 25	12 9 0	4° 8'53"	14° 1	16°16	28°23	1°32	20° 0	28°24	17°53	18°40	16°32'	25°59'	24°58'	22°58'	3°33	F 25
S 26	12 12 57	5° 8'16"	26°56	17°56	28°43	2°19	20°12	28°25	17°D53	18°43	16°33'	25°R59	24°55'	23° 5	3°37	S 26
S 27	12 16 53	6° 7'36"	9°33	19°38	29° 4	3° 5	20°24	28°26	17°53	18°45	16°34'	25°58'	24°52'	23°11'	3°40	S 27
M28	12 20 50	7° 6'55"	21°56	21°22	29°28	3°52	20°36	28°27	17°53	18°47	16°35'	25°56'	24°49'	23°18'	3°44	M28
T 29	12 24 46	8° 6'13"	4° 9	23° 7	29°53	4°38	20°48	28°28	17°53	18°49	16°36'	25°50'	24°46'	23°25'	3°47	T 29
W30	12 28 43	9° 5'28"	16°15	24°53	0°H20	5°24	21° 0	28°29	17°53	18°52	16°37'	25°41'	24°42'	23°31'	3°51	W30
T 31	12 32 39	10°Y 4'41"	28°H14	26°H41	0°H48	6°Y11	21°H13	28°H30	17°54	18°Y54	16°H38	25°530	24°539	23°Y38	3°Y55	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	7s44	15s26	2s21	17s11	0s19	2s45	8n43	7s40	0s58	15n45	0s50	22s12	1n14	22n42	0n29	5n31
W 2	7 21	11 54	3 16	17 3	0 29	3 0	8 39	7 22	0 58	15 48	0 50	22 12	1 14	22 42	0 29	5 31
T 3	6 58	7 55	4 2	16 52	0 38	3 14	8 35	7 3	0 58	15 51	0 50	22 12	1 14	22 42	0 29	5 32
F 4	6 35	3 40	4 36	16 41	0 47	3 29	8 30	6 45	0 57	15 54	0 50	22 12	1 14	22 43	0 29	5 33
S 5	6 12	0n42	4 58	16 28	0 55	3 44	8 25	6 26	0 57	15 57	0 50	22 12	1 14	22 43	0 29	5 34
S 6	5 49	5 0	5 7	16 14	1 3	3 59	8 18	6 7	0 57	16 0	0 49	22 12	1 14	22 43	0 29	5 34
M 7	5 26	9 7	5 2	15 58	1 11	4 13	8 11	5 49	0 56	16 3	0 49	22 12	1 15	22 43	0 29	5 35
T 8	5 3	12 54	4 45	15 41	1 18	4 28	8 4	5 30	0 56	16 6	0 49	22 12	1 15	22 43	0 29	5 36
W 9	4 39	16 12	4 15	15 23	1 25	4 42	7 55	5 11	0 55	16 9	0 49	22 12	1 15	22 43	0 29	5 37
T 10	4 16	18 51	3 33	15 3	1 32	4 56	7 47	4 52	0 55	16 12	0 49	22 12	1 15	22 43	0 29	5 38
F 11	3 52	20 42	2 41	14 42	1 38	5 9	7 37	4 34	0 55	16 15	0 48	22 12	1 15	22 43	0 29	5 38
S 12	3 29	21 33	1 39	14 20	1 44	5 22	7 28	4 15	0 54	16 19	0 48	22 12	1 15	22 43	0 29	5 39
S 13	3 5	21 17	0 31	13 56	1 49	5 35	7 18	3 56	0 54	16 22	0 48	22 12	1 15	22 44	0 29	5 40
M14	2 41	19 46	0n41	13 31	1 54	5 47	7 7	3 37	0 54	16 25	0 48	22 12	1 15	22 44	0 29	5 41
T 15	2 18	17 2	1 54	13 5	1 58	5 59	6 57	3 18	0 53	16 28	0 48	22 12	1 15	22 44	0 29	5 42
W16	1 54	13 9	3 1	12 38	2 3	6 10	6 46	2 59	0 52	16 31	0 47	22 12	1 15	22 44	0 29	5 43
T 17	1 30	8 22	3 58	12 9	2 6	6 20	6 35	2 40	0 53	16 35	0 47	22 11	1 15	22 44	0 29	5 44
F 18	1 7	3 0	4 39	11 39	2 9	6 29	6 24	2 21	0 52	16 38	0 47	22 11	1 15	22 44	0 29	5 44
S 19	0 43	2s36	5 1	11 7	2 12	6 38	6 13	2 2	0 51	16 41	0 47	22 11	1 15	22 44	0 29	5 45
S 20	0 19	7 59	5 1	10 35	2 14	6 47	6 1	1 43	0 51	16 45	0 47	22 11	1 15	22 44	0 29	5 46
M21	0n 4	12 50	4 41	10 1	2 16	6 54	5 50	1 24	0 51	16 48	0 46	22 11	1 15	22 44	0 29	5 47
T 22	0 28	16 48	4 3	9 26	2 18	7 1	5 38	1 5	0 50	16 51	0 46	22 11	1 15	22 44	0 29	5 47
W23	0 52	19 39	3 11	8 50	2 19	7 7	5 27	0 46	0 50	16 54	0 46	22 11	1 15	22 44	0 29	5 48
T 24	1 15	21 17	2 10	8 13	2 19	7 12	5 15	0 27	0 49	16 58	0 46	22 11	1 15	22 44	0 29	5 49
F 25	1 39	21 40	1 3	7 34	2 19	7 17	5 4	0 8	0 49	17 1	0 46	22 11	1 16	22 44	0 29	5 50
S 26	2 3	20 52	0s 5	6 54	2 19	7 21	4 53	0n11	0 48	17 5	0 46	22 11	1 16	22 44	0 29	5 51
S 27	2 26	19 1	1 11	6 13	2 18	7 24	4 41	0 30	0 48	17 8	0 45	22 11	1 16	22 44	0 29	5 52
M28	2 50	16 18	2 13	5 31	2 17	7 27	4 30	0 49	0 47	17 11	0 45	22 11	1 16	22 44	0 29	5 53
T 29	3 13	12 54	3 8	4 48	2 15	7 28	4 19	1 7	0 47	17 15	0 45	22 11	1 16	22 44	0 29	5 53
W30	3 36	9 0	3 53	4 4	2 13	7 29	4 8	1 26	0 46	17 18	0 45	22 11	1 16	22 44	0 29	5 54
T 31	4n 0	4s47	4s27	3s18	2s10	7s30	3n57	1n45	0s46	17n21	0s45	22s11	1n16	22n44	0n29	5n55

Julian Day Number = 2404122.5, Delta T = 2.16 sec  
 Ecliptic obliquity = 23°27'19", Nutation = - 0°00'14", out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 22°55'38", Lahiri = 22°02'38"

# ASTRODIENST EPHEMERIS for the year 1870

## geocentric

APRIL 1870

00:00 UT

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

Day	☉	☾	♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat
F 1	4n23	0s25	4s50	2s32	2s 7	7s29	3n47	2n 4	0s46	17n25	0s45	22s11	1n16	22n44	0n28	5n56	1s37	2n32	14s53	21n 6	21n13	4n26	4n11	2n50
S 2	4 46	3n58	5 0	1 45	2 3	7 28	3 36	2 23	0 45	17 28	0 44	22 11	1 16	22 44	0 28	5 57	1 37	2 32	14 53	21 8	21 14	4 29	4 12	2 50
S 3	5 9	8 11	4 56	0 56	1 58	7 26	3 26	2 41	0 45	17 32	0 44	22 11	1 16	22 44	0 28	5 58	1 37	2 33	14 53	21 11	21 14	4 31	4 14	2 50
M 4	5 32	12 6	4 40	0 7	1 54	7 24	3 15	3 0	0 44	17 35	0 44	22 11	1 16	22 43	0 28	5 58	1 37	2 33	14 53	21 13	21 15	4 34	4 15	2 50
T 5	5 55	15 34	4 12	0n44	1 48	7 20	3 5	3 19	0 44	17 38	0 44	22 11	1 16	22 43	0 28	5 59	1 37	2 34	14 52	21 15	21 15	4 36	4 16	2 50
W 6	6 18	18 25	3 32	1 35	1 42	7 17	2 55	3 37	0 43	17 42	0 44	22 11	1 16	22 43	0 28	6 0	1 37	2 34	14 52	21 16	21 16	4 38	4 18	2 50
T 7	6 40	20 30	2 42	2 27	1 36	7 12	2 45	3 56	0 42	17 45	0 44	22 11	1 16	22 43	0 28	6 1	1 37	2 35	14 52	21 17	21 16	4 41	4 19	2 50
F 8	7 3	21 40	1 44	3 20	1 29	7 7	2 35	4 14	0 42	17 48	0 43	22 10	1 16	22 43	0 28	6 2	1 37	2 35	14 52	21 17	21 17	4 43	4 21	2 50
S 9	7 25	21 45	0 39	4 13	1 22	7 1	2 26	4 33	0 41	17 52	0 43	22 10	1 16	22 43	0 28	6 3	1 37	2 36	14 52	21 17	21 17	4 46	4 22	2 50
S 10	7 48	20 42	0n29	5 7	1 14	6 55	2 16	4 51	0 41	17 55	0 43	22 10	1 16	22 43	0 28	6 4	1 37	2 36	14 51	21 17	21 18	4 48	4 23	2 50
M 11	8 10	18 27	1 38	6 2	1 6	6 48	2 7	5 9	0 40	17 59	0 43	22 10	1 16	22 43	0 28	6 4	1 37	2 37	14 51	21 17	21 19	4 51	4 25	2 50
T 12	8 32	15 5	2 44	6 57	0 57	6 40	1 58	5 27	0 40	18 2	0 43	22 10	1 17	22 43	0 28	6 5	1 37	2 37	14 51	21 18	21 19	4 53	4 26	2 50
W 13	8 54	10 43	3 42	7 52	0 48	6 32	1 49	5 46	0 39	18 5	0 43	22 10	1 17	22 42	0 28	6 6	1 37	2 37	14 51	21 19	21 20	4 56	4 27	2 50
T 14	9 15	5 34	4 26	8 48	0 38	6 23	1 40	6 4	0 39	18 9	0 43	22 10	1 17	22 42	0 28	6 7	1 37	2 38	14 51	21 20	21 20	4 58	4 29	2 50
F 15	9 37	0s 0	4 53	9 43	0 28	6 14	1 32	6 22	0 38	18 12	0 42	22 10	1 17	22 42	0 28	6 8	1 37	2 38	14 51	21 22	21 21	5 0	4 30	2 50
S 16	9 58	5 39	5 0	10 38	0 18	6 4	1 23	6 39	0 38	18 15	0 42	22 10	1 17	22 42	0 28	6 9	1 37	2 39	14 51	21 24	21 21	5 3	4 32	2 50
S 17	10 20	10 57	4 45	11 33	0 8	5 53	1 15	6 57	0 37	18 19	0 42	22 10	1 17	22 42	0 28	6 10	1 37	2 39	14 50	21 26	21 22	5 5	4 33	2 50
M 18	10 41	15 29	4 10	12 27	0n 3	5 42	1 7	7 15	0 37	18 22	0 42	22 10	1 17	22 42	0 28	6 10	1 37	2 40	14 50	21 27	21 22	5 8	4 34	2 50
T 19	11 2	18 57	3 19	13 20	0 14	5 31	0 59	7 33	0 36	18 25	0 42	22 10	1 17	22 41	0 28	6 11	1 37	2 40	14 50	21 28	21 23	5 10	4 36	2 50
W 20	11 22	21 8	2 16	14 13	0 25	5 19	0 51	7 50	0 35	18 29	0 42	22 10	1 17	22 41	0 28	6 12	1 37	2 41	14 50	21 29	21 24	5 13	4 37	2 50
T 21	11 43	21 57	1 8	15 4	0 36	5 6	0 44	8 8	0 35	18 32	0 42	22 10	1 17	22 41	0 28	6 13	1 37	2 41	14 50	21 29	21 24	5 15	4 38	2 50
F 22	12 3	21 27	0s 2	15 53	0 46	4 53	0 36	8 25	0 34	18 35	0 41	22 10	1 17	22 41	0 28	6 14	1 37	2 42	14 50	21 29	21 25	5 17	4 40	2 50
S 23	12 23	19 50	1 10	16 42	0 57	4 40	0 29	8 42	0 34	18 39	0 41	22 10	1 17	22 41	0 28	6 15	1 37	2 42	14 50	21 29	21 25	5 20	4 41	2 50
S 24	12 43	17 15	2 13	17 28	1 8	4 26	0 22	9 0	0 33	18 42	0 41	22 10	1 17	22 40	0 28	6 15	1 37	2 43	14 50	21 30	21 26	5 22	4 42	2 50
M 25	13 3	13 57	3 7	18 12	1 18	4 11	0 15	9 17	0 33	18 45	0 41	22 10	1 17	22 40	0 28	6 16	1 37	2 43	14 50	21 30	21 26	5 25	4 44	2 50
T 26	13 23	10 8	3 53	18 54	1 27	3 56	0 8	9 34	0 32	18 48	0 41	22 9	1 17	22 40	0 28	6 17	1 37	2 43	14 49	21 31	21 27	5 27	4 45	2 50
W 27	13 42	5 57	4 27	19 34	1 36	3 41	0 2	9 51	0 31	18 52	0 41	22 9	1 17	22 40	0 28	6 18	1 37	2 44	14 49	21 32	21 27	5 30	4 46	2 50
T 28	14 1	1 34	4 50	20 12	1 45	3 25	0s 5	10 7	0 31	18 55	0 41	22 9	1 17	22 40	0 28	6 19	1 37	2 44	14 49	21 34	21 28	5 32	4 47	2 50
F 29	14 20	2n51	5 0	20 47	1 53	3 9	0 11	10 24	0 30	18 58	0 41	22 9	1 17	22 39	0 28	6 19	1 37	2 45	14 49	21 36	21 28	5 35	4 49	2 50
S 30	14n38	7n10	4s57	21n20	2n 1	2s53	0s17	10n41	0s30	19n 1	0s41	22s 9	1n17	22n39	0n28	6n20	1s37	2n45	14s49	21n38	21n29	5n37	4n50	2n50

# ASTRODIENST EPHEMERIS for the year 1870

## geocentric

MAY 1870

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	14 34 53	10 <sup>8</sup> 23'34	12 <sup>8</sup> 50	28 <sup>8</sup> 9	24 <sup>8</sup> 21	29 <sup>8</sup> 47	28 <sup>8</sup> 1	28°R 6	18 <sup>8</sup> 27	20 <sup>8</sup> 3	17 <sup>8</sup> 17	21°R54	23 <sup>8</sup> 1	27 <sup>8</sup> 7	5 <sup>8</sup> 41	S 1
M 2	14 38 49	11°21'46	24°46	29°48	25°18	0 <sup>8</sup> 32	28°15	28 <sup>8</sup> 4	18°28	20° 5	17°19	21 <sup>8</sup> 42	22°58	27°13	5°44	M 2
T 3	14 42 46	12°19'56	6 <sup>II</sup> 46	1 <sup>II</sup> 22	26°15	1°17	28°29	28° 1	18°30	20° 8	17°20	21°33	22°54	27°20	5°47	T 3
W 4	14 46 42	13°18'04	18°52	2°54	27°13	2° 2	28°43	27°59	18°32	20°10	17°21	21°25	22°51	27°27	5°50	W 4
T 5	14 50 39	14°16'10	1 <sup>8</sup> 6	4°21	28°11	2°47	28°57	27°56	18°34	20°12	17°23	21°21	22°48	27°33	5°53	T 5
F 6	14 54 35	15°14'15	13°32	5°44	29° 9	3°32	29°10	27°54	18°36	20°14	17°24	21°19	22°45	27°40	5°56	F 6
S 7	14 58 32	16°12'18	26°12	7° 3	0 <sup>8</sup> 8	4°16	29°24	27°51	18°38	20°16	17°26	21°D19	22°42	27°47	5°59	S 7
S 8	15 2 29	17°10'18	9 <sup>II</sup> 10	8°18	1° 8	5° 1	29°38	27°48	18°41	20°18	17°27	21°20	22°39	27°54	6° 2	S 8
M 9	15 6 25	18° 8'17	22°30	9°29	2° 7	5°46	29°52	27°46	18°43	20°20	17°28	21°R20	22°35	28° 0	6° 5	M 9
T 10	15 10 22	19° 6'14	6 <sup>II</sup> 15	10°35	3° 7	6°30	0 <sup>II</sup> 6	27°43	18°45	20°22	17°30	21°18	22°32	28° 7	6° 8	T 10
W11	15 14 18	20° 4'09	20°26	11°38	4° 7	7°15	0°20	27°40	18°47	20°24	17°31	21°15	22°29	28°14	6°11	W11
T 12	15 18 15	21° 2'02	5 <sup>II</sup> 2	12°35	5° 8	7°59	0°34	27°37	18°49	20°26	17°32	21°10	22°26	28°21	6°13	T 12
F 13	15 22 11	21°59'54	19°58	13°29	6° 9	8°43	0°48	27°33	18°52	20°28	17°34	21° 2	22°23	28°27	6°16	F 13
S 14	15 26 8	22°57'44	5 <sup>II</sup> 8	14°18	7°10	9°28	1° 2	27°30	18°54	20°30	17°35	20°54	22°19	28°34	6°19	S 14
S 15	15 30 4	23°55'32	20°20	15° 2	8°11	10°12	1°16	27°27	18°57	20°32	17°36	20°45	22°16	28°41	6°22	S 15
M16	15 34 1	24°53'19	5 <sup>II</sup> 26	15°42	9°13	10°56	1°30	27°24	18°59	20°34	17°38	20°38	22°13	28°47	6°24	M16
T 17	15 37 58	25°51'05	20°14	16°17	10°15	11°40	1°44	27°20	19° 2	20°36	17°39	20°32	22°10	28°54	6°27	T 17
W18	15 41 54	26°48'49	4 <sup>8</sup> 38	16°47	11°17	12°25	1°58	27°17	19° 4	20°38	17°40	20°29	22° 7	29° 1	6°29	W18
T 19	15 45 51	27°46'32	18°34	17°12	12°20	13° 9	2°12	27°13	19° 7	20°40	17°42	20°D28	22° 4	29° 8	6°32	T 19
F 20	15 49 47	28°44'14	2 <sup>8</sup> 2	17°33	13°23	13°53	2°27	27°10	19° 9	20°42	17°43	20°29	22° 0	29°14	6°34	F 20
S 21	15 53 44	29°41'55	15° 4	17°49	14°26	14°37	2°41	27° 6	19°12	20°44	17°44	20°30	21°57	29°21	6°37	S 21
S 22	15 57 40	0 <sup>II</sup> 39'35	27°43	18° 0	15°29	15°20	2°55	27° 3	19°15	20°46	17°46	20°R30	21°54	29°28	6°39	S 22
M23	16 1 37	1°37'14	10 <sup>II</sup> 3	18° 6	16°32	16° 4	3° 9	26°59	19°17	20°47	17°47	20°30	21°51	29°35	6°42	M23
T 24	16 5 33	2°34'52	22°10	18°R 7	17°36	16°48	3°23	26°55	19°20	20°49	17°48	20°28	21°48	29°41	6°44	T 24
W25	16 9 30	3°32'29	4 <sup>8</sup> 7	18° 4	18°40	17°32	3°37	26°51	19°23	20°51	17°50	20°24	21°45	29°48	6°47	W25
T 26	16 13 27	4°30'05	16° 0	17°57	19°44	18°16	3°51	26°47	19°26	20°53	17°51	20°18	21°41	29°55	6°49	T 26
F 27	16 17 23	5°27'40	27°51	17°45	20°49	18°59	4° 5	26°43	19°28	20°54	17°52	20°11	21°38	0 <sup>8</sup> 1	6°51	F 27
S 28	16 21 20	6°25'14	9 <sup>8</sup> 44	17°29	21°53	19°43	4°19	26°39	19°31	20°56	17°54	20° 3	21°35	0° 8	6°53	S 28
S 29	16 25 16	7°22'47	21°40	17°10	22°58	20°26	4°33	26°35	19°34	20°58	17°55	19°54	21°32	0°15	6°55	S 29
M30	16 29 13	8°20'20	3 <sup>II</sup> 43	16°47	24° 3	21°10	4°47	26°31	19°37	21° 0	17°56	19°47	21°29	0°22	6°58	M30
T 31	16 33 9	9 <sup>II</sup> 17'51	15 <sup>II</sup> 52	16 <sup>II</sup> 21	25°8	21°853	5 <sup>II</sup> 1	26°27	19°40	21°8	17°58	19°41	21°25	0 <sup>8</sup> 28	7°8	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	14n57	11n14	4s41	21n50	2n 7	2s36	0s23	10n57	0s29	19n 5	0s40	22s 9	1n17	22n39	0n28	6n21
M 2	15 15	14 53	4 13	22 17	2 13	2 19	0 29	11 13	0 29	19 8	0 40	22 9	1 17	22 39	0 28	6 22
T 3	15 33	17 57	3 33	22 43	2 18	2 1	0 35	11 30	0 28	19 11	0 40	22 9	1 17	22 38	0 28	6 23
W 4	15 50	20 17	2 43	23 5	2 23	1 43	0 40	11 46	0 27	19 14	0 40	22 9	1 17	22 38	0 28	6 23
T 5	16 8	21 42	1 45	23 25	2 26	1 25	0 45	12 2	0 27	19 17	0 40	22 9	1 17	22 38	0 28	6 24
F 6	16 25	22 5	0 41	23 43	2 29	1 6	0 50	12 17	0 26	19 20	0 40	22 9	1 17	22 37	0 28	6 25
S 7	16 42	21 21	0n26	23 59	2 31	0 48	0 55	12 33	0 25	19 23	0 40	22 9	1 17	22 37	0 28	6 26
S 8	16 58	19 29	1 34	24 12	2 32	0 28	1 0	12 49	0 25	19 26	0 40	22 9	1 17	22 37	0 28	6 26
M 9	17 15	16 31	2 38	24 23	2 31	0 9	1 5	13 4	0 24	19 30	0 40	22 9	1 18	22 36	0 28	6 27
T 10	17 31	12 34	3 36	24 32	2 30	0n11	1 10	13 19	0 24	19 33	0 39	22 9	1 18	22 36	0 28	6 28
W11	17 46	7 48	4 22	24 39	2 28	0 30	1 14	13 35	0 23	19 36	0 39	22 9	1 18	22 36	0 28	6 29
T 12	18 2	2 29	4 53	24 43	2 25	0 50	1 18	13 50	0 22	19 39	0 39	22 8	1 18	22 35	0 28	6 29
F 13	18 17	3s 7	5 4	24 46	2 21	1 11	1 22	14 4	0 22	19 42	0 39	22 8	1 18	22 35	0 28	6 30
S 14	18 32	8 36	4 55	24 47	2 16	1 31	1 26	14 19	0 21	19 45	0 39	22 8	1 18	22 35	0 28	6 31
S 15	18 46	13 35	4 25	24 46	2 10	1 52	1 30	14 34	0 21	19 48	0 39	22 8	1 18	22 34	0 28	6 32
M16	19 0	17 40	3 37	24 44	2 3	2 13	1 34	14 48	0 20	19 51	0 39	22 8	1 18	22 34	0 28	6 32
T 17	19 14	20 31	2 35	24 40	1 55	2 34	1 37	15 2	0 19	19 53	0 39	22 8	1 18	22 34	0 28	6 33
W18	19 27	21 59	1 24	24 34	1 46	2 55	1 41	15 17	0 19	19 56	0 39	22 8	1 18	22 33	0 28	6 34
T 19	19 41	22 0	0 10	24 26	1 36	3 17	1 44	15 31	0 18	19 59	0 39	22 8	1 18	22 33	0 28	6 34
F 20	19 53	20 43	1s 2	24 17	1 25	3 38	1 47	15 44	0 17	20 2	0 38	22 8	1 18	22 33	0 28	6 35
S 21	20 6	18 22	2 8	24 7	1 13	4 0	1 50	15 58	0 17	20 5	0 38	22 8	1 18	22 32	0 28	6 36
S 22	20 18	15 12	3 7	23 55	1 1	4 22	1 53	16 11	0 16	20 8	0 38	22 8	1 18	22 32	0 28	6 36
M23	20 30	11 25	3 55	23 42	0 47	4 44	1 55	16 25	0 15	20 11	0 38	22 8	1 18	22 31	0 28	6 37
T 24	20 41	7 16	4 31	23 28	0 32	5 6	1 58	16 38	0 15	20 13	0 38	22 8	1 17	22 31	0 28	6 38
W25	20 53	2 53	4 56	23 12	0 17	5 28	2 0	16 51	0 14	20 16	0 38	22 8	1 17	22 31	0 28	6 38
T 26	21 3	1n35	5 7	22 56	0 1	5 50	2 3	17 4	0 13	20 19	0 38	22 8	1 17	22 30	0 28	6 39
F 27	21 14	5 58	5 5	22 38	0s15	6 12	2 5	17 16	0 13	20 21	0 38	22 7	1 17	22 30	0 28	6 39
S 28	21 24	10 9	4 50	22 20	0 32	6 34	2 7	17 29	0 12	20 24	0 38	22 7	1 17	22 29	0 28	6 40
S 29	21 33	13 58	4 22	22 1	0 49	6 56	2 9	17 41	0 12	20 27	0 38	22 7	1 17	22 29	0 28	6 41
M30	21 43	17 16	3 43	21 42	1 7	7 19	2 10	17 53	0 11	20 29	0 38	22 7	1 17	22 29	0 28	6 41
T 31	21n52	19n51	2s53	21n22	1s24	7n41	2s12	18n 5	0s10	20n32	0s38	22s 7	1n17	22n28	0n28	6n42

Julian Day Number = 2404183.5, Delta T = 1.98 sec  
 Ecliptic obliquity = 23°27'19, Nutation = - 0°00'17, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 22°55'46, Lahiri = 22°02'47

# ASTRODIENST EPHEMERIS for the year 1870

## geocentric

JUNE 1870

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	16 37 6	10 <sup>II</sup> 15'21	28 <sup>II</sup> 10	15°R52	26°Y13	22 <sup>8</sup> 37	5 <sup>II</sup> 15	26°R23	19 <sup>8</sup> 43	21°Y 3	17 <sup>8</sup> 59	19°R37	21 <sup>8</sup> 22	0 <sup>8</sup> 35	7°Y 2	W 1
T 2	16 41 2	11°12'50	10 <sup>8</sup> 37	15 <sup>II</sup> 22	27°19	23°20	5°29	26 <sup>8</sup> 19	19°46	21° 4	18° 0	19 <sup>8</sup> 35	21°19	0°42	7° 4	T 2
F 3	16 44 59	12°10'18	23°16	14°50	28°24	24° 3	5°44	26°15	19°49	21° 6	18° 1	19°D35	21°16	0°48	7° 6	F 3
S 4	16 48 56	13° 7'45	6 <sup>8</sup> 8	14°17	29°30	24°46	5°58	26°10	19°52	21° 8	18° 3	19°36	21°13	0°55	7° 7	S 4
S 5	16 52 52	14° 5'10	19°16	13°43	0 <sup>8</sup> 36	25°29	6°12	26° 6	19°55	21° 9	18° 4	19°37	21°10	1° 2	7° 9	S 5
M 6	16 56 49	15° 2'35	2 <sup>8</sup> 40	13°10	1°42	26°13	6°26	26° 2	19°59	21°11	18° 5	19°39	21° 6	1° 9	7°11	M 6
T 7	17 0 45	15°59'58	16°23	12°37	2°48	26°56	6°39	25°57	20° 2	21°12	18° 6	19°R39	21° 3	1°15	7°13	T 7
W 8	17 4 42	16°57'20	0 <sup>8</sup> 26	12° 6	3°55	27°38	6°53	25°53	20° 5	21°14	18° 8	19°39	21° 0	1°22	7°15	W 8
T 9	17 8 38	17°54'41	14°48	11°36	5° 1	28°21	7° 7	25°49	20° 8	21°15	18° 9	19°37	20°57	1°29	7°16	T 9
F 10	17 12 35	18°52'01	29°25	11° 9	6° 8	29° 4	7°21	25°44	20°11	21°17	18°10	19°33	20°54	1°36	7°18	F 10
S 11	17 16 31	19°49'21	14 <sup>8</sup> 13	10°44	7°14	29°47	7°35	25°40	20°15	21°18	18°11	19°29	20°51	1°42	7°19	S 11
S 12	17 20 28	20°46'39	29° 5	10°23	8°21	0 <sup>II</sup> 30	7°49	25°36	20°18	21°19	18°12	19°25	20°47	1°49	7°21	S 12
M13	17 24 25	21°43'56	13 <sup>8</sup> 52	10° 5	9°28	1°12	8° 3	25°31	20°21	21°21	18°13	19°22	20°44	1°56	7°22	M13
T 14	17 28 21	22°41'13	28°27	9°51	10°36	1°55	8°17	25°27	20°24	21°22	18°15	19°19	20°41	2° 2	7°24	T 14
W15	17 32 18	23°38'30	12 <sup>8</sup> 44	9°41	11°43	2°38	8°31	25°22	20°28	21°23	18°16	19°D18	20°38	2° 9	7°25	W15
T 16	17 36 14	24°35'45	26°39	9°36	12°50	3°20	8°44	25°18	20°31	21°24	18°17	19°18	20°35	2°16	7°27	T 16
F 17	17 40 11	25°33'01	10 <sup>8</sup> 8	9°D34	13°58	4° 3	8°58	25°13	20°35	21°26	18°18	19°19	20°31	2°23	7°28	F 17
S 18	17 44 7	26°30'16	23°13	9°38	15° 5	4°45	9°12	25° 9	20°38	21°27	18°19	19°21	20°28	2°29	7°29	S 18
S 19	17 48 4	27°27'31	5 <sup>8</sup> 56	9°46	16°13	5°27	9°25	25° 5	20°41	21°28	18°20	19°22	20°25	2°36	7°30	S 19
M20	17 52 0	28°24'45	18°20	9°59	17°21	6°10	9°39	25° 0	20°45	21°29	18°21	19°23	20°22	2°43	7°31	M20
T 21	17 55 57	29°22'00	0 <sup>Y</sup> 30	10°16	18°29	6°52	9°53	24°56	20°48	21°30	18°22	19°R24	20°19	2°49	7°33	T 21
W22	17 59 54	0 <sup>8</sup> 19'14	12°29	10°38	19°37	7°34	10° 6	24°51	20°52	21°31	18°23	19°23	20°16	2°56	7°34	W22
T 23	18 3 50	1°16'28	24°22	11° 5	20°45	8°16	10°20	24°47	20°55	21°32	18°24	19°22	20°12	3° 3	7°35	T 23
F 24	18 7 47	2°13'42	6 <sup>8</sup> 15	11°36	21°54	8°58	10°33	24°43	20°59	21°33	18°26	19°20	20° 9	3°10	7°35	F 24
S 25	18 11 43	3°10'56	18°10	12°12	23° 2	9°40	10°47	24°38	21° 2	21°34	18°27	19°17	20° 6	3°16	7°36	S 25
S 26	18 15 40	4° 8'10	0 <sup>II</sup> 10	12°53	24°10	10°22	11° 0	24°34	21° 6	21°35	18°28	19°15	20° 3	3°23	7°37	S 26
M27	18 19 36	5° 5'24	12°20	13°37	25°19	11° 4	11°14	24°30	21° 9	21°36	18°29	19°13	20° 0	3°30	7°38	M27
T 28	18 23 33	6° 2'38	24°40	14°27	26°28	11°46	11°27	24°25	21°13	21°37	18°30	19°11	19°57	3°36	7°39	T 28
W29	18 27 29	6°59'52	7 <sup>8</sup> 13	15°20	27°37	12°28	11°41	24°21	21°16	21°38	18°30	19°11	19°53	3°43	7°39	W29
T 30	18 31 26	7 <sup>8</sup> 57'06	19 <sup>8</sup> 59	16 <sup>II</sup> 18	28 <sup>8</sup> 45	13 <sup>II</sup> 10	11 <sup>II</sup> 54	24 <sup>8</sup> 17	21 <sup>8</sup> 20	21°Y39	18 <sup>8</sup> 31	19°D10	19 <sup>8</sup> 50	3 <sup>8</sup> 50	7°Y40	T 30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	22n 0	21n33	1s54	21n 2	1s41	8n 3	2s14	18n17	0s10	20n35	0s37	22s 7	1n17	22n28	0n28	6n42	1s38
T 2	22 8	22 13	0 49	20 41	1 58	8 25	2 15	18 28	0 9	20 37	0 37	22 7	1 17	22 27	0 28	6 43	1 38
F 3	22 16	21 47	0n20	20 21	2 15	8 48	2 16	18 40	0 8	20 40	0 37	22 7	1 17	22 27	0 28	6 44	1 38
S 4	22 23	20 11	1 29	20 1	2 31	9 10	2 17	18 51	0 8	20 42	0 37	22 7	1 17	22 26	0 28	6 44	1 38
S 5	22 30	17 30	2 35	19 42	2 47	9 32	2 18	19 2	0 7	20 45	0 37	22 7	1 17	22 26	0 28	6 45	1 38
M 6	22 37	13 51	3 33	19 24	3 1	9 54	2 19	19 13	0 6	20 47	0 37	22 7	1 17	22 25	0 28	6 45	1 38
T 7	22 43	9 23	4 21	19 6	3 15	10 16	2 20	19 24	0 6	20 50	0 37	22 7	1 17	22 25	0 28	6 46	1 38
W 8	22 49	4 20	4 55	18 50	3 27	10 37	2 21	19 34	0 5	20 52	0 37	22 7	1 17	22 24	0 28	6 46	1 38
T 9	22 54	1s 3	5 11	18 35	3 39	10 59	2 21	19 44	0 4	20 54	0 37	22 6	1 17	22 24	0 28	6 47	1 38
F 10	22 59	6 28	5 8	18 21	3 49	11 21	2 22	19 54	0 4	20 57	0 37	22 6	1 17	22 23	0 28	6 47	1 38
S 11	23 4	11 36	4 44	18 9	3 57	11 42	2 22	20 4	0 3	20 59	0 37	22 6	1 17	22 23	0 28	6 48	1 38
S 12	23 8	16 3	4 1	17 59	4 5	12 3	2 22	20 14	0 2	21 1	0 37	22 6	1 17	22 22	0 28	6 48	1 38
M13	23 12	19 28	3 2	17 50	4 11	12 24	2 22	20 23	0 2	21 4	0 37	22 6	1 17	22 22	0 28	6 49	1 38
T 14	23 15	21 35	1 52	17 44	4 16	12 45	2 22	20 33	0 1	21 6	0 37	22 6	1 17	22 21	0 28	6 49	1 38
W15	23 18	22 15	0 36	17 39	4 19	13 6	2 22	20 42	0 0	21 8	0 37	22 6	1 17	22 21	0 28	6 49	1 38
T 16	23 21	21 30	0s40	17 36	4 21	13 27	2 22	20 51	0n 0	21 10	0 36	22 6	1 16	22 20	0 28	6 50	1 39
F 17	23 23	19 31	1 52	17 35	4 22	13 47	2 22	20 59	0 1	21 13	0 36	22 6	1 16	22 20	0 28	6 50	1 39
S 18	23 25	16 33	2 56	17 36	4 22	14 7	2 21	21 8	0 2	21 15	0 36	22 6	1 16	22 19	0 28	6 51	1 39
S 19	23 26	12 53	3 49	17 39	4 20	14 27	2 21	21 16	0 2	21 17	0 36	22 6	1 16	22 19	0 28	6 51	1 39
M20	23 27	8 45	4 30	17 43	4 17	14 47	2 20	21 24	0 3	21 19	0 36	22 6	1 16	22 18	0 28	6 51	1 39
T 21	23 27	4 22	4 58	17 49	4 13	15 6	2 19	21 32	0 4	21 21	0 36	22 5	1 16	22 18	0 28	6 52	1 39
W22	23 27	0n 8	5 13	17 57	4 9	15 26	2 19	21 40	0 4	21 23	0 36	22 5	1 16	22 17	0 28	6 52	1 39
T 23	23 27	4 35	5 14	18 6	4 3	15 44	2 18	21 47	0 5	21 25	0 36	22 5	1 16	22 17	0 28	6 52	1 39
F 24	23 26	8 52	5 2	18 17	3 56	16 3	2 17	21 54	0 6	21 27	0 36	22 5	1 16	22 16	0 28	6 53	1 39
S 25	23 25	12 49	4 36	18 29	3 49	16 21	2 16	22 1	0 6	21 29	0 36	22 5	1 16	22 16	0 28	6 53	1 39
S 26	23 23	16 19	3 59	18 42	3 41	16 39	2 14	22 8	0 7	21 31	0 36	22 5	1 16	22 15	0 28	6 53	1 39
M27	23 21	19 9	3 10	18 56	3 32	16 57	2 13	22 15	0 8	21 33	0 36	22 5	1 15	22 15	0 28	6 54	1 39
T 28	23 19	21 10	2 11	19 12	3 23	17 14	2 12	22 21	0 8	21 35	0 36	22 5	1 15	22 14	0 28	6 54	1 39
W29	23 16	22 10	1 6	19 27	3 13	17 31	2 11	22 27	0 9	21 37	0 36	22 5	1 15	22 13	0 28	6 54	1 39
T 30	23n13	22n 2	0n 4	19n44	3s 2	17n48	2s 9	22n33	0n10	21n38	0s36	22s 5	1n15	22n13	0n28	6n55	1s39

Julian Day Number = 2404214.5, Delta T = 1.89 sec

Ecliptic obliquity = 23°27'18, Nutation = - 0°00'17, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 22°55'50, Lahiri = 22°02'51

# ASTRODIENST EPHEMERIS for the year 1870

## geocentric

JULY 1870

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	18 35 23	8♌54'19	2♌58	17♌20	29♌54	13♌51	12♌7	24°R12	21♌24	21°40	18♌32	19♌11	19♌47	3♌57	7°41	F 1
S 2	18 39 19	9°51'33	16°11	18°27	1♌3	14°33	12°20	24♌8	21°27	21°41	18°33	19°11	19°44	4°3	7°41	S 2
S 3	18 43 16	10°48'46	29°37	19°37	2°13	15°14	12°34	24°4	21°31	21°41	18°34	19°12	19°41	4°10	7°41	S 3
M 4	18 47 12	11°45'59	13♌16	20°51	3°22	15°56	12°47	24°0	21°35	21°42	18°35	19°13	19°37	4°17	7°42	M 4
T 5	18 51 9	12°43'11	27°8	22°10	4°31	16°37	13°0	23°56	21°38	21°43	18°36	19°13	19°34	4°24	7°42	T 5
W 6	18 55 5	13°40'23	11♌12	23°32	5°40	17°19	13°13	23°52	21°42	21°43	18°37	19°R13	19°31	4°30	7°43	W 6
T 7	18 59 2	14°37'36	25°25	24°58	6°50	18°0	13°26	23°48	21°45	21°44	18°38	19°13	19°28	4°37	7°43	T 7
F 8	19 2 58	15°34'48	9♌46	26°29	7°59	18°41	13°39	23°44	21°49	21°45	18°38	19°13	19°25	4°44	7°43	F 8
S 9	19 6 55	16°31'59	24°11	28°2	9°9	19°23	13°51	23°40	21°53	21°45	18°39	19°13	19°22	4°50	7°43	S 9
S 10	19 10 52	17°29'11	8♌36	29°40	10°19	20°4	14°4	23°36	21°56	21°46	18°40	19°13	19°18	4°57	7°43	S 10
M11	19 14 48	18°26'23	22°57	1♌21	11°28	20°45	14°17	23°32	22°0	21°46	18°41	19°12	19°15	5°4	7°R43	M11
T 12	19 18 45	19°23'35	7♌8	3°5	12°38	21°26	14°30	23°29	22°4	21°47	18°42	19°D12	19°12	5°11	7°43	T 12
W13	19 22 41	20°20'48	21°6	4°53	13°48	22°7	14°42	23°25	22°7	21°47	18°42	19°R12	19°9	5°17	7°43	W13
T 14	19 26 38	21°18'00	4♌47	6°44	14°58	22°48	14°55	23°21	22°11	21°48	18°43	19°12	19°6	5°24	7°43	T 14
F 15	19 30 34	22°15'13	18°9	8°38	16°8	23°29	15°7	23°18	22°15	21°48	18°44	19°12	19°3	5°31	7°43	F 15
S 16	19 34 31	23°12'27	1♌11	10°34	17°18	24°10	15°20	23°14	22°18	21°48	18°44	19°12	18°59	5°37	7°43	S 16
S 17	19 38 28	24°9'41	13°53	12°33	18°29	24°50	15°32	23°11	22°22	21°49	18°45	19°11	18°56	5°44	7°42	S 17
M18	19 42 24	25°6'55	26°18	14°34	19°39	25°31	15°45	23°7	22°26	21°49	18°46	19°11	18°53	5°51	7°42	M18
T 19	19 46 21	26°4'11	8°V29	16°36	20°49	26°12	15°57	23°4	22°29	21°49	18°46	19°10	18°50	5°58	7°42	T 19
W20	19 50 17	27°1'27	20°30	18°41	22°0	26°52	16°9	23°0	22°33	21°49	18°47	19°10	18°47	6°4	7°41	W20
T 21	19 54 14	27°58'44	2♌24	20°46	23°10	27°33	16°21	22°57	22°37	21°49	18°48	19°D10	18°43	6°11	7°41	T 21
F 22	19 58 10	28°56'01	14°17	22°53	24°21	28°13	16°33	22°54	22°40	21°50	18°48	19°10	18°40	6°18	7°40	F 22
S 23	20 2 7	29°53'20	26°13	24°59	25°32	28°54	16°45	22°51	22°44	21°50	18°49	19°11	18°37	6°24	7°39	S 23
S 24	20 6 3	0♌50'40	8♌17	27°7	26°42	29°34	16°57	22°48	22°48	21°50	18°49	19°12	18°34	6°31	7°39	S 24
M25	20 10 0	1°48'00	20°32	29°14	27°53	0♌15	17°9	22°45	22°51	21°50	18°50	19°13	18°31	6°38	7°38	M25
T 26	20 13 56	2°45'22	3♌1	1♌21	29°4	0°55	17°21	22°42	22°55	21°R50	18°50	19°14	18°28	6°45	7°37	T 26
W27	20 17 53	3°42'44	15°48	3°27	0♌15	1°35	17°32	22°39	22°58	21°50	18°51	19°R14	18°24	6°51	7°36	W27
T 28	20 21 50	4°40'07	28°52	5°33	1°26	2°15	17°44	22°37	23°2	21°50	18°51	19°14	18°21	6°58	7°36	T 28
F 29	20 25 46	5°37'31	12♌14	7°37	2°37	2°55	17°55	22°34	23°6	21°50	18°52	19°13	18°18	7°5	7°35	F 29
S 30	20 29 43	6°34'55	25°52	9°41	3°48	3°36	18°7	22°31	23°9	21°50	18°52	19°11	18°15	7°11	7°34	S 30
S 31	20 33 39	7♌32'21	9♌44	11♌43	5♌0	4♌16	18♌18	22♌29	23♌13	21°V49	18♌53	19♌9	18♌12	7♌18	7°V33	S 31

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	23n 9	20n44	1n16	20n 1	2s51	18n 4	2s 7	22n39	0n11	21n40	0s36	22s 5	1n15	22n12	0n28	6n55	1s39	3n 0	14s54	22n 5	22n 0	8n 8	5n42	2n54	
S 2	23 5	18 17	2 24	20 18	2 39	18 20	2 6	22 45	0 11	21 42	0 36	22 5	1 15	22 12	0 28	6 55	1 39	3 0	14 54	22 5	22 0	8 11	5 43	2 54	
S 3	23 1	14 49	3 26	20 36	2 27	18 35	2 4	22 50	0 12	21 44	0 36	22 5	1 15	22 11	0 28	6 55	1 39	3 0	14 55	22 5	22 1	8 13	5 43	2 54	
M 4	22 56	10 32	4 17	20 53	2 15	18 50	2 2	22 55	0 13	21 45	0 36	22 5	1 15	22 11	0 28	6 55	1 40	3 0	14 55	22 5	22 1	8 16	5 43	2 54	
T 5	22 51	5 38	4 54	21 11	2 3	19 5	2 1	23 0	0 13	21 47	0 35	22 4	1 15	22 10	0 28	6 56	1 40	3 0	14 55	22 5	22 2	8 18	5 43	2 54	
W 6	22 45	0 23	5 14	21 28	1 50	19 19	1 59	23 5	0 14	21 49	0 35	22 4	1 14	22 10	0 28	6 56	1 40	3 0	14 55	22 5	22 2	8 21	5 44	2 54	
T 7	22 39	4s57	5 15	21 44	1 37	19 33	1 57	23 9	0 15	21 50	0 35	22 4	1 14	22 9	0 28	6 56	1 40	3 0	14 55	22 5	22 3	8 23	5 44	2 54	
F 8	22 33	10 3	4 57	22 0	1 24	19 46	1 55	23 14	0 15	21 52	0 35	22 4	1 14	22 8	0 28	6 56	1 40	3 0	14 56	22 5	22 3	8 26	5 44	2 54	
S 9	22 26	14 38	4 20	22 15	1 11	19 59	1 52	23 18	0 16	21 54	0 35	22 4	1 14	22 8	0 28	6 56	1 40	3 0	14 56	22 5	22 3	8 28	5 44	2 54	
S 10	22 19	18 21	3 27	22 29	0 58	20 11	1 50	23 22	0 17	21 55	0 35	22 4	1 14	22 7	0 28	6 56	1 40	3 0	14 56	22 5	22 4	8 30	5 44	2 55	
M11	22 11	20 56	2 21	22 41	0 46	20 23	1 48	23 25	0 17	21 57	0 35	22 4	1 14	22 7	0 28	6 57	1 40	3 0	14 56	22 5	22 4	8 33	5 44	2 55	
T 12	22 3	22 9	1 6	22 52	0 33	20 35	1 46	23 29	0 18	21 58	0 35	22 4	1 14	22 6	0 28	6 57	1 40	3 0	14 57	22 5	22 5	8 35	5 44	2 55	
W13	21 55	21 58	0s11	23 2	0 20	20 46	1 43	23 32	0 19	22 0	0 35	22 4	1 14	22 5	0 28	6 57	1 40	3 0	14 57	22 5	22 5	8 38	5 44	2 55	
T 14	21 46	20 28	1 25	23 9	0 8	20 56	1 41	23 35	0 19	22 1	0 35	22 4	1 13	22 5	0 28	6 57	1 40	3 0	14 57	22 5	22 6	8 40	5 44	2 55	
F 15	21 37	17 50	2 34	23 14	0n 4	21 6	1 39	23 38	0 20	22 3	0 35	22 4	1 13	22 4	0 28	6 57	1 40	3 0	14 57	22 5	22 6	8 43	5 44	2 55	
S 16	21 27	14 22	3 32	23 17	0 15	21 15	1 36	23 40	0 21	22 4	0 35	22 4	1 13	22 4	0 28	6 57	1 40	3 0	14 58	22 5	22 7	8 45	5 44	2 55	
S 17	21 18	10 19	4 19	23 18	0 26	21 24	1 34	23 43	0 21	22 5	0 35	22 4	1 13	22 3	0 28	6 57	1 40	3 0	14 58	22 5	22 7	8 47	5 44	2 55	
M18	21 7	5 56	4 52	23 16	0 37	21 32	1 31	23 45	0 22	22 7	0 35	22 4	1 13	22 3	0 28	6 57	1 40	3 0	14 58	22 5	22 7	8 50	5 44	2 55	
T 19	20 57	1 24	5 11	23 11	0 46	21 40	1 29	23 47	0 23	22 8	0 35	22 4	1 13	22 2	0 28	6 57	1 40	3 0	14 58	22 5	22 8	8 52	5 44	2 55	
W20	20 46	3n 7	5 17	23 4	0 56	21 47	1 26	23 48	0 23	22 9	0 35	22 4	1 13	22 1	0 28	6 57	1 41	2 59	14 59	22 5	22 8	8 55	5 44	2 55	
T 21	20 35	7 29	5 8	22 54	1 4	21 54	1 23	23 50	0 24	22 11	0 35	22 4	1 12	22 1	0 28	6 57	1 41	2 59	14 59	22 5	22 9	8 57	5 44	2 56	
F 22	20 23	11 34	4 47	22 42	1 12	22 0	1 20	23 51	0 25	22 12	0 35	22 4	1 12	22 0	0 28	6 57	1 41	2 59	14 59	22 5	22 9	9 0	5 44	2 56	
S 23	20 11	15 13	4 13	22 26	1 19	22 5	1 18	23 52	0 25	22 13	0 35	22 4	1 12	22 0	0 28	6 57	1 41	2 59	14 59	22 5	22 10	9 2	5 44	2 56	
S 24	19 59	18 17	3 28	22 8	1 25	22 10	1 15	23 53	0 26	22 14	0 35	22 4	1 12	21 59	0 28	6 57	1 41	2 59	15 0	22 5	22 10	9 4	5 44	2 56	
M25	19 46	20 35	2 32	21 48	1 30	22 14	1 12	23 54	0 27	22 15	0 35	22 4	1 12	21 58	0 28	6 57	1 41	2 59	15 0	22 5	22 10	9 7	5 43	2 56	
T 26	19 33	21 57	1 28	21 25	1 35	22 18	1 9	23 55	0 27	22 17	0 35	22 4	1 12	21 58	0 28	6 57	1 41	2 59	15 0	22 5	22 11	9 9	5 43	2 56	
W27	19 20	22 12	0 19	21 0	1 39	22 21	1 6	23 55	0 28	22 18	0 35	22 4	1 11	21 57	0 28	6 57	1 41	2 59	15 0	22 4	22 11	9 12	5 43	2 56	
T 28	19 7	21 16	0n53	20 33	1 42	22 23	1 4	23 55	0 29	22 19	0 35	22 4	1 11	21 57	0 28	6 57	1 41	2 58	15 1	22 4	22 12	9 14	5 43	2 56	
F 29	18 53	19 7	2 4	20 3	1 44	22 25	1 1	23 55	0 30	22 20	0 35	22 4	1 11	21 56	0 28	6 57	1 41	2 58	15 1	22 5	22 12	9 17	5 42	2 56	
S 30	18 38	15 52	3 8	19 32	1 46	22 26	0 58	23 55	0 30	22 21	0 35	22 4	1 11	21 55	0 28	6 57	1 41	2 58	15 1	22 5	22 13	9 19	5 42	2 56	
S 31	18n24	11n41	4n 3	18n59	1n46	22n27	0s55	23n54	0n31	22n22	0s35	22s 4	1n11	21n55	0n28	6n57	1s41	2n58	15s 2	22n 5	22n13	9n21	5n42	2n56	



# ASTRODIENST EPHEMERIS for the year 1870

## geocentric

AUGUST 1870

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	20 37 36	8♌29°47'	23♍48	13♌45	6♌11	4♌55	18♌29	22°R26	23♌16	21°R49	18♌53	19°R 7	18♌ 9	7♌25	7°R32	M 1
T 2	20 41 32	9°27'13	7♌59	15°44	7°22	5°35	18°41	22°R24	23°20	21°Y49	18°53	19°D 4	18° 5	7°32	7°Y31	T 2
W 3	20 45 29	10°24'41	22°13	17°43	8°34	6°15	18°52	22°22	23°24	21°49	18°54	19° 3	18° 2	7°38	7°29	W 3
T 4	20 49 25	11°22'09	6♌28	19°40	9°45	6°55	19° 3	22°20	23°27	21°48	18°54	19°D 2	17°59	7°45	7°28	T 4
F 5	20 53 22	12°19'38	20°41	21°35	10°57	7°35	19°14	22°18	23°31	21°48	18°54	19° 2	17°56	7°52	7°27	F 5
S 6	20 57 19	13°17'07	4♌49	23°29	12° 8	8°14	19°24	22°16	23°34	21°48	18°54	19° 3	17°53	7°58	7°26	S 6
S 7	21 1 15	14°14'38	18°52	25°22	13°20	8°54	19°35	22°14	23°38	21°47	18°55	19° 4	17°49	8° 5	7°24	S 7
M 8	21 5 12	15°12'09	2♌46	27°12	14°32	9°33	19°46	22°12	23°41	21°47	18°55	19° 6	17°46	8°12	7°23	M 8
T 9	21 9 8	16° 9'41	16°30	29° 2	15°43	10°13	19°56	22°10	23°45	21°47	18°55	19°R 6	17°43	8°19	7°21	T 9
W10	21 13 5	17° 7'14	0♌ 3	0♌50	16°55	10°52	20° 7	22° 9	23°48	21°46	18°55	19° 6	17°40	8°25	7°20	W10
T11	21 17 1	18° 4'48	13°23	2°36	18° 7	11°32	20°17	22° 7	23°51	21°46	18°56	19° 4	17°37	8°32	7°18	T11
F12	21 20 58	19° 2'23	26°29	4°21	19°19	12°11	20°27	22° 6	23°55	21°45	18°56	19° 1	17°34	8°39	7°17	F12
S13	21 24 55	20° 0'00	9♌20	6° 4	20°31	12°50	20°37	22° 4	23°58	21°44	18°56	18°56	17°30	8°45	7°15	S13
S14	21 28 51	20°57'37	21°56	7°46	21°43	13°29	20°47	22° 3	24° 2	21°44	18°56	18°51	17°27	8°52	7°13	S14
M15	21 32 48	21°55'16	4♌17	9°26	22°55	14° 9	20°57	22° 2	24° 5	21°43	18°56	18°46	17°24	8°59	7°12	M15
T16	21 36 44	22°52'57	16°26	11° 5	24° 8	14°48	21° 7	22° 1	24° 8	21°43	18°56	18°41	17°21	9° 6	7°10	T16
W17	21 40 41	23°50'39	28°26	12°42	25°20	15°27	21°17	22° 0	24°12	21°42	18°56	18°36	17°18	9°12	7° 8	W17
T18	21 44 37	24°48'23	10♌20	14°18	26°32	16° 6	21°26	21°59	24°15	21°41	18°56	18°34	17°14	9°19	7° 6	T18
F19	21 48 34	25°46'08	22°12	15°53	27°45	16°45	21°36	21°58	24°18	21°40	18°56	18°D33	17°11	9°26	7° 4	F19
S20	21 52 30	26°43'55	4♌ 7	17°26	28°57	17°23	21°45	21°57	24°21	21°40	18°56	18°33	17° 8	9°32	7° 3	S20
S21	21 56 27	27°41'44	16°10	18°58	0♌10	18° 2	21°54	21°57	24°25	21°39	18°56	18°34	17° 5	9°39	7° 1	S21
M22	22 0 23	28°39'35	28°26	20°28	1°22	18°41	22° 3	21°56	24°28	21°38	18°56	18°36	17° 2	9°46	6°59	M22
T23	22 4 20	29°37'27	11♌ 0	21°57	2°35	19°20	22°12	21°56	24°31	21°37	18°56	18°37	16°59	9°53	6°57	T23
W24	22 8 17	0♌35'21	23°54	23°24	3°48	19°58	22°21	21°56	24°34	21°36	18°56	18°R37	16°55	9°59	6°54	W24
T25	22 12 13	1°33'16	7♌11	24°50	5° 0	20°37	22°30	21°55	24°37	21°35	18°56	18°35	16°52	10° 6	6°52	T25
F26	22 16 10	2°31'14	20°52	26°14	6°13	21°15	22°38	21°55	24°40	21°34	18°56	18°32	16°49	10°13	6°50	F26
S27	22 20 6	3°29'12	4♌54	27°37	7°26	21°54	22°47	21°D55	24°43	21°33	18°56	18°26	16°46	10°19	6°48	S27
S28	22 24 3	4°27'13	19°14	28°59	8°39	22°32	22°55	21°55	24°46	21°32	18°55	18°20	16°43	10°26	6°46	S28
M29	22 27 59	5°25'14	3♌45	0♌18	9°52	23°10	23° 4	21°55	24°49	21°31	18°55	18°12	16°40	10°33	6°44	M29
T30	22 31 56	6°23'18	18°22	1°37	11° 5	23°49	23°12	21°56	24°52	21°30	18°55	18° 5	16°36	10°40	6°41	T30
W31	22 35 52	7♌21'22	2♌56	2♌53	12♌18	24♌27	23♌20	21♌56	24♌55	21♌29	18♌55	18♌ 0	16♌33	10♌46	6♌39	W31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
M 1	18n 9	6n49	4n45	18n25	1n47	22n27	0s52	23n53	0n32	22n23	0s35	22s 4	1n11	21n54	0n28	6n57
T 2	17 54	1 34	5 9	17 49	1 46	22 26	0 49	23 52	0 32	22 24	0 35	22 4	1 10	21 54	0 28	6 56
W 3	17 39	3s48	5 14	17 12	1 45	22 25	0 46	23 51	0 33	22 25	0 35	22 4	1 10	21 53	0 28	6 56
T 4	17 23	8 57	5 0	16 34	1 43	22 23	0 43	23 50	0 34	22 26	0 35	22 4	1 10	21 52	0 28	6 56
F 5	17 7	13 38	4 28	15 55	1 41	22 21	0 40	23 49	0 34	22 27	0 35	22 4	1 10	21 52	0 28	6 56
S 6	16 51	17 31	3 40	15 14	1 38	22 17	0 37	23 47	0 35	22 27	0 35	22 4	1 10	21 51	0 28	6 56
S 7	16 34	20 21	2 38	14 34	1 35	22 14	0 34	23 45	0 36	22 28	0 35	22 4	1 10	21 51	0 28	6 56
M 8	16 17	21 57	1 29	13 52	1 31	22 9	0 31	23 43	0 36	22 29	0 35	22 4	1 9	21 50	0 28	6 55
T 9	16 0	22 12	0 14	13 10	1 26	22 4	0 28	23 41	0 37	22 30	0 35	22 4	1 9	21 50	0 28	6 55
W10	15 43	21 7	1s 0	12 28	1 22	21 58	0 25	23 38	0 38	22 31	0 34	22 4	1 9	21 49	0 28	6 55
T11	15 25	18 52	2 9	11 45	1 17	21 52	0 22	23 36	0 38	22 32	0 34	22 4	1 9	21 48	0 28	6 55
F12	15 7	15 41	3 10	11 2	1 11	21 45	0 19	23 33	0 39	22 32	0 34	22 5	1 9	21 48	0 28	6 54
S13	14 49	11 47	4 0	10 18	1 5	21 38	0 16	23 30	0 40	22 33	0 34	22 5	1 9	21 47	0 28	6 54
S14	14 31	7 27	4 38	9 35	0 59	21 29	0 13	23 27	0 40	22 34	0 34	22 5	1 8	21 47	0 28	6 54
M15	14 13	2 54	5 1	8 51	0 53	21 21	0 10	23 23	0 41	22 34	0 34	22 5	1 8	21 46	0 28	6 54
T16	13 54	1n41	5 11	8 7	0 46	21 11	0 7	23 20	0 42	22 35	0 34	22 5	1 8	21 46	0 28	6 53
W17	13 35	6 9	5 7	7 24	0 39	21 1	0 4	23 16	0 42	22 36	0 34	22 5	1 8	21 45	0 28	6 53
T18	13 16	10 21	4 49	6 40	0 32	20 50	0 1	23 12	0 43	22 36	0 34	22 5	1 8	21 44	0 28	6 53
F19	12 56	14 9	4 19	5 57	0 24	20 39	0n 2	23 8	0 44	22 37	0 34	22 5	1 7	21 44	0 28	6 52
S20	12 37	17 25	3 38	5 13	0 16	20 27	0 5	23 4	0 45	22 38	0 34	22 5	1 7	21 43	0 28	6 52
S21	12 17	19 58	2 47	4 30	0 9	20 15	0 7	22 59	0 45	22 38	0 34	22 6	1 7	21 43	0 28	6 52
M22	11 57	21 39	1 47	3 47	0 0	20 2	0 10	22 55	0 46	22 39	0 34	22 6	1 7	21 42	0 28	6 51
T23	11 37	22 19	0 41	3 5	0s 8	19 48	0 13	22 50	0 47	22 39	0 34	22 6	1 7	21 42	0 28	6 51
W24	11 16	21 49	0n29	2 22	0 16	19 34	0 16	22 45	0 47	22 40	0 34	22 6	1 7	21 41	0 28	6 51
T25	10 56	20 5	1 39	1 41	0 25	19 20	0 18	22 40	0 48	22 40	0 34	22 6	1 6	21 41	0 28	6 50
F26	10 35	17 10	2 45	0 59	0 33	19 4	0 21	22 35	0 49	22 41	0 34	22 6	1 6	21 40	0 28	6 50
S27	10 14	13 11	3 44	0 18	0 42	18 49	0 24	22 29	0 49	22 41	0 34	22 7	1 6	21 40	0 28	6 49
S28	9 53	8 23	4 29	0s22	0 51	18 32	0 26	22 24	0 50	22 42	0 34	22 7	1 6	21 39	0 28	6 49
M29	9 32	3 3	4 58	1 2	1 0	18 15	0 29	22 18	0 51	22 42	0 34	22 7	1 6	21 39	0 28	6 48
T30	9 10	2s28	5 7	1 41	1 8	17 58	0 32	22 12	0 51	22 43	0 34	22 7	1 6	21 38	0 28	6 48
W31	8n49	7s51	4n57	2s20	1s17	17n40	0n34	22n 6	0n52	22n43	0s34	22s 7	1n 5	21n37	0n28	6n48

Julian Day Number = 2404275.5, Delta T = 1.73 sec  
 Ecliptic obliquity = 23°27'19", Nutation = - 0°00'15", out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 22°55'59", Lahiri = 22°02'59"



ASTRODIENST EPHEMERIS for the year 1870  
geocentric

OCTOBER 1870

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	0 38 6	7♂36'25	26♂14	14°R28	20♂27	13♂39	26♂II 8	22♂55	26♂8	20°R46	18°R38	15°R23	14♂55	14♂14	5°R17	S 1
S 2	0 42 2	8°35'29	10♂0	13♂22	21°42	14°15	26°11	22°58	26°10	20°Y44	18♂37	15♂23	14°51	14°21	5°Y15	S 2
M 3	0 45 59	9°34'36	23°26	12°14	22°56	14°51	26°13	23° 2	26°11	20°43	18°36	15°23	14°48	14°28	5°12	M 3
T 4	0 49 55	10°33'44	6♂34	11° 4	24°11	15°27	26°16	23° 5	26°13	20°41	18°35	15°21	14°45	14°34	5° 9	T 4
W 5	0 53 52	11°32'53	19°27	9°55	25°25	16° 3	26°18	23° 9	26°14	20°39	18°35	15°18	14°42	14°41	5° 6	W 5
T 6	0 57 48	12°32'05	2♂7	8°48	26°40	16°39	26°20	23°12	26°16	20°38	18°34	15°12	14°39	14°48	5° 3	T 6
F 7	1 1 45	13°31'18	14°37	7°46	27°55	17°14	26°21	23°16	26°17	20°36	18°33	15° 3	14°36	14°54	5° 1	F 7
S 8	1 5 41	14°30'33	26°57	6°49	29° 9	17°50	26°23	23°20	26°19	20°34	18°32	14°51	14°32	15° 1	4°58	S 8
S 9	1 9 38	15°29'50	9°Y 9	6° 1	0♂24	18°26	26°24	23°24	26°20	20°33	18°31	14°37	14°29	15° 8	4°55	S 9
M10	1 13 35	16°29'10	21°13	5°21	1°39	19° 1	26°25	23°28	26°21	20°31	18°30	14°23	14°26	15°15	4°53	M10
T 11	1 17 31	17°28'31	3♂11	4°52	2°54	19°36	26°26	23°32	26°22	20°29	18°29	14° 9	14°23	15°21	4°50	T 11
W12	1 21 28	18°27'54	15° 4	4°33	4° 8	20°12	26°27	23°36	26°24	20°28	18°28	13°56	14°20	15°28	4°47	W12
T 13	1 25 24	19°27'20	26°54	4°D25	5°23	20°47	26°27	23°40	26°25	20°26	18°27	13°46	14°17	15°35	4°45	T 13
F 14	1 29 21	20°26'48	8♂43	4°28	6°38	21°22	26°28	23°45	26°26	20°24	18°26	13°39	14°13	15°41	4°42	F 14
S 15	1 33 17	21°26'18	20°35	4°42	7°53	21°57	26°R28	23°49	26°27	20°23	18°25	13°35	14°10	15°48	4°39	S 15
S 16	1 37 14	22°25'50	2♂34	5° 7	9° 8	22°32	26°28	23°54	26°28	20°21	18°24	13°33	14° 7	15°55	4°37	S 16
M17	1 41 10	23°25'25	14°45	5°41	10°23	23° 7	26°27	23°58	26°29	20°19	18°23	13°D33	14° 4	16° 1	4°34	M17
T 18	1 45 7	24°25'02	27°12	6°23	11°38	23°41	26°27	24° 3	26°29	20°18	18°22	13°R33	14° 1	16° 8	4°31	T 18
W19	1 49 4	25°24'41	10♂2	7°15	12°53	24°16	26°26	24° 7	26°30	20°16	18°21	13°32	13°57	16°15	4°29	W19
T 20	1 53 0	26°24'23	23°18	8°13	14° 8	24°51	26°25	24°12	26°31	20°14	18°20	13°30	13°54	16°22	4°26	T 20
F 21	1 56 57	27°24'07	7♂4	9°18	15°23	25°25	26°24	24°17	26°32	20°13	18°19	13°25	13°51	16°28	4°24	F 21
S 22	2 0 53	28°23'52	21°20	10°29	16°38	26° 0	26°23	24°22	26°32	20°11	18°18	13°17	13°48	16°35	4°21	S 22
S 23	2 4 50	29°23'41	6♂3	11°44	17°53	26°34	26°21	24°27	26°33	20° 9	18°17	13° 7	13°45	16°42	4°19	S 23
M24	2 8 46	0♂23'31	21° 8	13° 4	19° 8	27° 8	26°20	24°32	26°33	20° 8	18°16	12°57	13°42	16°48	4°16	M24
T 25	2 12 43	1°23'23	6♂24	14°28	20°23	27°42	26°18	24°37	26°34	20° 6	18°15	12°46	13°38	16°55	4°14	T 25
W26	2 16 39	2°23'17	21°40	15°54	21°38	28°16	26°16	24°42	26°34	20° 4	18°14	12°37	13°35	17° 2	4°12	W26
T 27	2 20 36	3°23'13	6♂45	17°24	22°54	28°50	26°13	24°47	26°35	20° 3	18°13	12°30	13°32	17° 8	4° 9	T 27
F 28	2 24 33	4°23'11	21°32	18°55	24° 9	29°24	26°11	24°53	26°35	20° 1	18°12	12°26	13°29	17°15	4° 7	F 28
S 29	2 28 29	5°23'11	5♂53	20°28	25°24	29°58	26° 8	24°58	26°35	20° 0	18°11	12°24	13°26	17°22	4° 5	S 29
S 30	2 32 26	6°23'12	19°49	22° 2	26°39	0♂31	26° 5	25° 3	26°35	19°58	18°10	12°D24	13°23	17°29	4° 3	S 30
M31	2 36 22	7♂23'15	3♂18	23♂37	27♂54	1♂5	26♂II 2	25♂9	26♂35	19°Y56	18♂9	12°R25	13♂19	17♂35	4°Y 0	M31

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	3s 1	21s45	1n39	8s29	3s 0	5n 6	1n26	17n55	1n14	22n50	0s34	22s16	1n 0	21n25	0n29	6n31	1s44	2n39	15s18	22n34	22n37	11n50	4n48	2n57			
S 2	3 25	22 36	0 28	7 50	2 46	4 37	1 26	17 45	1 14	22 50	0 34	22 16	1 0	21 25	0 29	6 30	1 44	2 38	15 18	22 34	22 38	11 52	4 47	2 57			
M 3	3 48	22 7	0s42	7 8	2 30	4 8	1 27	17 35	1 15	22 50	0 34	22 17	1 0	21 24	0 29	6 29	1 44	2 38	15 18	22 34	22 38	11 55	4 46	2 57			
T 4	4 11	20 25	1 49	6 25	2 12	3 39	1 27	17 25	1 16	22 50	0 34	22 17	0 59	21 24	0 29	6 29	1 44	2 38	15 18	22 34	22 38	11 57	4 45	2 56			
W 5	4 34	17 41	2 49	5 40	1 53	3 10	1 28	17 15	1 17	22 50	0 34	22 17	0 59	21 24	0 29	6 28	1 44	2 37	15 18	22 35	22 39	11 59	4 44	2 56			
T 6	4 57	14 9	3 40	4 55	1 33	2 41	1 28	17 5	1 17	22 50	0 34	22 18	0 59	21 24	0 29	6 27	1 44	2 37	15 19	22 35	22 39	12 2	4 42	2 56			
F 7	5 20	10 2	4 19	4 12	1 13	2 11	1 29	16 55	1 18	22 50	0 34	22 18	0 59	21 23	0 29	6 27	1 44	2 36	15 19	22 36	22 39	12 4	4 41	2 56			
S 8	5 43	5 34	4 45	3 31	0 53	1 42	1 29	16 45	1 19	22 50	0 34	22 19	0 59	21 23	0 29	6 26	1 44	2 36	15 19	22 38	22 40	12 6	4 40	2 56			
S 9	6 6	0 56	4 58	2 53	0 32	1 12	1 29	16 35	1 20	22 50	0 34	22 19	0 59	21 23	0 30	6 25	1 44	2 36	15 19	22 39	22 40	12 9	4 39	2 56			
M10	6 29	3n41	4 57	2 19	0 12	0 42	1 29	16 24	1 20	22 50	0 34	22 19	0 58	21 23	0 30	6 25	1 44	2 35	15 19	22 41	22 40	12 11	4 38	2 56			
T 11	6 52	8 9	4 43	1 50	0n 7	0 13	1 29	16 14	1 21	22 50	0 34	22 20	0 58	21 23	0 30	6 24	1 44	2 35	15 19	22 42	22 41	12 13	4 37	2 56			
W12	7 15	12 16	4 17	1 26	0 25	0s17	1 29	16 3	1 22	22 50	0 34	22 20	0 58	21 22	0 30	6 24	1 44	2 35	15 19	22 44	22 41	12 16	4 35	2 56			
T 13	7 37	15 55	3 40	1 8	0 41	0 47	1 29	15 53	1 23	22 50	0 34	22 20	0 58	21 22	0 30	6 23	1 44	2 34	15 20	22 45	22 41	12 18	4 34	2 56			
F 14	8 0	18 55	2 53	0 55	0 56	1 17	1 29	15 42	1 23	22 50	0 34	22 21	0 58	21 22	0 30	6 22	1 44	2 34	15 20	22 45	22 42	12 20	4 33	2 55			
S 15	8 22	21 9	1 58	0 48	1 10	1 46	1 29	15 32	1 24	22 51	0 34	22 21	0 58	21 22	0 30	6 22	1 44	2 33	15 20	22 46	22 42	12 23	4 32	2 55			
S 16	8 44	22 28	0 58	0 47	1 22	2 16	1 28	15 21	1 25	22 51	0 34	22 21	0 58	21 22	0 30	6 21	1 44	2 33	15 20	22 46	22 42	12 25	4 31	2 55			
M17	9 6	22 45	0n 6	0 51	1 32	2 46	1 28	15 10	1 25	22 51	0 34	22 22	0 57	21 22	0 30	6 20	1 44	2 33	15 20	22 46	22 43	12 27	4 30	2 55			
T 18	9 28	21 54	1 12	1 0	1 41	3 16	1 28	14 59	1 26	22 51	0 34	22 22	0 57	21 21	0 30	6 20	1 44	2 32	15 20	22 46	22 43	12 30	4 28	2 55			
W19	9 50	19 55	2 15	1 13	1 48	3 45	1 27	14 48	1 27	22 51	0 34	22 22	0 57	21 21	0 30	6 19	1 44	2 32	15 20	22 46	22 43	12 32	4 27	2 55			
T 20	10 12	16 49	3 14	1 31	1 54	4 15	1 27	14 38	1 28	22 51	0 34	22 23	0 57	21 21	0 30	6 19	1 44	2 32	15 20	22 46	22 44	12 35	4 26	2 55			
F 21	10 33	12 41	4 4	1 52	1 59	4 44	1 26	14 27	1 28	22 51	0 34	22 23	0 57	21 21	0 30	6 18	1 44	2 31	15 20	22 47	22 44	12 37	4 25	2 55			
S 22	10 55	7 44	4 40	2 17	2 2	5 14	1 25	14 16	1 29	22 51	0 34	22 23	0 57	21 21	0 30	6 17	1 44	2 31	15 21	22 48	22 44	12 39	4 24	2 54			
S 23	11 16	2 11	4 59	2 44	2 4	5 43	1 24	14 5	1 30	22 51	0 34	22 24	0 57	21 21	0 30	6 17	1 44	2 31	15 21	22 48	22 45	12 42	4 23	2 54			
M24	11 37	3s38	4 59	3 14	2 6	6 12	1 24	13 54	1 31	22 51	0 34	22 24	0 56	21 21	0 30	6 16	1 44	2 30	15 21	22 50	22 45	12 44	4 22	2 54			
T 25	11 58	9 18	4 37	3 46	2 6	6 42	1 23	13 43	1 32	22 50	0 34	22 25	0 56	21 21	0 30	6 15	1 44	2 30	15 21	22 51	22 45	12 46	4 21	2 54			
W26	12 19	14 24	3 55	4 20	2 5	7 11	1 22	13 32	1 32	22 50	0 34	22 25	0 56	21 21	0 30	6 15	1 44	2 30	15 21	22 51	22 46	12 49	4 20	2 54			
T 27	12 39	18 32	2 57	4 56	2 3	7 39	1 21	13 21	1 33	22 50	0 34	22 25	0 56	21 21	0 30	6 14	1 44	2 29	15 21	22 52	22 46	12 51	4 19	2 54			
F 28	12 59	21 23	1 49	5 33	2 1	8 8	1 20	13 9	1 34	22 50	0 34	22 26	0 56	21 21	0 30	6 14	1 44	2 29	15 21	22 52	22 46	12 53	4 17	2 53			
S 29	13 20	22 45	0 35	6 10	1 58	8 37	1 19	12 58	1 35	22 50	0 34	22 26	0 56	21 21	0 30	6 13	1 44	2 29	15 21	22 53	22 47	12 55	4 16	2 53			
S 30	13 39	22 39	0s39	6 49	1 55	9 5	1 17	12 47	1 35	22 50	0 34	22 26	0 56	21 21	0 30	6 12	1 44	2 28	15 21	22 53	22 47	12 58	4 15	2 53			
M31	13s59	21s12	1s49	7s28	1n51	9s33	1n16	12n36	1n36	22n50	0s34	22s27	0n55	21n21	0n30	6n12	1s44	2n28	15s21	22n53	22n47	13n 0	4n14	2n53			



ASTRODIENST EPHEMERIS for the year 1870  
geocentric

DECEMBER 1870

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	4 38 35	8°38'19	20°50	13°12	6°51	17°18	23°R 4	28°22	26°R13	19°R16	17°R34	10°R30	11°R41	21°R 3	3°R13	T 1
F 2	4 42 32	9°39'11	3°Y 5	14°46	8° 7	17°47	22°II56	28°29	26°R12	19°Y15	17°R33	10°R28	11°R38	21°10	3°Y12	F 2
S 3	4 46 29	10°40'03	15° 8	16°20	9°22	18°16	22°48	28°36	26°10	19°14	17°32	10°24	11°34	21°16	3°11	S 3
S 4	4 50 25	11°40'56	27° 4	17°54	10°38	18°44	22°40	28°43	26° 9	19°13	17°31	10°20	11°31	21°23	3°11	S 4
M 5	4 54 22	12°41'50	8°56	19°27	11°53	19°13	22°33	28°50	26° 7	19°12	17°30	10°14	11°28	21°30	3°10	M 5
T 6	4 58 18	13°42'45	20°47	21° 1	13° 9	19°41	22°25	28°57	26° 5	19°11	17°29	10° 9	11°25	21°36	3°10	T 6
W 7	5 2 15	14°43'41	21°38	22°35	14°24	20° 9	22°17	29° 4	26° 4	19°11	17°28	10° 5	11°22	21°43	3° 9	W 7
T 8	5 6 11	15°44'37	14°32	24° 9	15°40	20°37	22° 8	29°11	26° 2	19°10	17°27	10° 2	11°19	21°50	3° 9	T 8
F 9	5 10 8	16°45'35	26°31	25°42	16°55	21° 4	22° 0	29°18	26° 0	19° 9	17°26	10° 0	11°15	21°56	3° 9	F 9
S 10	5 14 4	17°46'33	8°R36	27°16	18°11	21°31	21°52	29°25	25°58	19° 8	17°25	9°D59	11°12	22° 3	3° 8	S 10
S 11	5 18 1	18°47'33	20°49	28°50	19°26	21°59	21°44	29°32	25°56	19° 8	17°24	9°59	11° 9	22°10	3° 8	S 11
M12	5 21 58	19°48'33	3°R13	0°R24	20°42	22°25	21°36	29°39	25°54	19° 7	17°24	10° 1	11° 6	22°16	3° 8	M12
T 13	5 25 54	20°49'35	15°49	1°57	21°57	22°52	21°28	29°46	25°52	19° 6	17°23	10° 2	11° 3	22°23	3° 8	T 13
W14	5 29 51	21°50'37	28°41	3°31	23°13	23°18	21°20	29°53	25°50	19° 6	17°22	10° 4	11° 0	22°30	3° 8	W14
T 15	5 33 47	22°51'40	11°R51	5° 5	24°28	23°45	21°11	29°59	25°48	19° 5	17°21	10° 5	10°56	22°37	3°D 8	T 15
F 16	5 37 44	23°52'44	25°22	6°38	25°44	24°11	21° 3	0°R 7	25°46	19° 5	17°20	10°R 5	10°53	22°43	3° 8	F 16
S 17	5 41 40	24°53'49	9°R15	8°11	26°59	24°36	20°55	0°14	25°44	19° 4	17°19	10° 4	10°50	22°50	3° 8	S 17
S 18	5 45 37	25°54'55	23°29	9°44	28°15	25° 2	20°47	0°21	25°42	19° 4	17°18	10° 3	10°47	22°57	3° 8	S 18
M19	5 49 33	26°56'02	8°R 4	11°17	29°30	25°27	20°39	0°28	25°40	19° 3	17°17	10° 2	10°44	23° 3	3° 8	M19
T 20	5 53 30	27°57'10	22°54	12°49	0°R46	25°52	20°31	0°35	25°38	19° 3	17°17	10° 0	10°40	23°10	3° 9	T 20
W21	5 57 27	28°58'18	7°R52	14°21	2° 1	26°16	20°23	0°42	25°35	19° 3	17°16	9°59	10°37	23°17	3° 9	W21
T 22	6 1 23	29°59'27	22°52	15°52	3°17	26°41	20°15	0°49	25°33	19° 2	17°15	9°58	10°34	23°23	3° 9	T 22
F 23	6 5 20	1°R 0'36	7°R43	17°22	4°32	27° 5	20° 7	0°56	25°31	19° 2	17°14	9°D58	10°31	23°30	3°10	F 23
S 24	6 9 16	2° 1'46	22°19	18°51	5°48	27°28	19°59	1° 3	25°29	19° 2	17°13	9°58	10°28	23°37	3°10	S 24
S 25	6 13 13	3° 2'56	6°R33	20°19	7° 3	27°52	19°51	1°11	25°26	19° 2	17°13	9°58	10°25	23°43	3°11	S 25
M26	6 17 9	4° 4'06	20°21	21°45	8°19	28°15	19°44	1°18	25°24	19° 2	17°12	9°59	10°21	23°50	3°11	M26
T 27	6 21 6	5° 5'16	3°R44	23°10	9°34	28°38	19°36	1°25	25°21	19° 1	17°11	9°59	10°18	23°57	3°12	T 27
W28	6 25 3	6° 6'26	16°41	24°32	10°50	29° 0	19°28	1°32	25°19	19° 1	17°11	10° 0	10°15	24° 3	3°13	W28
T 29	6 28 59	7° 7'35	29°17	25°52	12° 5	29°23	19°21	1°39	25°17	19° 1	17°10	10° 0	10°12	24°10	3°14	T 29
F 30	6 32 56	8° 8'45	11°Y34	27° 8	13°21	29°44	19°14	1°46	25°14	19° 1	17° 9	10°R 0	10° 9	24°17	3°14	F 30
S 31	6 36 52	9°R 9'54	23°Y38	28°R21	14°R36	0°R 6	19°II 6	1°R53	25°R12	19°D 1	17°R 9	10°R 0	10°R 6	24°R24	3°Y15	S 31

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓		
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	21s46	8s 9	4s55	23s44	1s20	21s12	0n17	6n54	2n 3	22n45	0s31	22s35	0n52	21n26	0n31	5n57	1s43	2n21	15s19	23n 2	22n56	14n11	3n50	2n47											
F 2	21 55	3 31	5 10	24 0	1 26	21 26	0 14	6 44	2 4	22 45	0 31	22 35	0 52	21 26	0 31	5 57	1 43	2 21	15 19	23 3	22 57	14 13	3 49	2 47											
S 3	22 4	1n10	5 12	24 15	1 31	21 41	0 12	6 33	2 5	22 45	0 31	22 35	0 52	21 27	0 31	5 57	1 43	2 20	15 19	23 3	22 57	14 16	3 49	2 47											
S 4	22 12	5 47	5 0	24 29	1 35	21 54	0 9	6 23	2 5	22 44	0 31	22 35	0 52	21 27	0 31	5 57	1 43	2 20	15 19	23 3	22 57	14 18	3 49	2 46											
M 5	22 20	10 9	4 35	24 42	1 40	22 7	0 7	6 13	2 6	22 44	0 31	22 35	0 52	21 27	0 31	5 56	1 43	2 20	15 19	23 4	22 58	14 20	3 48	2 46											
T 6	22 28	14 8	3 58	24 53	1 44	22 19	0 5	6 2	2 7	22 44	0 31	22 36	0 52	21 28	0 31	5 56	1 43	2 20	15 19	23 4	22 58	14 22	3 48	2 46											
W 7	22 35	17 35	3 11	25 3	1 49	22 30	0 2	5 52	2 8	22 43	0 31	22 36	0 51	21 28	0 31	5 56	1 43	2 20	15 18	23 4	22 58	14 25	3 47	2 46											
T 8	22 42	20 19	2 16	25 12	1 53	22 41	0s 0	5 42	2 9	22 43	0 30	22 36	0 51	21 28	0 32	5 55	1 43	2 20	15 18	23 5	22 58	14 27	3 47	2 45											
F 9	22 48	22 11	1 14	25 19	1 56	22 51	0 2	5 32	2 10	22 43	0 30	22 36	0 51	21 29	0 32	5 55	1 43	2 20	15 18	23 5	22 59	14 29	3 47	2 45											
S 10	22 54	23 3	0 8	25 25	2 0	23 1	0 5	5 22	2 11	22 42	0 30	22 36	0 51	21 29	0 32	5 55	1 43	2 20	15 18	23 5	22 59	14 32	3 46	2 45											
S 11	22 59	22 49	0n59	25 30	2 3	23 9	0 7	5 13	2 12	22 42	0 30	22 36	0 51	21 29	0 32	5 55	1 42	2 20	15 18	23 5	22 59	14 34	3 46	2 45											
M12	23 4	21 28	2 5	25 33	2 5	23 17	0 10	5 3	2 13	22 41	0 30	22 36	0 51	21 30	0 32	5 55	1 42	2 20	15 18	23 5	22 59	14 36	3 46	2 45											
T 13	23 8	19 3	3 5	25 34	2 8	23 25	0 12	4 53	2 14	22 41	0 30	22 36	0 51	21 30	0 32	5 54	1 42	2 20	15 17	23 5	23 0	14 38	3 45	2 44											
W14	23 12	15 39	3 58	25 34	2 10	23 31	0 14	4 44	2 15	22 41	0 30	22 36	0 51	21 31	0 32	5 54	1 42	2 20	15 17	23 4	23 0	14 40	3 45	2 44											
T 15	23 16	11 25	4 39	25 33	2 12	23 37	0 17	4 34	2 16	22 40	0 30	22 37	0 51	21 31	0 32	5 54	1 42	2 20	15 17	23 4	23 0	14 43	3 45	2 44											
F 16	23 19	6 31	5 6	25 30	2 13	23 42	0 19	4 25	2 17	22 40	0 29	22 37	0 51	21 31	0 32	5 54	1 42	2 20	15 17	23 4	23 1	14 45	3 45	2 44											
S 17	23 21	1 11	5 16	25 26	2 14	23 47	0 21	4 16	2 18	22 40	0 29	22 37	0 51	21 32	0 32	5 54	1 42	2 20	15 17	23 4	23 1	14 47	3 45	2 43											
S 18	23 24	4s21	5 8	25 20	2 14	23 50	0 24	4 7	2 19	22 39	0 29	22 37	0 51	21 32	0 32	5 54	1 42	2 20	15 16	23 4	23 1	14 49	3 45	2 43											
M19	23 25	9 47	4 40	25 12	2 14	23 53	0 26	3 58	2 20	22 39	0 29	22 37	0 51	21 33	0 32	5 54	1 42	2 20	15 16	23 5	23 1	14 52	3 44	2 43											
T 20	23 26	14 46	3 52	25 3	2 14	23 56	0 28	3 49	2 22	22 38	0 29	22 37	0 50	21 33	0 32	5 54	1 42	2 20	15 16	23 5	23 2	14 54	3 44	2 43											
W21	23 27	18 52	2 49	24 53	2 12	23 57	0 31	3 40	2 23	22 38	0 29	22 37	0 50	21 34	0 32	5 53	1 42	2 20	15 16	23 5	23 2	14 56	3 44	2 43											
T 22	23 27	21 42	1 33	24 41	2 11	23 58	0 33	3 31	2 24	22 37	0 28	22 37	0 50	21 34	0 32	5 53	1 42	2 20	15 15	23 5	23 2	14 58	3 44	2 42											
F 23	23 27	23 1	0 12	24 27	2 9	23 58	0 35	3 23	2 25	22 37	0 28	22 37	0 50	21 34	0 32	5 53	1 42	2 20	15 15	23 5	23 2	15 1	3 44	2 42											
S 24	23 26	22 44	1s 8	24 12	2 6	23 57	0 37	3 14	2 26	22 37	0 28	22 37	0 50	21 35	0 32	5 53	1 42	2 20	15 15	23 5	23 3	15 3	3 44	2 42											
S 25	23 25	20 57	2 22	23 56	2 2	23 55	0 39	3 6	2 27	22 36	0 28	22 37	0 50	21 35	0 32	5 53	1 42	2 20	15 15	23 5	23 3	15 5	3 44	2 42											
M26	23 24	17 58	3 26	23 38	1 58	23 53	0 42	2 58	2 28	22 36	0 28	22 37	0 50	21 36	0 32	5 53	1 42	2 20	15 14	23 5	23 3	15 7	3 44	2 41											
T 27	23 21	14 7	4 16	23 19	1 53	23 50	0 44	2 49	2 29	22 35	0 28	22 37	0 50	21 36	0 32	5 53	1 42	2 20	15 14	23 5	23 3	15 9	3 44	2 41											
W28	23 19	9 44	4 52	22 59	1 47	23 46	0 46	2 42	2 30	22 35	0 27	22 37	0 50	21 37	0 32	5 53	1 42	2 20	15 14	23 5	23 4	15 12	3 44	2 41											
T 29	23 16	5 3	5 12	22 38	1 40	24 32	0 48	2 34	2 31	22 34	0 27	22 37	0 50	21 37	0 32	5 53	1 42	2 20	15 14	23 5	23 4	15 14	3 45	2 41											
F 30	23 12	0 17	5 18	22 15	1 32	23 37	0 50	2 26	2 33	22 34	0 27	22 37	0 50	21 38	0 32	5 53	1 41	2 20	15 13	23 5	23 4	15 16	3 45	2 41											
S 31	23s 8	4n24	5s 9	21s52	1s24	23s31	0s52	2n19	2n34	22n34	0s27	22s37	0n50	21n38	0n32	5n53	1s41	2n20	15s13	23n 5	23n 4	15n18	3n45	2n40											