



Astrodienst Ephemeris Tables for the year 1861

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 1861

geocentric

JANUARY 1861

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	6 42 31	10°37'39	0°11' 6	23°27'23	8°57'53	27°11'23	26°R26	9°R24	8°R49	26°11'46	7°R36	22°38'48	23°38'26	7°11'29	24°28'28	T 1
W 2	6 46 27	11°38'48	14°15	24°50	10° 8	28° 4	26°Q22	9°11'23	8°11'46	26°47	7°B35	22°49	23°23	7°36	24°31	W 2
T 3	6 50 24	12°39'57	28°26	26°18	11°22	28°45	26°18	9°21	8°44	26°48	7°35	22°50	23°20	7°43	24°35	T 3
F 4	6 54 20	13°41'07	12°23	27°46	12°36	29°26	26°14	9°19	8°43	26°49	7°35	22°R50	23°17	7°49	24°38	F 4
S 5	6 58 17	14°42'16	26°48	29°15	13°50	0°11' 7	26°10	9°18	8°41	26°50	7°34	22°50	23°13	7°56	24°42	S 5
S 6	7 2 13	15°43'26	10°11'54	0°34'44	15° 4	0°48	26° 5	9°16	8°39	26°51	7°34	22°49	23°10	8° 3	24°45	S 6
M 7	7 6 10	16°44'37	24°53	2°14	16°19	1°29	26° 0	9°14	8°37	26°52	7°34	22°49	23° 7	8°10	24°49	M 7
T 8	7 10 6	17°45'47	8°21'44	3°45	17°33	2°10	25°56	9°12	8°35	26°53	7°33	22°48	23° 4	8°16	24°52	T 8
W 9	7 14 3	18°46'57	22°25	5°15	18°47	2°51	25°51	9°10	8°33	26°54	7°33	22°47	23° 1	8°23	24°56	W 9
T 10	7 18 0	19°48'07	5°35'52	6°47	20° 2	3°32	25°45	9° 8	8°32	26°55	7°33	22°47	22°58	8°30	24°59	T 10
F 11	7 21 56	20°49'17	19° 5	8°19	21°16	4°13	25°40	9° 5	8°30	26°56	7°33	22°D47	22°54	8°36	25° 3	F 11
S 12	7 25 53	21°50'26	2°28' 3	9°51	22°31	4°55	25°35	9° 3	8°28	26°57	7°32	22°47	22°51	8°43	25° 7	S 12
S 13	7 29 49	22°51'34	14°45	11°24	23°45	5°36	25°29	9° 0	8°27	26°58	7°32	22°R47	22°48	8°50	25°10	S 13
M14	7 33 46	23°52'43	27°12	12°57	24°59	6°17	25°23	8°58	8°25	27° 0	7°32	22°47	22°45	8°57	25°14	M14
T 15	7 37 42	24°53'50	9°11'26	14°31	26°14	6°58	25°17	8°55	8°23	27° 1	7°32	22°47	22°42	9° 3	25°18	T 15
W16	7 41 39	25°54'57	21°28	16° 5	27°28	7°39	25°11	8°52	8°22	27° 2	7°32	22°46	22°39	9°10	25°22	W16
T 17	7 45 35	26°56'03	3°11'24	17°40	28°43	8°20	25° 5	8°49	8°20	27° 4	7°32	22°46	22°35	9°17	25°25	T 17
F 18	7 49 32	27°57'08	15°16	19°15	29°57	9° 1	24°59	8°47	8°19	27° 5	7°32	22°45	22°32	9°23	25°29	F 18
S 19	7 53 29	28°58'12	27° 9	20°51	1°31'52	9°43	24°52	8°43	8°18	27° 6	7°31	22°D45	22°29	9°30	25°33	S 19
S 20	7 57 25	29°59'15	9°11' 8	22°28	2°26	10°24	24°46	8°40	8°16	27° 8	7°31	22°45	22°26	9°37	25°37	S 20
M21	8 1 22	1°01'17	21°17	24° 5	3°41	11° 5	24°39	8°37	8°15	27° 9	7°D31	22°46	22°23	9°44	25°41	M21
T 22	8 5 18	2° 1'19	3°11'41	25°43	4°55	11°46	24°32	8°34	8°14	27°11	7°31	22°47	22°19	9°50	25°45	T 22
W23	8 9 15	3° 2'19	16°24	27°21	6°10	12°27	24°26	8°30	8°13	27°12	7°31	22°48	22°16	9°57	25°49	W23
T 24	8 13 11	4° 3'18	29°28	29° 0	7°24	13° 8	24°19	8°27	8°12	27°14	7°32	22°49	22°13	10° 4	25°53	T 24
F 25	8 17 8	5° 4'17	12°28'55	0°28'39	8°39	13°49	24°12	8°23	8°11	27°15	7°32	22°49	22°10	10°11	25°57	F 25
S 26	8 21 4	6° 5'14	26°45	2°19	9°53	14°31	24° 4	8°20	8° 9	27°17	7°32	22°R50	22° 7	10°17	26° 1	S 26
S 27	8 25 1	7° 6'10	10°11'54	4° 0	11° 8	15°12	23°57	8°16	8° 9	27°18	7°32	22°49	22° 4	10°24	26° 5	S 27
M28	8 28 58	8° 7'06	25°19	5°42	12°23	15°53	23°50	8°12	8° 8	27°20	7°32	22°48	22° 0	10°31	26° 9	M28
T 29	8 32 54	9° 8'00	9°11'53	7°24	13°37	16°34	23°42	8° 8	8° 7	27°21	7°32	22°46	21°57	10°37	26°13	T 29
W30	8 36 51	10° 8'53	24°31	9° 7	14°52	17°15	23°35	8° 5	8° 6	27°23	7°32	22°43	21°54	10°44	26°17	W30
T 31	8 40 47	11°09'46	9°11' 5	10°28'50	16°13' 6	17°11'56	23°32'27	8°11' 1	8°11' 5	27°25	7°B33	22°34'1	21°35'1	10°11'51	26°22'1	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	23s 2	8n27	3s12	23s 8	0n10	20s22	1n27	1s22	0s21	13n38	0n58	9n41	1n46	21n45	0s 3	2s30
W 2	22 57	2 23	4 8	23 19	0 2	20 35	1 25	1 4	0 20	13 39	0 59	9 42	1 46	21 44	0 3	2 30
T 3	22 51	3s47	4 49	23 30	0s 5	20 48	1 22	0 47	0 18	13 41	0 59	9 43	1 46	21 44	0 2	2 29
F 4	22 45	9 47	5 12	23 39	0 13	21 0	1 20	0 29	0 17	13 43	0 59	9 43	1 46	21 44	0 2	2 29
S 5	22 39	15 15	5 16	23 47	0 20	21 12	1 18	0 12	0 16	13 44	0 59	9 44	1 47	21 44	0 2	2 28
S 6	22 32	19 52	5 1	23 54	0 27	21 23	1 15	0n 6	0 15	13 46	1 0	9 45	1 47	21 43	0 2	2 28
M 7	22 25	23 21	4 29	24 0	0 34	21 33	1 13	0 23	0 13	13 48	1 0	9 46	1 47	21 43	0 2	2 28
T 8	22 17	25 24	3 41	24 5	0 40	21 42	1 10	0 41	0 12	13 50	1 0	9 47	1 47	21 43	0 2	2 27
W 9	22 8	25 55	2 41	24 8	0 47	21 52	1 8	0 58	0 11	13 52	1 0	9 48	1 48	21 42	0 2	2 27
T 10	22 0	24 52	1 32	24 10	0 53	22 0	1 5	1 16	0 10	13 54	1 1	9 49	1 48	21 42	0 2	2 26
F 11	21 51	22 26	0 20	24 11	0 59	22 8	1 3	1 33	0 9	13 56	1 1	9 50	1 48	21 42	0 2	2 26
S 12	21 41	18 53	0n51	24 10	1 5	22 15	1 0	1 50	0 7	13 58	1 1	9 51	1 48	21 42	0 2	2 25
S 13	21 31	14 32	1 59	24 9	1 11	22 21	0 57	2 8	0 6	14 0	1 1	9 53	1 49	21 41	0 2	2 25
M14	21 21	9 38	3 0	24 5	1 16	22 27	0 55	2 25	0 5	14 2	1 1	9 54	1 49	21 41	0 2	2 24
T 15	21 10	4 28	3 51	24 1	1 21	22 32	0 52	2 42	0 4	14 4	1 2	9 55	1 49	21 41	0 2	2 24
W16	20 59	0n46	4 31	23 55	1 26	22 37	0 49	3 0	0 3	14 6	1 2	9 56	1 49	21 41	0 2	2 23
T 17	20 47	5 56	4 59	23 48	1 31	22 40	0 47	3 17	0 2	14 9	1 2	9 57	1 49	21 41	0 2	2 23
F 18	20 35	10 51	5 14	23 39	1 35	22 44	0 44	3 34	0 1	14 11	1 2	9 59	1 50	21 40	0 2	2 22
S 19	20 23	15 22	5 16	23 29	1 40	22 46	0 41	3 51	0n 0	14 13	1 2	10 0	1 50	21 40	0 2	2 21
S 20	20 10	19 21	5 4	23 17	1 44	22 48	0 38	4 9	0 2	14 16	1 3	10 2	1 50	21 40	0 2	2 21
M21	19 57	22 34	4 39	23 4	1 47	22 49	0 36	4 26	0 3	14 18	1 3	10 3	1 50	21 40	0 2	2 20
T 22	19 44	24 50	4 0	22 50	1 50	22 49	0 33	4 43	0 4	14 21	1 3	10 4	1 51	21 40	0 2	2 20
W23	19 30	25 53	3 8	22 34	1 53	22 49	0 30	5 0	0 5	14 23	1 3	10 6	1 51	21 39	0 2	2 19
T 24	19 15	25 33	2 6	22 16	1 56	22 48	0 27	5 17	0 6	14 26	1 3	10 7	1 51	21 39	0 2	2 18
F 25	19 1	23 44	0 55	21 57	1 58	22 46	0 24	5 34	0 7	14 28	1 4	10 9	1 51	21 39	0 2	2 18
S 26	18 46	20 28	0s22	21 37	2 0	22 44	0 22	5 51	0 8	14 31	1 4	10 10	1 51	21 39	0 2	2 17
S 27	18 31	15 56	1 38	21 15	2 2	22 41	0 19	6 7	0 9	14 33	1 4	10 12	1 52	21 39	0 2	2 16
M28	18 15	10 25	2 50	20 51	2 3	22 37	0 16	6 24	0 10	14 36	1 4	10 14	1 52	21 39	0 2	2 16
T 29	17 59	4 18	3 51	20 26	2 4	22 32	0 13	6 41	0 11	14 38	1 4	10 15	1 52	21 38	0 2	2 15
W30	17 43	2s 4	4 38	20 0	2 5	22 27	0 10	6 57	0 12	14 41	1 4	10 17	1 52	21 38	0 2	2 14
T 31	17s26	8s18	5s 6	19s32	2s 5	22s22	0n 8	7n14	0n13	14n44	1n 5	10n18	1n52	21n38	0s 2	2s14

Julian Day Number = 2400776.5, Delta T = 8.95 sec

Ecliptic obliquity = 23°27'30, Nutation = 0°00'16, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 22°47'57, Lahiri = 21°54'58

ASTRODIENST EPHEMERIS for the year 1861

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FEBRUARY 1861

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	8 44 44	12 ²⁸ 10'38	23 ²³ 31	12 ²⁸ 35	17 ²³ 21	18 ²³ 37	23 ²³ R20	7 ²³ R57	8 ²³ R 4	27 ²³ 27	7 ²³ 33	22 ²³ R39	21 ²³ 38	10 ²³ Y58	26 ²³ 25	F 1
S 2	8 48 40	13 ²³ 11'29	7 ²³ 45	14 ²³ 20	18 ²³ 36	19 ²³ 18	23 ²³ Q12	7 ²³ 52	8 ²³ II 4	27 ²³ 28	7 ²³ 33	22 ²³ D38	21 ²³ 45	11 ²³ ° 4	26 ²³ 29	S 2
S 3	8 52 37	14 ²³ 12'19	21 ²³ 45	16 ²³ ° 5	19 ²³ 50	19 ²³ 59	23 ²³ ° 4	7 ²³ 48	8 ²³ ° 3	27 ²³ 30	7 ²³ 33	22 ²³ 38	21 ²³ 41	11 ²³ 11	26 ²³ 33	S 3
M 4	8 56 33	15 ²³ 13'08	5 ²³ 29	17 ²³ 52	21 ²³ ° 5	20 ²³ 40	22 ²³ 56	7 ²³ 44	8 ²³ ° 2	27 ²³ 32	7 ²³ 34	22 ²³ 39	21 ²³ 38	11 ²³ 18	26 ²³ 37	M 4
T 5	9 0 30	16 ²³ 13'57	18 ²³ 58	19 ²³ 39	22 ²³ 20	21 ²³ 21	22 ²³ 48	7 ²³ 40	8 ²³ ° 2	27 ²³ 34	7 ²³ 34	22 ²³ 41	21 ²³ 35	11 ²³ 24	26 ²³ 42	T 5
W 6	9 4 27	17 ²³ 14'44	2 ²³ 14	21 ²³ 26	23 ²³ 34	22 ²³ ° 2	22 ²³ 41	7 ²³ 35	8 ²³ ° 1	27 ²³ 35	7 ²³ 34	22 ²³ 43	21 ²³ 32	11 ²³ 31	26 ²³ 46	W 6
T 7	9 8 23	18 ²³ 15'31	15 ²³ 15	23 ²³ 14	24 ²³ 49	22 ²³ 43	22 ²³ 33	7 ²³ 31	8 ²³ ° 1	27 ²³ 37	7 ²³ 35	22 ²³ 44	21 ²³ 29	11 ²³ 38	26 ²³ 50	T 7
F 8	9 12 20	19 ²³ 16'16	28 ²³ ° 5	25 ²³ ° 3	26 ²³ ° 3	23 ²³ 24	22 ²³ 25	7 ²³ 27	8 ²³ ° 1	27 ²³ 39	7 ²³ 35	22 ²³ R44	21 ²³ 25	11 ²³ 45	26 ²³ 54	F 8
S 9	9 16 16	20 ²³ 17'00	10 ²³ 42	26 ²³ 52	27 ²³ 18	24 ²³ ° 5	22 ²³ 17	7 ²³ 22	8 ²³ ° 0	27 ²³ 41	7 ²³ 35	22 ²³ 42	21 ²³ 22	11 ²³ 51	26 ²³ 58	S 9
S 10	9 20 13	21 ²³ 17'43	23 ²³ ° 9	28 ²³ 42	28 ²³ 33	24 ²³ 46	22 ²³ ° 9	7 ²³ 18	8 ²³ ° 0	27 ²³ 43	7 ²³ 36	22 ²³ 40	21 ²³ 19	11 ²³ 58	27 ²³ ° 2	S 10
M 11	9 24 9	22 ²³ 18'24	5 ²³ 26	0 ²³ 31	29 ²³ 47	25 ²³ 27	22 ²³ ° 1	7 ²³ 13	8 ²³ ° 0	27 ²³ 45	7 ²³ 36	22 ²³ 35	21 ²³ 16	12 ²³ ° 5	27 ²³ ° 7	M 11
T 12	9 28 6	23 ²³ 19'04	17 ²³ 33	2 ²³ 21	1 ²³ 22	26 ²³ ° 8	21 ²³ 53	7 ²³ ° 9	8 ²³ ° 0	27 ²³ 47	7 ²³ 37	22 ²³ 30	21 ²³ 13	12 ²³ 12	27 ²³ 11	T 12
W 13	9 32 2	24 ²³ 19'42	29 ²³ 33	4 ²³ 11	2 ²³ 17	26 ²³ 49	21 ²³ 45	7 ²³ ° 4	8 ²³ ° 0	27 ²³ 49	7 ²³ 37	22 ²³ 24	21 ²³ 10	12 ²³ 18	27 ²³ 15	W 13
T 14	9 35 59	25 ²³ 20'18	11 ²³ Y28	6 ²³ ° 0	3 ²³ 31	27 ²³ 30	21 ²³ 37	6 ²³ 59	8 ²³ D 0	27 ²³ 51	7 ²³ 38	22 ²³ 18	21 ²³ ° 6	12 ²³ 25	27 ²³ 19	T 14
F 15	9 39 56	26 ²³ 20'53	23 ²³ 19	7 ²³ 49	4 ²³ 46	28 ²³ 11	21 ²³ 29	6 ²³ 55	8 ²³ ° 0	27 ²³ 53	7 ²³ 38	22 ²³ 13	21 ²³ ° 3	12 ²³ 32	27 ²³ 23	F 15
S 16	9 43 52	27 ²³ 21'26	5 ²³ 31	9 ²³ 37	6 ²³ ° 1	28 ²³ 52	21 ²³ 21	6 ²³ 50	8 ²³ ° 0	27 ²³ 55	7 ²³ 39	22 ²³ ° 9	21 ²³ ° 0	12 ²³ 38	27 ²³ 28	S 16
S 17	9 47 49	28 ²³ 21'57	17 ²³ ° 8	11 ²³ 24	7 ²³ 15	29 ²³ 32	21 ²³ 13	6 ²³ 45	8 ²³ ° 0	27 ²³ 57	7 ²³ 39	22 ²³ ° 6	20 ²³ 57	12 ²³ 45	27 ²³ 32	S 17
M 18	9 51 45	29 ²³ 22'27	29 ²³ 13	13 ²³ ° 9	8 ²³ 30	0 ²³ 13	21 ²³ ° 6	6 ²³ 40	8 ²³ ° 0	27 ²³ 59	7 ²³ 40	22 ²³ D 6	20 ²³ 54	12 ²³ 52	27 ²³ 36	M 18
T 19	9 55 42	0 ²³ 22'55	11 ²³ II33	14 ²³ 53	9 ²³ 45	0 ²³ 54	20 ²³ 58	6 ²³ 36	8 ²³ ° 0	28 ²³ ° 1	7 ²³ 41	22 ²³ ° 6	20 ²³ 51	12 ²³ 59	27 ²³ 40	T 19
W 20	9 59 38	1 ²³ 23'20	24 ²³ 11	16 ²³ 34	10 ²³ 59	1 ²³ 35	20 ²³ 50	6 ²³ 31	8 ²³ ° 0	28 ²³ ° 3	7 ²³ 41	22 ²³ ° 8	20 ²³ 47	13 ²³ ° 5	27 ²³ 44	W 20
T 21	10 3 35	2 ²³ 23'44	7 ²³ 313	18 ²³ 12	12 ²³ 14	2 ²³ 16	20 ²³ 43	6 ²³ 26	8 ²³ ° 1	28 ²³ ° 5	7 ²³ 42	22 ²³ ° 9	20 ²³ 44	13 ²³ 12	27 ²³ 49	T 21
F 22	10 7 31	3 ²³ 24'06	20 ²³ 40	19 ²³ 47	13 ²³ 28	2 ²³ 56	20 ²³ 35	6 ²³ 21	8 ²³ ° 1	28 ²³ ° 7	7 ²³ 42	22 ²³ R10	20 ²³ 41	13 ²³ 19	27 ²³ 53	F 22
S 23	10 11 28	4 ²³ 24'27	4 ²³ Q35	21 ²³ 18	14 ²³ 43	3 ²³ 37	20 ²³ 27	6 ²³ 16	8 ²³ ° 1	28 ²³ ° 9	7 ²³ 43	22 ²³ ° 9	20 ²³ 38	13 ²³ 25	27 ²³ 57	S 23
S 24	10 15 25	5 ²³ 24'45	18 ²³ 57	22 ²³ 44	15 ²³ 58	4 ²³ 18	20 ²³ 20	6 ²³ 12	8 ²³ ° 2	28 ²³ 11	7 ²³ 44	22 ²³ ° 7	20 ²³ 35	13 ²³ 32	28 ²³ ° 1	S 24
M 25	10 19 21	6 ²³ 25'01	3 ²³ Y41	24 ²³ ° 5	17 ²³ 12	4 ²³ 59	20 ²³ 13	6 ²³ ° 7	8 ²³ ° 3	28 ²³ 13	7 ²³ 45	22 ²³ ° 2	20 ²³ 31	13 ²³ 39	28 ²³ ° 5	M 25
T 26	10 23 18	7 ²³ 25'15	18 ²³ 40	25 ²³ 21	18 ²³ 27	5 ²³ 39	20 ²³ ° 5	6 ²³ ° 2	8 ²³ ° 3	28 ²³ 16	7 ²³ 45	21 ²³ 56	20 ²³ 28	13 ²³ 46	28 ²³ ° 9	T 26
W 27	10 27 14	8 ²³ 25'28	3 ²³ Q45	26 ²³ 29	19 ²³ 41	6 ²³ 20	19 ²³ 58	5 ²³ 57	8 ²³ ° 4	28 ²³ 18	7 ²³ 46	21 ²³ 48	20 ²³ 25	13 ²³ 52	28 ²³ 14	W 27
T 28	10 31 11	9 ²³ 25'39	18 ²³ Q46	27 ²³ 31	20 ²³ 56	7 ²³ 31	19 ²³ Q51	5 ²³ Y52	8 ²³ II 4	28 ²³ 20	7 ²³ Q47	21 ²³ Q41	20 ²³ Q22	13 ²³ Y59	28 ²³ 18	T 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
F 1	17s 9	14s 1	5s15	19s 2	2s 4	22s15	0n 5	7n31	0n13	14n46	1n 5	10n20	1n52	21n38	0s 2	2s13	1s18	1s14	16s 7	21s33	21s42	8n59	7s15	5n49			
S 2	16 52	18 54	5 4	18 31	2 4	22 8	0 2	7 47	0 14	14 49	1 5	10 22	1 53	21 38	0 2	2 12	1 18	1 14	16 7	21 33	21 42	9 2	7 14	5 49			
S 3	16 35	22 39	4 36	17 58	2 2	22 0	0s 1	8 3	0 15	14 52	1 5	10 24	1 53	21 38	0 2	2 12	1 18	1 14	16 6	21 33	21 43	9 5	7 12	5 49			
M 4	16 17	25 2	3 51	17 24	2 0	21 52	0 3	8 20	0 16	14 54	1 5	10 25	1 53	21 38	0 2	2 11	1 18	1 13	16 6	21 33	21 43	9 8	7 11	5 48			
T 5	15 59	25 55	2 55	16 48	1 58	21 42	0 6	8 36	0 17	14 57	1 5	10 27	1 53	21 38	0 2	2 10	1 18	1 13	16 6	21 33	21 44	9 10	7 10	5 48			
W 6	15 41	25 17	1 50	16 11	1 55	21 33	0 9	8 52	0 18	15 0	1 5	10 29	1 53	21 38	0 2	2 9	1 18	1 12	16 5	21 33	21 44	9 13	7 8	5 48			
T 7	15 22	23 16	0 41	15 33	1 52	21 22	0 11	9 8	0 19	15 2	1 5	10 31	1 53	21 38	0 2	2 9	1 18	1 12	16 5	21 32	21 45	9 16	7 7	5 48			
F 8	15 3	20 5	0n29	14 52	1 48	21 11	0 14	9 24	0 20	15 5	1 6	10 32	1 54	21 38	0 2	2 8	1 18	1 11	16 5	21 32	21 45	9 19	7 6	5 48			
S 9	14 44	16 0	1 37	14 11	1 43	20 59	0 17	9 40	0 21	15 8	1 6	10 34	1 54	21 38	0 2	2 7	1 18	1 11	16 4	21 33	21 46	9 22	7 5	5 48			
S 10	14 25	11 18	2 39	13 28	1 38	20 47	0 19	9 56	0 21	15 11	1 6	10 36	1 54	21 38	0 2	2 6	1 18	1 11	16 4	21 33	21 46	9 24	7 3	5 48			
M 11	14 5	6 14	3 33	12 44	1 32	20 34	0 22	10 12	0 22	15 13	1 6	10 38	1 54	21 38	0 2	2 5	1 18	1 10	16 4	21 34	21 47	9 27	7 2	5 48			
T 12	13 45	1 0	4 16	11 59	1 26	20 20	0 24	10 27	0 23	15 16	1 6	10 40	1 54	21 38	0 2	2 5	1 18	1 10	16 3	21 35	21 47	9 30	7 1	5 48			
W 13	13 25	4n13	4 47	11 13	1 19	20 6	0 27	10 43	0 24	15 19	1 6	10 42	1 54	21 38	0 2	2 4	1 18	1 9	16 3	21 36	21 48	9 33	6 59	5 48			
T 14	13 5	9 13	5 6	10 25	1 11	19 51	0 29	10 58	0 25	15 21	1 6	10 43	1 54	21 38	0 2	2 3	1 18	1 9	16 3	21 37	21 48	9 35	6 58	5 48			
F 15	12 45	13 53	5 11	9 37	1 3	19 36	0 32	11 14	0 25	15 24	1 6	10 45	1 55	21 38	0 2	2 2	1 18	1 8	16 2	21 38	21 49	9 38	6 56	5 48			
S 16	12 24	18 1	5 3	8 48	0 54	19 20	0 34	11 29	0 26	15 26	1 6	10 47	1 55	21 38	0 2	2 1	1 18	1 8	16 2	21 38	21 49	9 41	6 55	5 48			
S 17	12 3	21 28	4 42	7 58	0 44	19 4	0 36	11 44	0 27	15 29	1 6	10 49	1 55	21 38	0 2	2 1	1 18	1 7	16 2	21 39	21 49	9 44	6 54	5 47			
M 18	11 42	24 2	4 8	7 8	0 34	18 47	0 39	11 59	0 28	15 32	1 6	10 51	1 55	21 38	0 2	2 0	1 18	1 7	16 1	21 39	21 50	9 46	6 52	5 47			
T 19	11 21	25 32	3 23	6 18	0 22	18 29	0 41	12 14	0 28	15 34	1 7	10 53	1 55	21 38	0 2	1 59	1 18	1 6	16 1	21 39	21 50	9 49	6 51	5 47			
W 20	10 59	25 46	2 26	5 28	0 11	18 11	0 43	12 29	0 29	15 37	1 7	10 55	1 55	21 38	0 2	1 58	1 18	1 6	16 1	21 38	21 51	9 52	6 50	5 47			
T 21	10 38	24 36	1 20	4 39	0n 2	17 52	0 46	12 44	0 30	15 39	1 7	10 56	1 55	21 38	0 2	1 57	1 18	1 5	16 0	21 38	21 51	9 55	6 48	5 47			
F 22	10 16	22 0	0 8	3 50	0 14	17 33	0 48	12 59	0 31	15 42	1 7	10 58	1 55	21 38	0 2	1 56	1 18	1 5	16 0	21 38	21 52	9 57	6 47	5 47			
S 23	9 54	18 3	1s 7	3 2	0 28	17 13	0 50	13 13	0 31	15 44	1 7	11 0	1 55	21 38	0 2	1 56	1 18	1 4	16 0	21 38	21 52	10 0	6 45	5 47			
S 24	9 32	12 56	2 20	2 15	0 42	16 53	0 52	13 28	0 32	15 47	1 7	11 2	1 55	21 38	0 2	1 55	1 18	1 4	15 59	21 39	21 53	10 3	6 44	5 47			
M 25	9 10	6 59	3 25	1 30	0 56	16 33	0 54	13 42	0 33	15 49	1 7	11 4	1 56	21 38	0 2	1 54	1 18	1 3	15 59	21 39	21 53	10 6	6 43	5 47			
T 26	8 48	0 32	4 18	0 47	1 10	16 12	0 56	13 57	0 33	15 51	1 7	11 6	1 56	21 38	0 2	1 53	1 18	1 3	15 59	21 40	21 54	10 8	6 41	5 47			
W 27	8 25	5s58	4 52	0 6	1 24	15 50	0 58	14 11	0 34	15 54	1 7	11 8	1 56	21 38	0 2	1 52	1 18	1 2	15 59	21 41	21 54	10 11	6 40	5 47			
T 28	8s 2	12s 5	5s 7	0n32	1n39	15s28	1s 0	14n25	0n35	15n56	1n 7	11n 9	1n56	21n38	0s 2	1s51	1s18	1s 2	15s58	21s43	21s55	10n14	6s38	5n47			

ASTRODIENST EPHEMERIS for the year 1861
geocentric

MARCH 1861

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	10 35 7	10 ^h 25'49"	3 ^m 35	28 ^s 26	22 ^s 11	7 ^s 41	19°R44	5°R48	8 ^h 11 5	28 ^h 22	7 ^h 48	21°R35	20 ^h 19	14 ^h 6	28 ^h 22	F 1
S 2	10 39 4	11°25'57"	18° 4	29°12	23°25	8°22	19 ^h 037	5 ^h 43	8° 6	28°24	7°48	21 ^h 31	20°16	14°13	28°26	S 2
S 3	10 43 0	12°26'04"	2 ^m 11	29°50	24°40	9° 2	19°30	5°38	8° 7	28°27	7°49	21°28	20°12	14°19	28°30	S 3
M 4	10 46 57	13°26'09"	15°55	0 ^h 19	25°54	9°43	19°23	5°33	8° 8	28°29	7°50	21°D28	20° 9	14°26	28°34	M 4
T 5	10 50 54	14°26'12"	29°16	0°39	27° 9	10°23	19°17	5°29	8° 9	28°31	7°51	21°28	20° 6	14°33	28°38	T 5
W 6	10 54 50	15°26'14"	12 ^h 17	0°50	28°24	11° 4	19°10	5°24	8°10	28°33	7°52	21°29	20° 3	14°39	28°42	W 6
T 7	10 58 47	16°26'15"	25° 2	0°R52	29°38	11°44	19° 4	5°19	8°11	28°35	7°53	21°R30	20° 0	14°46	28°46	T 7
F 8	11 2 43	17°26'13"	7 ^s 33	0°44	0 ^h 53	12°25	18°58	5°14	8°12	28°38	7°54	21°28	19°56	14°53	28°50	F 8
S 9	11 6 40	18°26'10"	19°54	0°29	2° 7	13° 5	18°51	5°10	8°13	28°40	7°55	21°25	19°53	15° 0	28°54	S 9
S 10	11 10 36	19°26'05"	2 ^h 6	0° 5	3°22	13°46	18°45	5° 5	8°14	28°42	7°56	21°18	19°50	15° 6	28°58	S 10
M 11	11 14 33	20°25'58"	14°11	29 ^h 34	4°36	14°26	18°40	5° 1	8°15	28°44	7°57	21° 9	19°47	15°13	29° 2	M 11
T 12	11 18 29	21°25'49"	26°11	28°55	5°51	15° 6	18°34	4°56	8°17	28°47	7°58	20°58	19°44	15°20	29° 6	T 12
W 13	11 22 26	22°25'38"	8 ^h 6	28°12	7° 6	15°47	18°28	4°52	8°18	28°49	7°59	20°46	19°41	15°26	29°10	W 13
T 14	11 26 23	23°25'25"	19°59	27°23	8°20	16°27	18°23	4°47	8°20	28°51	8° 0	20°33	19°37	15°33	29°14	T 14
F 15	11 30 19	24°25'10"	1 ^h 50	26°31	9°35	17° 7	18°18	4°43	8°21	28°53	8° 1	20°22	19°34	15°40	29°18	F 15
S 16	11 34 16	25°24'52"	13°42	25°36	10°49	17°48	18°12	4°38	8°22	28°56	8° 2	20°13	19°31	15°47	29°22	S 16
S 17	11 38 12	26°24'33"	25°39	24°41	12° 4	18°28	18° 7	4°34	8°24	28°58	8° 3	20° 6	19°28	15°53	29°26	S 17
M 18	11 42 9	27°24'11"	7 ^h 43	23°45	13°18	19° 8	18° 3	4°30	8°26	29° 0	8° 4	20° 1	19°25	16° 0	29°30	M 18
T 19	11 46 5	28°23'48"	19°59	22°50	14°33	19°48	17°58	4°26	8°27	29° 3	8° 5	19°59	19°22	16° 7	29°33	T 19
W 20	11 50 2	29°23'22"	2 ^h 32	21°58	15°47	20°29	17°54	4°21	8°29	29° 5	8° 6	19°D59	19°18	16°14	29°37	W 20
T 21	11 53 58	0 ^h 22'53"	15°27	21° 9	17° 1	21° 9	17°49	4°17	8°31	29° 7	8° 7	20°R 0	19°15	16°20	29°41	T 21
F 22	11 57 55	1°22'22"	28°47	20°24	18°16	21°49	17°45	4°13	8°33	29° 9	8° 8	19°59	19°12	16°27	29°45	F 22
S 23	12 1 52	2°21'49"	12 ^h 37	19°44	19°30	22°29	17°41	4° 9	8°34	29°12	8° 9	19°58	19° 9	16°34	29°48	S 23
S 24	12 5 48	3°21'14"	26°56	19° 8	20°45	23° 9	17°37	4° 6	8°36	29°14	8°10	19°53	19° 6	16°40	29°52	S 24
M 25	12 9 45	4°20'36"	11 ^h 43	18°39	21°59	23°49	17°34	4° 2	8°38	29°16	8°12	19°46	19° 2	16°47	29°55	M 25
T 26	12 13 41	5°19'56"	26°50	18°14	23°13	24°29	17°30	3°58	8°40	29°18	8°13	19°37	18°59	16°54	29°59	T 26
W 27	12 17 38	6°19'14"	12 ^h 9	17°56	24°28	25° 9	17°27	3°54	8°42	29°21	8°14	19°26	18°56	17° 1	0 ^h 3	W 27
T 28	12 21 34	7°18'30"	27°28	17°44	25°42	25°49	17°24	3°51	8°44	29°23	8°15	19°16	18°53	17° 7	0° 6	T 28
F 29	12 25 31	8°17'44"	12 ^h 36	17°37	26°57	26°29	17°21	3°47	8°46	29°25	8°16	19° 6	18°50	17°14	0°10	F 29
S 30	12 29 27	9°16'56"	27°23	17°D36	28°11	27° 9	17°19	3°44	8°48	29°27	8°18	18°59	18°47	17°21	0°13	S 30
S 31	12 33 24	10 ^h 16'07"	11 ^h 43	17 ^h 41	29 ^h 25	27 ^h 49	17 ^h 16	3 ^h 40	8 ^h 51	29 ^h 30	8 ^h 19	18 ^h 54	18 ^h 43	17 ^h 27	0 ^h 17	S 31

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	7s40	17s26	5s 1	1n 6	1n53	15s 6	1s 1	14n39	0n35	15n58	1n 7	11n11	1n56	21n39	0s 2	1s50	1s18	1s 1	15s58	21s44	21s55	10n16	6s37	5n47			
S 2	7 17	21 38	4 35	1 38	2 7	14 43	1 3	14 52	0 36	16 0	1 7	11 13	1 56	21 39	0 2	1 50	1 18	1 1	15 58	21 44	21 56	10 19	6 35	5 47			
S 3	6 54	24 26	3 54	2 5	2 21	14 20	1 5	15 6	0 37	16 2	1 7	11 15	1 56	21 39	0 2	1 49	1 18	1 0	15 57	21 45	21 56	10 22	6 34	5 47			
M 4	6 31	25 41	2 59	2 29	2 34	13 56	1 7	15 20	0 37	16 5	1 7	11 17	1 56	21 39	0 2	1 48	1 18	1 0	15 57	21 45	21 57	10 25	6 33	5 47			
T 5	6 8	25 24	1 57	2 48	2 46	13 32	1 8	15 33	0 38	16 7	1 7	11 18	1 56	21 39	0 2	1 47	1 18	0 59	15 57	21 45	21 57	10 27	6 31	5 48			
W 6	5 45	23 42	0 49	3 3	2 58	13 8	1 10	15 46	0 39	16 9	1 7	11 20	1 56	21 39	0 2	1 46	1 18	0 59	15 57	21 44	21 58	10 30	6 30	5 48			
T 7	5 21	20 50	0n19	3 13	3 8	12 43	1 11	15 59	0 39	16 11	1 7	11 22	1 56	21 40	0 2	1 45	1 18	0 58	15 56	21 44	21 58	10 33	6 28	5 48			
F 8	4 58	17 2	1 25	3 18	3 17	12 18	1 13	16 12	0 40	16 13	1 7	11 24	1 56	21 40	0 2	1 44	1 18	0 57	15 56	21 45	21 59	10 35	6 27	5 48			
S 9	4 35	12 33	2 26	3 19	3 24	11 53	1 14	16 25	0 40	16 15	1 7	11 26	1 56	21 40	0 2	1 43	1 18	0 57	15 56	21 45	21 59	10 38	6 25	5 48			
S 10	4 11	7 38	3 19	3 15	3 30	11 27	1 15	16 38	0 41	16 16	1 7	11 27	1 56	21 40	0 2	1 42	1 18	0 56	15 55	21 46	21 59	10 41	6 24	5 48			
M11	3 48	2 30	4 3	3 6	3 34	11 1	1 16	16 51	0 41	16 18	1 7	11 29	1 56	21 40	0 2	1 42	1 18	0 56	15 55	21 48	22 0	10 43	6 23	5 48			
T 12	3 24	2n41	4 35	2 53	3 36	10 35	1 18	17 3	0 42	16 20	1 7	11 31	1 56	21 41	0 2	1 41	1 18	0 55	15 55	21 49	22 0	10 46	6 21	5 48			
W13	3 0	7 44	4 55	2 36	3 37	10 8	1 19	17 15	0 43	16 22	1 7	11 32	1 56	21 41	0 2	1 40	1 18	0 55	15 55	21 51	22 1	10 49	6 20	5 48			
T 14	2 37	12 29	5 3	2 15	3 35	9 41	1 20	17 28	0 43	16 23	1 7	11 34	1 56	21 41	0 2	1 39	1 18	0 54	15 54	21 53	22 1	10 51	6 18	5 48			
F 15	2 13	16 45	4 57	1 51	3 31	9 14	1 21	17 40	0 44	16 25	1 7	11 36	1 56	21 41	0 2	1 38	1 18	0 54	15 54	21 55	22 2	10 54	6 17	5 48			
S 16	1 49	20 23	4 38	1 24	3 26	8 47	1 22	17 51	0 44	16 26	1 7	11 37	1 56	21 42	0 2	1 37	1 18	0 53	15 54	21 56	22 2	10 57	6 16	5 48			
S 17	1 26	23 11	4 7	0 55	3 19	8 19	1 23	18 3	0 45	16 28	1 6	11 39	1 56	21 42	0 2	1 36	1 18	0 53	15 54	21 57	22 3	10 59	6 14	5 48			
M18	1 2	24 59	3 25	0 25	3 9	7 51	1 23	18 15	0 45	16 29	1 6	11 40	1 56	21 42	0 2	1 35	1 18	0 52	15 53	21 58	22 3	11 2	6 13	5 49			
T 19	0 38	25 37	2 32	0s 6	2 59	7 23	1 24	18 26	0 46	16 31	1 6	11 42	1 56	21 42	0 2	1 34	1 18	0 51	15 53	21 58	22 4	11 5	6 11	5 49			
W20	0 15	24 57	1 31	0 38	2 47	6 55	1 25	18 38	0 46	16 32	1 6	11 43	1 56	21 43	0 2	1 33	1 18	0 51	15 53	21 58	22 4	11 7	6 10	5 49			
T 21	0n 9	22 58	0 24	1 9	2 34	6 26	1 25	18 49	0 47	16 33	1 6	11 45	1 56	21 43	0 2	1 33	1 18	0 50	15 53	21 58	22 4	11 10	6 8	5 49			
F 22	0 33	19 40	0s47	1 40	2 20	5 58	1 26	19 0	0 47	16 34	1 6	11 46	1 56	21 43	0 2	1 32	1 18	0 50	15 53	21 58	22 5	11 13	6 7	5 49			
S 23	0 56	15 10	1 57	2 9	2 5	5 29	1 26	19 11	0 48	16 36	1 6	11 48	1 56	21 43	0 2	1 31	1 18	0 49	15 52	21 58	22 5	11 15	6 6	5 49			
S 24	1 20	9 41	3 2	2 37	1 50	5 0	1 27	19 21	0 48	16 37	1 6	11 49	1 56	21 44	0 2	1 30	1 18	0 49	15 52	21 59	22 6	11 18	6 4	5 49			
M25	1 44	3 31	3 58	3 3	1 35	4 31	1 27	19 32	0 49	16 38	1 6	11 50	1 56	21 44	0 2	1 29	1 18	0 48	15 52	22 0	22 6	11 21	6 3	5 50			
T 26	2 7	2s59	4 38	3 26	1 19	4 2	1 27	19 42	0 49	16 39	1 6	11 52	1 56	21 44	0 2	1 28	1 18	0 48	15 52	22 1	22 7	11 23	6 1	5 50			
W27	2 31	9 23	4 58	3 48	1 4	3 33	1 28	19 52	0 50	16 40	1 6	11 53	1 56	21 45	0 2	1 27	1 18	0 47	15 52	22 3	22 7	11 26	6 0	5 50			
T 28	2 54	15 12	4 58	4 7	0 48	3 3	1 28	20 2	0 50	16 40	1 6	11 54	1 56	21 45	0 2	1 26	1 18	0 47	15 51	22 4	22 8	11 29	5 59	5 50			
F 29	3 18	20 1	4 36	4 24	0 33	2 34	1 28	20 12	0 51	16 41	1 6	11 56	1 56	21 45	0 2	1 25	1 18	0 46	15 51	22 6	22 8	11 31	5 57	5 50			
S 30	3 41	23 25	3 56	4 38	0 18	2 4	1 28	20 22	0 51	16 42	1 6	11 57	1 56	21 46	0 2	1 25	1 18	0 46	15 51	22 7	22 8	11 34	5 56	5 50			
S 31	4n 4	25s14	3s 3	4s49	0n 4	1s34	1s28	20n31	0n51	16n43	1n 5	11n58	1n56	21n46	0s 2	1s24	1s18	0s45	15s51	22s 8	22s 9	11n36	5s55	5n50			

ASTRODIENST EPHEMERIS for the year 1861

geocentric

APRIL 1861

00:00 UT

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

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒		♓		♈	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	4n27	25s23	2s 0	4s58	0s10	1s 5	1s28	20n41	0n52	16n43	1n 5	11n59	1n56	21n46	0s 2	1s23	1s18	0s44	15s51	22s 8	22s 9	11n39	5s53	5n51	
T 2	4 50	24 1	0 52	5 5	0 24	0 35	1 28	20 50	0 52	16 44	1 5	12 0	1 56	21 47	0 2	1 22	1 18	0 44	15 51	22 8	22 10	11 42	5 52	5 51	
W 3	5 13	21 23	0n17	5 9	0 37	0 5	1 27	20 59	0 53	16 44	1 5	12 1	1 55	21 47	0 1	1 21	1 18	0 43	15 50	22 8	22 10	11 44	5 51	5 51	
T 4	5 36	17 47	1 23	5 10	0 49	0n25	1 27	21 8	0 53	16 45	1 5	12 2	1 55	21 47	0 1	1 20	1 18	0 43	15 50	22 8	22 11	11 47	5 49	5 51	
F 5	5 59	13 28	2 23	5 9	1 1	0 54	1 27	21 17	0 53	16 45	1 5	12 3	1 55	21 48	0 1	1 19	1 18	0 42	15 50	22 8	22 11	11 49	5 48	5 51	
S 6	6 22	8 42	3 16	5 6	1 12	1 24	1 26	21 25	0 54	16 46	1 5	12 4	1 55	21 48	0 1	1 18	1 18	0 42	15 50	22 9	22 12	11 52	5 47	5 52	
S 7	6 45	3 40	3 59	5 1	1 22	1 54	1 26	21 33	0 54	16 46	1 5	12 5	1 55	21 49	0 1	1 18	1 18	0 41	15 50	22 10	22 12	11 55	5 45	5 52	
M 8	7 7	1n27	4 31	4 54	1 32	2 24	1 25	21 42	0 55	16 46	1 5	12 6	1 55	21 49	0 1	1 17	1 18	0 41	15 50	22 12	22 12	11 57	5 44	5 52	
T 9	7 30	6 29	4 52	4 45	1 41	2 53	1 25	21 50	0 55	16 46	1 5	12 7	1 55	21 49	0 1	1 16	1 18	0 40	15 49	22 13	22 13	12 0	5 43	5 52	
W10	7 52	11 16	4 59	4 33	1 50	3 23	1 24	21 57	0 55	16 46	1 4	12 8	1 55	21 50	0 1	1 15	1 18	0 40	15 49	22 15	22 13	12 2	5 42	5 52	
T 11	8 14	15 38	4 54	4 20	1 58	3 53	1 23	22 5	0 56	16 46	1 4	12 9	1 55	21 50	0 1	1 14	1 18	0 39	15 49	22 17	22 14	12 5	5 40	5 53	
F 12	8 36	19 24	4 35	4 5	2 5	4 22	1 22	22 12	0 56	16 46	1 4	12 9	1 55	21 51	0 1	1 13	1 18	0 39	15 49	22 19	22 14	12 8	5 39	5 53	
S 13	8 58	22 24	4 5	3 48	2 12	4 52	1 21	22 20	0 56	16 46	1 4	12 10	1 55	21 51	0 1	1 13	1 18	0 38	15 49	22 20	22 15	12 10	5 38	5 53	
S 14	9 20	24 25	3 23	3 30	2 18	5 21	1 21	22 27	0 57	16 46	1 4	12 11	1 55	21 51	0 1	1 12	1 18	0 38	15 49	22 22	22 15	12 13	5 37	5 53	
M15	9 41	25 20	2 32	3 9	2 24	5 50	1 20	22 34	0 57	16 46	1 4	12 12	1 54	21 52	0 1	1 11	1 18	0 37	15 49	22 22	22 15	12 15	5 35	5 54	
T 16	10 3	25 0	1 33	2 48	2 28	6 19	1 19	22 40	0 57	16 46	1 4	12 12	1 54	21 52	0 1	1 10	1 18	0 37	15 49	22 23	22 16	12 18	5 34	5 54	
W17	10 24	23 25	0 28	2 24	2 33	6 48	1 17	22 47	0 58	16 45	1 4	12 13	1 54	21 53	0 1	1 9	1 18	0 36	15 49	22 23	22 16	12 20	5 33	5 54	
T 18	10 45	20 35	0s40	1 59	2 36	7 17	1 16	22 53	0 58	16 45	1 4	12 13	1 54	21 53	0 1	1 8	1 18	0 36	15 49	22 23	22 17	12 23	5 32	5 54	
F 19	11 6	16 37	1 48	1 33	2 39	7 46	1 15	22 59	0 58	16 45	1 3	12 14	1 54	21 54	0 1	1 8	1 18	0 35	15 48	22 23	22 17	12 25	5 31	5 55	
S 20	11 26	11 40	2 52	1 5	2 42	8 14	1 14	23 5	0 59	16 44	1 3	12 14	1 54	21 54	0 1	1 7	1 18	0 35	15 48	22 23	22 17	12 28	5 30	5 55	
S 21	11 47	5 57	3 47	0 36	2 44	8 42	1 13	23 11	0 59	16 44	1 3	12 15	1 54	21 54	0 1	1 6	1 18	0 34	15 48	22 23	22 18	12 31	5 28	5 55	
M22	12 7	0s15	4 30	0 6	2 45	9 11	1 11	23 16	0 59	16 43	1 3	12 15	1 54	21 55	0 1	1 5	1 19	0 34	15 48	22 24	22 18	12 33	5 27	5 55	
T 23	12 27	6 34	4 55	0n26	2 46	9 38	1 10	23 22	1 0	16 42	1 3	12 15	1 54	21 55	0 1	1 5	1 19	0 34	15 48	22 25	22 19	12 36	5 26	5 56	
W24	12 47	12 37	5 1	0 59	2 46	10 6	1 8	23 27	1 0	16 42	1 3	12 16	1 53	21 56	0 1	1 4	1 19	0 33	15 48	22 27	22 19	12 38	5 25	5 56	
T 25	13 7	17 54	4 45	1 33	2 46	10 34	1 7	23 32	1 0	16 41	1 3	12 16	1 53	21 56	0 1	1 3	1 19	0 33	15 48	22 28	22 20	12 41	5 24	5 56	
F 26	13 26	21 59	4 8	2 8	2 45	11 1	1 5	23 37	1 1	16 40	1 3	12 16	1 53	21 57	0 1	1 2	1 19	0 32	15 48	22 29	22 20	12 43	5 23	5 56	
S 27	13 46	24 30	3 16	2 44	2 43	11 28	1 4	23 41	1 1	16 39	1 3	12 16	1 53	21 57	0 1	1 2	1 19	0 32	15 48	22 30	22 20	12 46	5 22	5 57	
S 28	14 5	25 17	2 11	3 22	2 41	11 54	1 2	23 46	1 1	16 38	1 2	12 17	1 53	21 58	0 1	1 1	1 19	0 31	15 48	22 30	22 21	12 48	5 21	5 57	
M29	14 23	24 24	1 1	4 0	2 39	12 21	1 0	23 50	1 1	16 37	1 2	12 17	1 53	21 58	0 1	1 0	1 19	0 31	15 48	22 31	22 21	12 51	5 20	5 57	
T 30	14n42	22s 5	0n11	4n39	2s36	12n47	0s58	23n54	1n 2	16n36	1n 2	12n17	1n53	21n59	0s 1	0s59	1s19	0s30	15s48	22s31	22s22	12n53	5s19	5n58	

ASTRODIENST EPHEMERIS for the year 1861
geocentric

MAY 1861

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	14 35 37	10♈34°29	1♈0	19♊35	7♈45	18♊15	17♊30	2°R40	10♊15	0°Y34	9♈0	15♈54	17♈5	20°Y56	1♈43	W 1
T 2	14 39 34	11°32'39	13°42	21°15	8°59	18°54	17°34	2°M40	10°18	0°36	9°1	15°R54	17°2	21°3	1°45	T 2
F 3	14 43 30	12°30'46	26°5	22°56	10°12	19°33	17°37	2°40	10°22	0°38	9°2	15°53	16°59	21°9	1°47	F 3
S 4	14 47 27	13°28'53	8♈14	24°39	11°26	20°12	17°41	2°40	10°25	0°40	9°4	15°50	16°55	21°16	1°49	S 4
S 5	14 51 23	14°26'58	20°13	26°24	12°40	20°51	17°45	2°D40	10°28	0°41	9°5	15°45	16°52	21°23	1°50	S 5
M 6	14 55 20	15°25'01	2°Y7	28°11	13°54	21°30	17°49	2°40	10°31	0°43	9°6	15°37	16°49	21°30	1°52	M 6
T 7	14 59 16	16°23'03	13°58	29°59	15°8	22°9	17°53	2°40	10°35	0°45	9°8	15°28	16°46	21°36	1°54	T 7
W 8	15 3 13	17°21'04	25°49	1♈50	16°22	22°48	17°57	2°40	10°38	0°47	9°9	15°17	16°43	21°43	1°56	W 8
T 9	15 7 10	18°19'03	7♈43	3°43	17°36	23°27	18°2	2°41	10°41	0°48	9°11	15°6	16°39	21°50	1°57	T 9
F 10	15 11 6	19°17'00	19°41	5°37	18°50	24°6	18°6	2°41	10°45	0°50	9°12	14°55	16°36	21°56	1°59	F 10
S 11	15 15 3	20°14'57	1♊45	7°34	20°4	24°45	18°11	2°42	10°48	0°52	9°13	14°47	16°33	22°3	2°1	S 11
S 12	15 18 59	21°12'51	13°55	9°32	21°18	25°24	18°16	2°43	10°51	0°53	9°15	14°40	16°30	22°10	2°2	S 12
M13	15 22 56	22°10'44	26°13	11°32	22°32	26°3	18°21	2°44	10°55	0°55	9°16	14°36	16°27	22°17	2°3	M13
T 14	15 26 52	23°8'35	8♈42	13°33	23°46	26°42	18°27	2°45	10°58	0°56	9°17	14°D34	16°24	22°23	2°5	T 14
W15	15 30 49	24°6'25	21°24	15°37	25°0	27°21	18°32	2°46	11°2	0°58	9°19	14°34	16°20	22°30	2°6	W15
T 16	15 34 45	25°4'13	4♊21	17°42	26°13	28°0	18°38	2°47	11°5	0°59	9°20	14°35	16°17	22°37	2°7	T 16
F 17	15 38 42	26°1'59	17°37	19°48	27°27	28°39	18°43	2°48	11°8	1°1	9°21	14°36	16°14	22°43	2°8	F 17
S 18	15 42 39	26°59'44	1♊13	21°56	28°41	29°18	18°49	2°49	11°12	1°2	9°23	14°R37	16°11	22°50	2°10	S 18
S 19	15 46 35	27°57'27	15°13	24°5	29°55	29°56	18°55	2°51	11°15	1°4	9°24	14°35	16°8	22°57	2°11	S 19
M20	15 50 32	28°55'08	29°34	26°15	1♊9	0♈35	19°2	2°52	11°19	1°5	9°25	14°32	16°5	23°4	2°12	M20
T 21	15 54 28	29°52'48	14♈16	28°26	2°22	1°14	19°8	2°54	11°22	1°7	9°26	14°27	16°1	23°10	2°13	T 21
W22	15 58 25	0♊50'26	29°11	0♊37	3°36	1°53	19°14	2°56	11°26	1°8	9°28	14°21	15°58	23°17	2°14	W22
T 23	16 2 21	1°48'02	14♊14	2°49	4°50	2°32	19°21	2°58	11°29	1°9	9°29	14°15	15°55	23°24	2°14	T 23
F 24	16 6 18	2°45'38	29°13	5°1	6°4	3°10	19°28	3°0	11°33	1°11	9°30	14°9	15°52	23°31	2°15	F 24
S 25	16 10 14	3°43'12	14♈1	7°12	7°18	3°49	19°35	3°2	11°36	1°12	9°32	14°5	15°49	23°37	2°16	S 25
S 26	16 14 11	4°40'45	28°29	9°24	8°31	4°28	19°42	3°4	11°40	1°13	9°33	14°2	15°45	23°44	2°17	S 26
M27	16 18 8	5°38'18	12♈32	11°34	9°45	5°6	19°49	3°6	11°43	1°14	9°34	14°D1	15°42	23°51	2°17	M27
T 28	16 22 4	6°35'49	26°9	13°43	10°59	5°45	19°56	3°9	11°47	1°16	9°35	14°1	15°39	23°57	2°18	T 28
W29	16 26 1	7°33'19	9♈20	15°51	12°13	6°24	20°3	3°11	11°50	1°17	9°37	14°3	15°36	24°4	2°18	W29
T 30	16 29 57	8°30'49	22°7	17°57	13°26	7°2	20°11	3°14	11°54	1°18	9°38	14°4	15°33	24°11	2°19	T 30
F 31	16 33 54	9♊28'17	4♈34	20♊2	14♊40	7♈41	20♊19	3°M16	11♊58	1°Y19	9♈39	14°R5	15♈30	24°Y18	2♈19	F 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
W 1	15n 0	18s39 1n20	5n19 2s32	13n13 0s57	23n58 1n 2	16n35 1n 2	12n17 1n53	21n59 0s 1	0s59 1s19	0s30 15s48	22s31 22s22	12n56 5s18	5n58			
T 2	15 18	14 27 2 22	6 0 2 28	13 38 0 55	24 2 1 2	16 34 1 2	12 17 1 52	22 0 0 1	0 58 1 19	0 30 15 48	22 31 22 22	12 58 5 17	5 58			
F 3	15 36	9 45 3 17	6 42 2 23	14 3 0 53	24 5 1 2	16 33 1 2	12 17 1 52	22 0 0 1	0 57 1 19	0 29 15 48	22 31 22 23	13 1 5 16	5 58			
S 4	15 54	4 45 4 1	7 25 2 18	14 28 0 51	24 8 1 3	16 32 1 2	12 17 1 52	22 0 0 1	0 57 1 19	0 29 15 48	22 31 22 23	13 3 5 15	5 59			
S 5	16 11	0n20 4 34	8 8 2 12	14 52 0 49	24 11 1 3	16 30 1 2	12 17 1 52	22 1 0 1	0 56 1 19	0 28 15 48	22 32 22 24	13 6 5 14	5 59			
M 6	16 28	5 21 4 55	8 52 2 6	15 17 0 47	24 14 1 3	16 29 1 2	12 16 1 52	22 1 0 1	0 55 1 19	0 28 15 48	22 33 22 24	13 8 5 13	5 59			
T 7	16 45	10 10 5 4	9 37 1 59	15 40 0 45	24 17 1 3	16 28 1 1	12 16 1 52	22 2 0 1	0 55 1 19	0 28 15 48	22 34 22 24	13 11 5 12	6 0			
W 8	17 2	14 37 4 59	10 22 1 52	16 4 0 43	24 19 1 4	16 26 1 1	12 16 1 52	22 2 0 1	0 54 1 19	0 27 15 48	22 35 22 25	13 13 5 11	6 0			
T 9	17 18	18 31 4 41	11 8 1 45	16 26 0 41	24 21 1 4	16 25 1 1	12 16 1 52	22 3 0 1	0 53 1 19	0 27 15 48	22 36 22 25	13 16 5 10	6 0			
F 10	17 34	21 41 4 10	11 53 1 36	16 49 0 39	24 24 1 4	16 23 1 1	12 15 1 51	22 3 0 1	0 53 1 19	0 26 15 48	22 37 22 26	13 18 5 10	6 1			
S 11	17 49	23 56 3 49	12 39 1 28	17 11 0 37	24 25 1 4	16 21 1 1	12 15 1 51	22 4 0 1	0 52 1 19	0 26 15 48	22 38 22 26	13 21 5 9	6 1			
S 12	18 5	25 5 2 37	13 26 1 19	17 33 0 35	24 27 1 4	16 20 1 1	12 15 1 51	22 4 0 1	0 52 1 19	0 26 15 48	22 39 22 26	13 23 5 8	6 1			
M13	18 20	25 1 1 37	14 12 1 10	17 54 0 32	24 29 1 5	16 18 1 1	12 14 1 51	22 5 0 1	0 51 1 19	0 25 15 48	22 39 22 27	13 25 5 7	6 2			
T 14	18 34	23 42 0 32	14 58 1 0	18 14 0 30	24 30 1 5	16 16 1 1	12 14 1 51	22 5 0 1	0 50 1 19	0 25 15 48	22 40 22 27	13 28 5 6	6 2			
W15	18 49	21 9 0s37	15 43 0 50	18 35 0 28	24 31 1 5	16 15 1 1	12 13 1 51	22 6 0 1	0 50 1 19	0 25 15 48	22 40 22 27	13 30 5 6	6 2			
T 16	19 3	17 30 1 45	16 29 0 40	18 54 0 26	24 32 1 5	16 13 1 0	12 13 1 51	22 6 0 1	0 49 1 19	0 24 15 48	22 40 22 28	13 33 5 5	6 2			
F 17	19 17	12 54 2 48	17 13 0 30	19 14 0 23	24 32 1 7	15 11 1 0	12 12 1 51	22 7 0 1	0 49 1 19	0 24 15 48	22 39 22 28	13 35 5 4	6 3			
S 18	19 30	7 33 3 45	17 57 0 20	19 32 0 21	24 33 1 6	16 9 1 0	12 11 1 50	22 7 0 1	0 48 1 19	0 24 15 48	22 39 22 29	13 38 5 3	6 3			
S 19	19 43	1 42 4 29	18 40 0 9	19 51 0 19	24 33 1 6	16 7 1 0	12 11 1 50	22 8 0 1	0 48 1 20	0 23 15 49	22 40 22 29	13 40 5 3	6 3			
M20	19 56	4s23 4 58	19 21 0n 2	20 8 0 16	24 33 1 6	16 5 1 0	12 10 1 50	22 8 0 1	0 47 1 20	0 23 15 49	22 40 22 29	13 42 5 2	6 4			
T 21	20 8	10 22 5 8	20 1 0 12	20 25 0 14	24 33 1 6	16 3 1 0	12 9 1 50	22 9 0 1	0 47 1 20	0 23 15 49	22 40 22 30	13 45 5 1	6 4			
W22	20 21	15 50 4 58	20 40 0 23	20 42 0 12	24 33 1 6	16 1 1 0	12 9 1 50	22 9 0 1	0 46 1 20	0 23 15 49	22 41 22 30	13 47 5 1	6 4			
T 23	20 32	20 22 4 28	21 17 0 33	20 58 0 9	24 32 1 6	15 59 1 0	12 8 1 50	22 10 0 1	0 46 1 20	0 22 15 49	22 42 22 30	13 50 5 0	6 5			
F 24	20 44	23 33 3 39	21 51 0 43	21 13 0 7	24 32 1 7	15 56 1 0	12 7 1 50	22 10 0 1	0 45 1 20	0 22 15 49	22 42 22 31	13 52 5 0	6 5			
S 25	20 55	25 4 2 35	22 24 0 52	21 28 0 5	24 31 1 7	15 54 1 0	12 6 1 49	22 11 0 1	0 45 1 20	0 22 15 49	22 43 22 31	13 55 4 59	6 5			
S 26	21 5	24 50 1 23	22 54 1 2	21 42 0 2	24 30 1 7	15 52 0 59	12 5 1 49	22 11 0 1	0 44 1 20	0 21 15 49	22 43 22 32	13 57 4 59	6 6			
M27	21 16	23 0 0 8	23 21 1 11	21 56 0n 0	24 29 1 7	15 49 0 59	12 4 1 49	22 12 0 1	0 44 1 20	0 21 15 49	22 43 22 32	13 59 4 58	6 6			
T 28	21 26	19 52 1n 6	23 46 1 19	22 9 0 3	24 27 1 7	15 47 0 59	12 3 1 49	22 12 0 1	0 43 1 20	0 21 15 49	22 43 22 32	14 2 4 58	6 6			
W29	21 35	15 47 2 13	24 8 1 27	22 21 0 5	24 25 1 7	15 45 0 59	12 2 1 49	22 13 0 1	0 43 1 20	0 21 15 50	22 43 22 33	14 4 4 57	6 7			
T 30	21 44	11 7 3 13	24 28 1 34	22 33 0 7	24 24 1 7	15 42 0 59	12 1 1 49	22 13 0 1	0 42 1 20	0 20 15 50	22 43 22 33	14 7 4 57	6 7			
F 31	21n53	6s 6 4n 1	24n45 1n40	22n44 0n10	24n22 1n 8	15n40 0n59	12n 0 1n49	22n14 0s 1	0s42 1s20	0s20 15s50	22s43 22s33	14n 9 4s56	6n 7			

Julian Day Number = 2400896.5, Delta T = 8.95 sec
Ecliptic obliquity = 23°27'29", Nutation = 0°00'15", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 22°48'14", Lahiri = 21°55'14"

ASTRODIENST EPHEMERIS for the year 1861
geocentric

JUNE 1861

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	16 37 50	10II25'45	16K45	22II 5	15II54	8E19	20Ω26	3Π19	12II 1	1Υ20	9R40	14°R 5	15R26	24Υ24	2K19	S 1
S 2	16 41 47	11°23'12	28°46	24° 6	17° 7	8°58	20°34	3°22	12° 5	1°21	9°41	14R 4	15°23	24°31	2°19	S 2
M 3	16 45 43	12°20'39	10Y40	26° 5	18°21	9°37	20°42	3°25	12° 8	1°22	9°43	14° 1	15°20	24°38	2°20	M 3
T 4	16 49 40	13°18'04	22°31	28° 1	19°35	10°15	20°50	3°28	12°12	1°23	9°44	13°57	15°17	24°45	2°20	T 4
W 5	16 53 37	14°15'29	4R24	29°55	20°49	10°54	20°59	3°31	12°15	1°24	9°45	13°52	15°14	24°51	2°20	W 5
T 6	16 57 33	15°12'54	16°22	19R47	22° 2	11°32	21° 7	3°34	12°19	1°25	9°46	13°47	15°11	24°58	2°20	T 6
F 7	17 1 30	16°10'18	28°26	3°36	23°16	12°11	21°15	3°37	12°22	1°26	9°47	13°42	15° 7	25° 5	2°20	F 7
S 8	17 5 26	17° 7'41	10II39	5°23	24°30	12°49	21°24	3°41	12°26	1°27	9°48	13°39	15° 4	25°11	2°20	S 8
S 9	17 9 23	18° 5'03	23° 2	7° 7	25°43	13°28	21°33	3°44	12°29	1°28	9°49	13°36	15° 1	25°18	2°19	S 9
M10	17 13 19	19° 2'25	5R37	8°48	26°57	14° 6	21°42	3°48	12°33	1°29	9°51	13°34	14°58	25°25	2°19	M10
T 11	17 17 16	19°59'45	18°23	10°28	28°11	14°45	21°51	3°52	12°36	1°29	9°52	13°D34	14°55	25°32	2°19	T 11
W12	17 21 13	20°57'05	1R22	12° 4	29°24	15°23	22° 0	3°55	12°40	1°30	9°53	13°35	14°51	25°38	2°19	W12
T 13	17 25 9	21°54'24	14°35	13°38	0R38	16° 1	22° 9	3°59	12°43	1°31	9°54	13°36	14°48	25°45	2°18	T 13
F 14	17 29 6	22°51'43	28° 3	15° 9	1°52	16°40	22°18	4° 3	12°47	1°31	9°55	13°38	14°45	25°52	2°18	F 14
S 15	17 33 2	23°49'00	11R45	16°38	3° 5	17°18	22°27	4° 7	12°50	1°32	9°56	13°39	14°42	25°58	2°17	S 15
S 16	17 36 59	24°46'16	25°43	18° 3	4°19	17°57	22°37	4°11	12°54	1°33	9°57	13°R39	14°39	26° 5	2°16	S 16
M17	17 40 55	25°43'32	9R55	19°27	5°33	18°35	22°46	4°15	12°57	1°33	9°58	13°39	14°36	26°12	2°16	M17
T 18	17 44 52	26°40'47	24°20	20°47	6°46	19°13	22°56	4°20	13° 1	1°34	9°59	13°38	14°32	26°19	2°15	T 18
W19	17 48 48	27°38'01	8R53	22° 5	8° 0	19°52	23° 6	4°24	13° 4	1°34	10° 0	13°36	14°29	26°25	2°14	W19
T 20	17 52 45	28°35'14	23°30	23°19	9°14	20°30	23°15	4°28	13° 8	1°35	10° 1	13°34	14°26	26°32	2°14	T 20
F 21	17 56 42	29°32'27	8R 5	24°31	10°27	21° 8	23°25	4°33	13°11	1°35	10° 2	13°32	14°23	26°39	2°13	F 21
S 22	18 0 38	0R29'40	22°31	25°40	11°41	21°47	23°35	4°37	13°15	1°36	10° 3	13°31	14°20	26°46	2°12	S 22
S 23	18 4 35	1°26'52	6R43	26°46	12°54	22°25	23°45	4°42	13°18	1°36	10° 4	13°D30	14°17	26°52	2°11	S 23
M24	18 8 31	2°24'03	20°37	27°49	14° 8	23° 3	23°56	4°47	13°21	1°37	10° 5	13°30	14°13	26°59	2°10	M24
T 25	18 12 28	3°21'15	4R 9	28°48	15°22	23°42	24° 6	4°51	13°25	1°37	10° 6	13°31	14°10	27° 6	2° 9	T 25
W26	18 16 24	4°18'26	17°19	29°45	16°35	24°20	24°16	4°56	13°28	1°37	10° 6	13°32	14° 7	27°12	2° 7	W26
T 27	18 20 21	5°15'38	0R 7	0R38	17°49	24°58	24°27	5° 1	13°32	1°37	10° 7	13°33	14° 4	27°19	2° 6	T 27
F 28	18 24 17	6°12'49	12°37	1°27	19° 2	25°36	24°37	5° 6	13°35	1°38	10° 8	13°33	14° 1	27°26	2° 5	F 28
S 29	18 28 14	7°10'01	24°51	2°13	20°16	26°15	24°48	5°11	13°38	1°38	10° 9	13°34	13°57	27°33	2° 4	S 29
S 30	18 32 11	8R 7'12	6Y53	2R55	21R29	26R53	24R58	5R16	13R42	1Y38	10R10	13°R34	13R54	27Y39	2K 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	decl lat	decl lat	decl lat
S 1	22n 2	0s58 4n37	24n59 1n46	22n55 0n12	24n19 1n 8	15n37 0n59	11n59 1n49	22n14 0s 1	0s42 1s20	0s20 15s50	22s43 22s34	14n11 4s56	6n 8			
S 2	22 10	4n 6 5 1	25 10 1 51	23 4 0 14	24 17 1 8	15 34 0 59	11 58 1 48	22 14 0 1	0 41 1 20	0 20 15 50	22 43 22 34	14 14 4 55	6 8			
M 3	22 18	8 59 5 11	25 19 1 55	23 14 0 17	24 14 1 8	15 32 0 59	11 57 1 48	22 15 0 1	0 41 1 20	0 20 15 50	22 43 22 35	14 16 4 55	6 8			
T 4	22 25	13 32 5 8	25 25 1 59	23 22 0 19	24 12 1 8	15 29 0 59	11 56 1 48	22 15 0 1	0 41 1 20	0 19 15 50	22 44 22 35	14 18 4 55	6 9			
W 5	22 32	17 35 4 52	25 29 2 1	23 30 0 22	24 9 1 8	15 26 0 59	11 54 1 48	22 16 0 1	0 40 1 20	0 19 15 51	22 44 22 35	14 21 4 54	6 9			
T 6	22 38	20 57 4 23	25 30 2 3	23 37 0 24	24 5 1 8	15 24 0 58	11 53 1 48	22 16 0 1	0 40 1 20	0 19 15 51	22 45 22 36	14 23 4 54	6 9			
F 7	22 44	23 26 3 42	25 29 2 4	23 43 0 26	24 2 1 8	15 21 0 58	11 52 1 48	22 17 0 1	0 40 1 20	0 19 15 51	22 45 22 36	14 25 4 54	6 10			
S 8	22 50	24 53 2 51	25 26 2 5	23 49 0 29	23 59 1 9	15 18 0 58	11 50 1 48	22 17 0 1	0 39 1 20	0 19 15 51	22 45 22 36	14 28 4 54	6 10			
S 9	22 55	25 7 1 50	25 20 2 5	23 54 0 31	23 55 1 9	15 15 0 58	11 49 1 48	22 18 0 1	0 39 1 21	0 19 15 51	22 46 22 37	14 30 4 53	6 10			
M10	23 0	24 4 0 44	25 13 2 4	23 58 0 33	23 51 1 9	15 12 0 58	11 48 1 47	22 18 0 1	0 39 1 21	0 18 15 51	22 46 22 37	14 33 4 53	6 11			
T 11	23 5	21 46 0s26	25 4 2 2	24 2 0 35	23 47 1 9	15 9 0 58	11 46 1 47	22 19 0 1	0 38 1 21	0 18 15 52	22 46 22 37	14 35 4 53	6 11			
W12	23 9	18 18 1 36	24 53 1 59	24 5 0 38	23 43 1 9	15 6 0 58	11 45 1 47	22 19 0 1	0 38 1 21	0 18 15 52	22 46 22 38	14 37 4 53	6 11			
T 13	23 13	13 53 2 42	24 41 1 56	24 7 0 40	23 38 1 9	15 3 0 58	11 43 1 47	22 20 0 1	0 38 1 21	0 18 15 52	22 46 22 38	14 40 4 53	6 12			
F 14	23 16	8 42 3 41	24 27 1 52	24 9 0 42	23 34 1 9	15 0 0 58	11 42 1 47	22 20 0 1	0 38 1 21	0 18 15 52	22 46 22 38	14 42 4 52	6 12			
S 15	23 19	3 2 4 28	24 12 1 47	24 9 0 44	23 29 1 9	14 57 0 58	11 40 1 47	22 21 0 1	0 37 1 21	0 18 15 52	22 45 22 39	14 44 4 52	6 12			
S 16	23 21	2s53 5 0	23 56 1 42	24 9 0 46	23 24 1 9	14 54 0 58	11 38 1 47	22 21 0 1	0 37 1 21	0 18 15 53	22 45 22 39	14 46 4 52	6 13			
M17	23 23	8 45 5 15	23 38 1 36	24 9 0 48	23 19 1 9	14 51 0 58	11 37 1 47	22 21 0 1	0 37 1 21	0 18 15 53	22 45 22 39	14 49 4 52	6 13			
T 18	23 25	14 14 5 10	23 19 1 30	24 7 0 50	23 13 1 9	14 47 0 58	11 35 1 47	22 22 0 1	0 37 1 21	0 17 15 53	22 46 22 40	14 51 4 52	6 13			
W19	23 26	18 58 4 45	23 0 1 22	24 5 0 52	23 8 1 9	14 44 0 57	11 33 1 46	22 22 0 1	0 37 1 21	0 17 15 53	22 46 22 40	14 53 4 52	6 13			
T 20	23 27	22 34 4 2	22 40 1 14	24 2 0 54	23 2 1 9	14 41 0 57	11 32 1 46	22 23 0 1	0 37 1 21	0 17 15 54	22 46 22 41	14 56 4 52	6 14			
F 21	23 27	24 41 3 3	22 19 1 6	23 59 0 56	22 56 1 10	14 37 0 57	11 30 1 46	22 23 0 1	0 36 1 21	0 17 15 54	22 46 22 41	14 58 4 52	6 14			
S 22	23 27	25 8 1 53	21 57 0 57	23 55 0 58	22 50 1 10	14 34 0 57	11 28 1 46	22 24 0 1	0 36 1 21	0 17 15 54	22 46 22 41	15 0 4 52	6 14			
S 23	23 27	23 55 0 37	21 35 0 47	23 50 1 0	22 44 1 10	14 31 0 57	11 26 1 46	22 24 0 1	0 36 1 21	0 17 15 54	22 46 22 42	15 3 4 52	6 15			
M24	23 26	21 14 0n39	21 13 0 37	23 44 1 2	22 38 1 10	14 27 0 57	11 25 1 46	22 25 0 1	0 36 1 21	0 17 15 54	22 46 22 42	15 5 4 52	6 15			
T 25	23 25	17 25 1 52	20 50 0 26	23 38 1 4	22 31 1 10	14 24 0 57	11 23 1 46	22 25 0 1	0 36 1 21	0 17 15 55	22 46 22 42	15 7 4 52	6 15			
W26	23 23	12 51 2 56	20 28 0 15	23 31 1 5	22 25 1 10	14 20 0 57	11 21 1 46	22 25 0 1	0 36 1 21	0 17 15 55	22 46 22 43	15 9 4 53	6 16			
T 27	23 21	7 50 3 50	20 5 0 3	23 23 1 7	22 18 1 10	14 17 0 57	11 19 1 46	22 26 0 1	0 36 1 21	0 17 15 55	22 46 22 43	15 12 4 53	6 16			
F 28	23 19	2 38 4 32	19 42 0s10	23 14 1 9	22 11 1 10	14 13 0 57	11 17 1 46	22 26 0 1	0 36 1 22	0 17 15 55	22 46 22 43	15 14 4 53	6 16			
S 29	23 16	2n33 5 0	19 19 0 22	23 5 1 10	22 4 1 10	14 10 0 57	11 15 1 45	22 27 0 1	0 36 1 22	0 17 15 56	22 46 22 44	15 16 4 53	6 16			
S 30	23n13	7n33 5n15	18n57 0s36	22n56 1n12	21n56 1n10	14n 6 0n57	11n13 1n45	22n27 0s 1	0s36 1s22	0s17 15s56	22s46 22s44	15n18 4s53	6n17			

Julian Day Number = 2400927.5, Delta T = 8.96 sec
Ecliptic obliquity = 23°27'28", Nutation = 0°00'16", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 22°48'18", Lahiri = 21°55'19"

ASTRODIENST EPHEMERIS for the year 1861
geocentric

JULY 1861

00:00 UT

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

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
M 1	23n 9	12n14	5n15	18n35	0s49	22n45	1n14	21n49	1n10	14n 2	0n57	11n11	1n45	22n27	0s 1	0s36	1s22	0s17	15s56	22s46	22s44	15n21	4s54	6n17
T 2	23 5	16 27	5 3	18 13	1 3	22 34	1 15	21 41	1 10	13 59	0 57	11 9	1 45	22 28	0 1	0 36	1 22	0 17	15 56	22 46	22 45	15 23	4 54	6 17
W 3	23 0	20 2	4 37	17 52	1 17	22 22	1 16	21 34	1 10	13 55	0 57	11 7	1 45	22 28	0 1	0 36	1 22	0 17	15 57	22 46	22 45	15 25	4 54	6 17
T 4	22 55	22 48	3 59	17 32	1 32	22 10	1 18	21 26	1 10	13 51	0 57	11 5	1 45	22 29	0 1	0 36	1 22	0 17	15 57	22 46	22 45	15 27	4 55	6 18
F 5	22 50	24 35	3 10	17 12	1 47	21 57	1 19	21 18	1 10	13 47	0 57	11 3	1 45	22 29	0 1	0 36	1 22	0 17	15 57	22 46	22 46	15 30	4 55	6 18
S 6	22 44	25 12	2 11	16 53	2 2	21 43	1 20	21 9	1 10	13 44	0 57	11 1	1 45	22 29	0 1	0 36	1 22	0 17	15 57	22 46	22 46	15 32	4 55	6 18
S 7	22 38	24 32	1 5	16 36	2 17	21 29	1 21	21 1	1 10	13 40	0 56	10 59	1 45	22 30	0 1	0 36	1 22	0 17	15 58	22 46	22 46	15 34	4 56	6 18
M 8	22 32	22 33	0s 6	16 19	2 32	21 14	1 23	20 52	1 10	13 36	0 56	10 56	1 45	22 30	0 1	0 36	1 22	0 17	15 58	22 46	22 46	15 36	4 56	6 19
T 9	22 25	19 21	1 18	16 4	2 47	20 58	1 24	20 44	1 10	13 32	0 56	10 54	1 45	22 31	0 1	0 36	1 22	0 17	15 58	22 46	22 47	15 39	4 56	6 19
W10	22 18	15 5	2 27	15 50	3 1	20 42	1 25	20 35	1 10	13 28	0 56	10 52	1 45	22 31	0 1	0 36	1 22	0 17	15 59	22 46	22 47	15 41	4 57	6 19
T 11	22 10	10 0	3 29	15 38	3 16	20 25	1 26	20 26	1 10	13 24	0 56	10 50	1 45	22 31	0 1	0 36	1 22	0 17	15 59	22 46	22 47	15 43	4 57	6 19
F 12	22 2	4 21	4 20	15 27	3 30	20 8	1 27	20 17	1 10	13 20	0 56	10 47	1 44	22 32	0 1	0 37	1 22	0 18	15 59	22 46	22 48	15 45	4 58	6 20
S 13	21 53	1s34	4 56	15 17	3 43	19 50	1 27	20 7	1 10	13 16	0 56	10 45	1 44	22 32	0 1	0 37	1 22	0 18	15 59	22 46	22 48	15 47	4 58	6 20
S 14	21 45	7 28	5 14	15 10	3 56	19 32	1 28	19 58	1 10	13 12	0 56	10 43	1 44	22 32	0 1	0 37	1 22	0 18	16 0	22 46	22 48	15 50	4 59	6 20
M15	21 35	13 0	5 14	15 4	4 8	19 13	1 29	19 49	1 10	13 8	0 56	10 41	1 44	22 33	0 1	0 37	1 22	0 18	16 0	22 46	22 49	15 52	4 59	6 20
T 16	21 26	17 51	4 54	15 0	4 19	18 53	1 29	19 39	1 10	13 4	0 56	10 38	1 44	22 33	0 1	0 37	1 22	0 18	16 0	22 46	22 49	15 54	5 0	6 20
W17	21 16	21 42	4 17	14 57	4 29	18 33	1 30	19 29	1 10	13 0	0 56	10 36	1 44	22 33	0 1	0 37	1 23	0 18	16 1	22 46	22 49	15 56	5 1	6 21
T 18	21 6	24 13	3 23	14 57	4 37	18 13	1 31	19 19	1 10	12 56	0 56	10 33	1 44	22 34	0 1	0 38	1 23	0 18	16 1	22 46	22 50	15 58	5 1	6 21
F 19	20 55	25 11	2 18	14 58	4 44	17 52	1 31	19 9	1 10	12 51	0 56	10 31	1 44	22 34	0 1	0 38	1 23	0 18	16 1	22 46	22 50	16 0	5 2	6 21
S 20	20 44	24 32	1 5	15 2	4 50	17 30	1 31	18 59	1 10	12 47	0 56	10 29	1 44	22 34	0 0	0 38	1 23	0 19	16 2	22 46	22 50	16 3	5 2	6 21
S 21	20 33	22 23	0n11	15 7	4 54	17 9	1 32	18 49	1 10	12 43	0 56	10 26	1 44	22 35	0 0	0 38	1 23	0 19	16 2	22 46	22 51	16 5	5 3	6 21
M22	20 21	18 59	1 25	15 13	4 57	16 46	1 32	18 38	1 10	12 39	0 56	10 24	1 44	22 35	0 0	0 39	1 23	0 19	16 2	22 46	22 51	16 7	5 4	6 22
T 23	20 9	14 40	2 32	15 21	4 57	16 23	1 32	18 28	1 10	12 35	0 56	10 21	1 44	22 35	0 0	0 39	1 23	0 19	16 2	22 46	22 51	16 9	5 4	6 22
W24	19 57	9 46	3 31	15 31	4 56	16 0	1 32	18 17	1 10	12 30	0 56	10 19	1 44	22 36	0 0	0 39	1 23	0 19	16 3	22 46	22 51	16 11	5 5	6 22
T 25	19 44	4 34	4 17	15 41	4 54	15 36	1 32	18 6	1 10	12 26	0 56	10 16	1 44	22 36	0 0	0 40	1 23	0 20	16 3	22 47	22 52	16 13	5 6	6 22
F 26	19 31	0n42	4 50	15 53	4 49	15 12	1 32	17 55	1 10	12 22	0 56	10 14	1 44	22 36	0 0	0 40	1 23	0 20	16 3	22 47	22 52	16 15	5 7	6 22
S 27	19 18	5 50	5 9	16 6	4 43	14 48	1 32	17 44	1 10	12 17	0 56	10 11	1 44	22 37	0 0	0 40	1 23	0 20	16 4	22 47	22 52	16 18	5 7	6 22
S 28	19 4	10 40	5 14	16 20	4 35	14 23	1 32	17 33	1 10	12 13	0 56	10 9	1 44	22 37	0 0	0 40	1 23	0 20	16 4	22 47	22 53	16 20	5 8	6 22
M29	18 50	15 4	5 6	16 34	4 26	13 57	1 32	17 22	1 9	12 9	0 56	10 6	1 44	22 37	0 0	0 41	1 23	0 20	16 4	22 48	22 53	16 22	5 9	6 23
T 30	18 36	18 52	4 4	16 48	4 15	13 32	1 31	17 10	1 9	12 4	0 56	10 4	1 44	22 37	0 0	0 41	1 23	0 21	16 5	22 48	22 53	16 24	5 10	6 23
W31	18n21	21n55	4n11	17n 3	4s 3	13n 6	1n31	16n59	1n 9	12n 0	0n56	10n 1	1n44	22n38	0s 0	0s42	1s23	0s21	16s 5	22s48	22s54	16n26	5s11	6n23

ASTRODIENST EPHEMERIS for the year 1861
geocentric

AUGUST 1861

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	20 38 20	8♌39°48	2♊34	25°R25	0♍40	17♌14	1♎13	8♏32	15♊15	1°R27	10♏26	13♓20	12♓13	1♌14	0°R54	T 1
F 2	20 42 17	9°37'15	14°47	25°D19	1°53	17°52	1°26	8°39	15°17	1°Y26	10°26	13°22	12° 9	1°21	0°X51	F 2
S 3	20 46 13	10°34'43	27°15	25♌20	3° 6	18°30	1°38	8°46	15°19	1°25	10°26	13°23	12° 6	1°28	0°48	S 3
S 4	20 50 10	11°32'12	10♌ 1	25°27	4°20	19° 8	1°51	8°53	15°22	1°24	10°27	13°R24	12° 3	1°34	0°46	S 4
M 5	20 54 7	12°29'43	23° 8	25°41	5°33	19°46	2° 3	9° 0	15°24	1°23	10°27	13°23	12° 0	1°41	0°43	M 5
T 6	20 58 3	13°27'14	6♌35	26° 2	6°46	20°24	2°16	9° 7	15°26	1°22	10°27	13°22	11°57	1°48	0°40	T 6
W 7	21 2 0	14°24'47	20°23	26°29	7°59	21° 2	2°29	9°14	15°29	1°21	10°27	13°19	11°54	1°55	0°37	W 7
T 8	21 5 56	15°22'20	4♎27	27° 3	9°13	21°40	2°41	9°21	15°31	1°20	10°27	13°14	11°50	2° 1	0°34	T 8
F 9	21 9 53	16°19'55	18°44	27°44	10°26	22°19	2°54	9°29	15°33	1°19	10°27	13°10	11°47	2° 8	0°31	F 9
S 10	21 13 49	17°17'31	3♌ 7	28°32	11°39	22°57	3° 7	9°36	15°35	1°18	10°R27	13° 5	11°44	2°15	0°28	S 10
S 11	21 17 46	18°15'07	17°33	29°26	12°52	23°35	3°20	9°43	15°37	1°17	10°27	13° 1	11°41	2°21	0°25	S 11
M12	21 21 42	19°12'45	1♌55	0♌26	14° 5	24°13	3°32	9°50	15°39	1°16	10°27	12°58	11°38	2°28	0°23	M12
T 13	21 25 39	20°10'23	16°11	1°33	15°18	24°51	3°45	9°57	15°41	1°15	10°27	12°D57	11°35	2°35	0°20	T 13
W14	21 29 36	21° 8'03	0♌17	2°45	16°32	25°29	3°58	10° 5	15°43	1°13	10°27	12°57	11°31	2°42	0°17	W14
T 15	21 33 32	22° 5'43	14°13	4° 3	17°45	26° 7	4°11	10°12	15°45	1°12	10°27	12°58	11°28	2°48	0°14	T 15
F 16	21 37 29	23° 3'25	27°58	5°27	18°58	26°45	4°24	10°19	15°47	1°11	10°27	13° 0	11°25	2°55	0°11	F 16
S 17	21 41 25	24° 1'07	11♓32	6°55	20°11	27°24	4°37	10°27	15°48	1°10	10°26	13°R 0	11°22	3° 2	0° 8	S 17
S 18	21 45 22	24°58'51	24°54	8°29	21°24	28° 2	4°50	10°34	15°50	1° 9	10°26	13° 0	11°19	3° 8	0° 5	S 18
M19	21 49 18	25°56'36	8♌ 5	10° 6	22°37	28°40	5° 3	10°41	15°52	1° 7	10°26	12°57	11°15	3°15	0° 2	M19
T 20	21 53 15	26°54'22	21° 3	11°48	23°50	29°18	5°16	10°49	15°53	1° 6	10°26	12°53	11°12	3°22	29°55	T 20
W21	21 57 12	27°52'10	3♌49	13°33	25° 3	29°56	5°29	10°56	15°55	1° 5	10°26	12°46	11° 9	3°29	29°56	W21
T 22	22 1 8	28°49'59	16°22	15°21	26°16	0♎34	5°42	11° 4	15°57	1° 3	10°25	12°38	11° 6	3°35	29°53	T 22
F 23	22 5 5	29°47'50	28°42	17°12	27°29	1°12	5°55	11°11	15°58	1° 2	10°25	12°30	11° 3	3°42	29°50	F 23
S 24	22 9 1	0♎45'42	10°Y52	19° 5	28°42	1°51	6° 7	11°18	16° 0	1° 1	10°25	12°21	11° 0	3°49	29°47	S 24
S 25	22 12 58	1°43'36	22°52	20°59	29°55	2°29	6°21	11°26	16° 1	0°59	10°25	12°14	10°56	3°55	29°44	S 25
M26	22 16 54	2°41'31	4♌46	22°55	1♌ 7	3° 7	6°34	11°33	16° 2	0°58	10°24	12° 8	10°53	4° 2	29°41	M26
T 27	22 20 51	3°39'29	16°37	24°52	2°20	3°45	6°47	11°41	16° 4	0°56	10°24	12° 5	10°50	4° 9	29°38	T 27
W28	22 24 47	4°37'28	28°30	26°50	3°33	4°23	7° 0	11°48	16° 5	0°55	10°24	12° 3	10°47	4°16	29°35	W28
T 29	22 28 44	5°35'30	10♊29	28°48	4°46	5° 2	7°13	11°56	16° 6	0°54	10°23	12°D 3	10°44	4°22	29°32	T 29
F 30	22 32 40	6°33'33	22°40	0♎46	5°59	5°40	7°26	12° 3	16° 8	0°52	10°23	12° 4	10°40	4°29	29°29	F 30
S 31	22 36 37	7♎31'38	5♌ 8	2♎44	7♌12	6♎18	7♎39	12♎11	16♊ 9	0°Y51	10♏22	12♓ 4	10♓37	4♌36	29°26	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	decl	decl	decl	lat
T 1	18n 7	24n 3	3n26	17n18	3s50	12n39	1n30	16n47	1n 9	11n55	0n56	9n58	1n44	22n38	0s 0	0s42	1s23	0s21	16s 5	22s47	22s54	16n28	5s11	6n23		
F 2	17 51	25 5	2 31	17 32	3 36	12 13	1 30	16 35	1 9	11 51	0 56	9 56	1 43	22 38	0 0	0 42	1 23	0 21	16 6	22 47	22 54	16 30	5 12	6 23		
S 3	17 36	24 53	1 27	17 47	3 22	11 45	1 29	16 23	1 9	11 46	0 56	9 53	1 43	22 39	0 0	0 43	1 23	0 22	16 6	22 47	22 54	16 32	5 13	6 23		
S 4	17 20	23 23	0 19	18 1	3 6	11 18	1 28	16 11	1 9	11 42	0 56	9 51	1 43	22 39	0 0	0 43	1 23	0 22	16 6	22 47	22 55	16 34	5 14	6 23		
M 5	17 4	20 36	0s53	18 14	2 51	10 51	1 28	15 59	1 9	11 37	0 56	9 48	1 43	22 39	0 0	0 43	1 23	0 22	16 6	22 47	22 55	16 37	5 15	6 23		
T 6	16 48	16 39	2 3	18 26	2 34	10 23	1 27	15 47	1 9	11 33	0 56	9 45	1 43	22 39	0 0	0 44	1 23	0 22	16 7	22 47	22 55	16 39	5 16	6 23		
W 7	16 31	11 44	3 8	18 37	2 18	9 54	1 26	15 35	1 9	11 28	0 56	9 42	1 43	22 40	0 0	0 44	1 23	0 23	16 7	22 47	22 56	16 41	5 17	6 23		
T 8	16 14	6 7	4 3	18 47	2 1	9 26	1 25	15 23	1 9	11 24	0 56	9 40	1 43	22 40	0 0	0 45	1 24	0 23	16 7	22 48	22 56	16 43	5 18	6 23		
F 9	15 57	0 7	4 43	18 55	1 45	8 57	1 24	15 10	1 9	11 19	0 56	9 37	1 43	22 40	0 0	0 45	1 24	0 23	16 8	22 48	22 56	16 45	5 19	6 23		
S 10	15 40	5s56	5 6	19 2	1 28	8 28	1 23	14 58	1 9	11 14	0 56	9 34	1 43	22 40	0 0	0 46	1 24	0 23	16 8	22 49	22 56	16 47	5 20	6 24		
S 11	15 22	11 40	5 10	19 7	1 12	7 59	1 22	14 45	1 8	11 10	0 56	9 32	1 43	22 41	0 0	0 46	1 24	0 24	16 8	22 49	22 57	16 49	5 21	6 24		
M12	15 4	16 45	4 54	19 9	0 56	7 30	1 20	14 32	1 8	11 5	0 56	9 29	1 43	22 41	0 0	0 47	1 24	0 24	16 9	22 50	22 57	16 51	5 22	6 24		
T 13	14 46	20 51	4 20	19 10	0 41	7 0	1 19	14 19	1 8	11 1	0 56	9 26	1 43	22 41	0 0	0 47	1 24	0 24	16 9	22 50	22 57	16 53	5 23	6 24		
W14	14 28	23 40	3 31	19 9	0 26	6 31	1 18	14 6	1 8	10 56	0 56	9 23	1 43	22 41	0 0	0 48	1 24	0 25	16 9	22 50	22 57	16 55	5 24	6 24		
T 15	14 9	25 0	2 30	19 4	0 11	6 1	1 16	13 53	1 8	10 51	0 56	9 21	1 43	22 41	0 0	0 48	1 24	0 25	16 10	22 49	22 58	16 57	5 25	6 24		
F 16	13 51	24 47	1 21	18 58	0n 3	5 31	1 15	13 40	1 8	10 47	0 56	9 18	1 43	22 42	0 0	0 49	1 24	0 25	16 10	22 49	22 58	16 59	5 26	6 24		
S 17	13 32	23 5	0 8	18 49	0 16	5 1	1 13	13 27	1 8	10 42	0 56	9 15	1 43	22 42	0 0	0 49	1 24	0 26	16 10	22 49	22 58	17 1	5 27	6 24		
S 18	13 12	20 7	1n 4	18 36	0 28	4 30	1 11	13 14	1 8	10 37	0 56	9 12	1 43	22 42	0 0	0 50	1 24	0 26	16 10	22 49	22 59	17 3	5 28	6 24		
M19	12 53	16 9	2 11	18 22	0 39	4 0	1 10	13 0	1 8	10 32	0 56	9 10	1 43	22 42	0 0	0 50	1 24	0 26	16 11	22 50	22 59	17 5	5 29	6 24		
T 20	12 33	11 29	3 11	18 4	0 50	3 29	1 8	12 47	1 8	10 28	0 56	9 7	1 43	22 42	0 0	0 51	1 24	0 27	16 11	22 50	22 59	17 7	5 30	6 24		
W21	12 13	6 24	4 0	17 43	1 0	2 59	1 6	12 33	1 7	10 23	0 56	9 4	1 43	22 43	0 0	0 51	1 24	0 27	16 11	22 51	22 59	17 9	5 31	6 24		
T 22	11 53	1 9	4 36	17 20	1 9	2 28	1 4	12 20	1 7	10 18	0 56	9 1	1 43	22 43	0 0	0 52	1 24	0 27	16 12	22 51	23 0	17 11	5 32	6 23		
F 23	11 33	4n 3	4 58	16 54	1 16	1 57	1 2	12 6	1 7	10 13	0 56	8 58	1 43	22 43	0 0	0 52	1 24	0 28	16 12	22 52	23 0	17 13	5 33	6 23		
S 24	11 13	9 0	5 7	16 26	1 23	1 26	1 0	11 52	1 7	10 9	0 56	8 55	1 43	22 43	0 0	0 53	1 24	0 28	16 12	22 53	23 0	17 15	5 34	6 23		
S 25	10 52	13 34	5 2	15 55	1 29	0 55	0 58	11 38	1 7	10 4	0 56	8 53	1 44	22 43	0 0	0 54	1 24	0 28	16 13	22 54	23 0	17 17	5 35	6 23		
M26	10 31	17 34	4 44	15 22	1 34	0 24	0 56	11 24	1 7	9 59	0 56	8 50	1 44	22 43	0 0	0 54	1 24	0 29	16 13	22 54	23 1	17 19	5 36	6 23		
T 27	10 10	20 51	4 13	14 47	1 39	0s 7	0 53	11 10	1 7	9 54	0 56	8 47	1 44	22 44	0 0	0 55	1 24	0 29	16 13	22 55	23 1	17 21	5 37	6 23		
W28	9 49	23 17	3 32	14 10	1 42	0 38	0 51	10 56	1 7	9 50	0 57	8 44	1 44	22 44	0 0	0 55	1 24	0 30	16 13	22 55	23 1	17 23	5 39	6 23		
T 29	9 28	24 42	2 41	13 32	1 44	1 9	0 49	10 42	1 6	9 45	0 57	8 41	1 44	22 44	0 0	0 56	1 24	0 30	16 14	22 55	23 1	17 25	5 40	6 23		
F 30	9 7	24 57	1 42	12 51	1 46	1 0	0 46	10 28	1 6	9 40	0 57	8 38	1 44	22 44	0 0	0 57	1 24	0 30	16 14	22 55	23 2	17 27	5 41	6 23		
S 31	8n45	23n59	0n37	12n10	1n47	2s11	0n44	10n14	1n 6	9n35	0n57	8n36	1n44	22n44	0s 0	0s57	1s24	0s31	16s14	22s55	23s 2	17n29	5s42	6n23		

ASTRODIENST EPHEMERIS for the year 1861

geocentric

SEPTEMBER 1861

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	22 40 34	8 ^m 29'45	17 ^h 57	4 ^m 42	8 ^h 24	6 ^m 56	7 ^m 52	12 ^m 19	16 ^m 10	0 ^m R49	10 ^m R22	12 ^m R 4	10 ^m 34	4 ^m 42	29 ^m R23	S 1
M 2	22 44 30	9 ^m 27'54	1 ^h 11	6 ^m 39	9 ^m 37	7 ^m 35	8 ^m 5	12 ^m 26	16 ^m 11	0 ^m Y48	10 ^m 822	12 ^m 3 3	10 ^m 31	4 ^m 49	29 ^m 20	M 2
T 3	22 48 27	10 ^m 26'05	14 ^m 51	8 ^m 35	10 ^m 50	8 ^m 13	8 ^m 18	12 ^m 34	16 ^m 12	0 ^m 46	10 ^m 21	11 ^m 59	10 ^m 28	4 ^m 56	29 ^m 17	T 3
W 4	22 52 23	11 ^m 24'18	28 ^m 56	10 ^m 31	12 ^m 2	8 ^m 51	8 ^m 31	12 ^m 41	16 ^m 13	0 ^m 45	10 ^m 21	11 ^m 53	10 ^m 25	5 ^m 2	29 ^m 14	W 4
T 5	22 56 20	12 ^m 22'32	13 ^m 23	12 ^m 25	13 ^m 15	9 ^m 29	8 ^m 44	12 ^m 49	16 ^m 14	0 ^m 43	10 ^m 20	11 ^m 44	10 ^m 21	5 ^m 9	29 ^m 11	T 5
F 6	23 0 16	13 ^m 20'48	28 ^m 6	14 ^m 19	14 ^m 28	10 ^m 8	8 ^m 57	12 ^m 56	16 ^m 14	0 ^m 41	10 ^m 19	11 ^m 35	10 ^m 18	5 ^m 16	29 ^m 8	F 6
S 7	23 4 13	14 ^m 19'06	12 ^m 57	16 ^m 12	15 ^m 40	10 ^m 46	9 ^m 10	13 ^m 4	16 ^m 15	0 ^m 40	10 ^m 19	11 ^m 25	10 ^m 15	5 ^m 23	29 ^m 5	S 7
S 8	23 8 9	15 ^m 17'26	27 ^m 46	18 ^m 3	16 ^m 53	11 ^m 24	9 ^m 23	13 ^m 11	16 ^m 16	0 ^m 38	10 ^m 18	11 ^m 17	10 ^m 12	5 ^m 29	29 ^m 2	S 8
M 9	23 12 6	16 ^m 15'47	12 ^m 57	19 ^m 54	18 ^m 6	12 ^m 2	9 ^m 36	13 ^m 19	16 ^m 17	0 ^m 37	10 ^m 18	11 ^m 11	10 ^m 9	5 ^m 36	29 ^m 0	M 9
T 10	23 16 3	17 ^m 14'10	26 ^m 54	21 ^m 44	19 ^m 18	12 ^m 41	9 ^m 49	13 ^m 26	16 ^m 17	0 ^m 35	10 ^m 17	11 ^m 7	10 ^m 6	5 ^m 43	28 ^m 57	T 10
W11	23 19 59	18 ^m 12'34	11 ^m 3 3	23 ^m 32	20 ^m 31	13 ^m 19	10 ^m 2	13 ^m 34	16 ^m 18	0 ^m 33	10 ^m 17	11 ^m 5	10 ^m 2	5 ^m 49	28 ^m 54	W11
T 12	23 23 56	19 ^m 11'00	24 ^m 54	25 ^m 19	21 ^m 43	13 ^m 57	10 ^m 15	13 ^m 42	16 ^m 18	0 ^m 32	10 ^m 16	11 ^m D 5	9 ^m 59	5 ^m 56	28 ^m 51	T 12
F 13	23 27 52	20 ^m 9'28	8 ^m 37	27 ^m 6	22 ^m 56	14 ^m 36	10 ^m 28	13 ^m 49	16 ^m 19	0 ^m 30	10 ^m 15	11 ^m R 6	9 ^m 56	6 ^m 3	28 ^m 49	F 13
S 14	23 31 49	21 ^m 7'57	21 ^m 44	28 ^m 51	24 ^m 8	15 ^m 14	10 ^m 41	13 ^m 57	16 ^m 19	0 ^m 29	10 ^m 15	11 ^m 5	9 ^m 53	6 ^m 10	28 ^m 46	S 14
S 15	23 35 45	22 ^m 6'28	4 ^m 46	0 ^m 35	25 ^m 20	15 ^m 53	10 ^m 54	14 ^m 4	16 ^m 20	0 ^m 27	10 ^m 14	11 ^m 3	9 ^m 50	6 ^m 16	28 ^m 43	S 15
M16	23 39 42	23 ^m 5'00	17 ^m 36	2 ^m 18	26 ^m 33	16 ^m 31	11 ^m 6	14 ^m 12	16 ^m 20	0 ^m 25	10 ^m 13	10 ^m 58	9 ^m 46	6 ^m 23	28 ^m 40	M16
T 17	23 43 38	24 ^m 3'34	0 ^m 15	4 ^m 0	27 ^m 45	17 ^m 9	11 ^m 19	14 ^m 19	16 ^m 20	0 ^m 24	10 ^m 13	10 ^m 51	9 ^m 43	6 ^m 30	28 ^m 38	T 17
W18	23 47 35	25 ^m 2'10	12 ^m 44	5 ^m 41	28 ^m 57	17 ^m 48	11 ^m 32	14 ^m 27	16 ^m 21	0 ^m 22	10 ^m 12	10 ^m 40	9 ^m 40	6 ^m 36	28 ^m 35	W18
T 19	23 51 32	26 ^m 0'48	25 ^m 4	7 ^m 21	0 ^m 10	18 ^m 26	11 ^m 45	14 ^m 34	16 ^m 21	0 ^m 20	10 ^m 11	10 ^m 28	9 ^m 37	6 ^m 43	28 ^m 33	T 19
F 20	23 55 28	26 ^m 59'27	7 ^m Y14	9 ^m 0	1 ^m 22	19 ^m 4	11 ^m 58	14 ^m 41	16 ^m 21	0 ^m 19	10 ^m 10	10 ^m 14	9 ^m 34	6 ^m 50	28 ^m 30	F 20
S 21	23 59 25	27 ^m 58'09	19 ^m 17	10 ^m 38	2 ^m 34	19 ^m 43	12 ^m 11	14 ^m 49	16 ^m 21	0 ^m 17	10 ^m 9	10 ^m 1	9 ^m 31	6 ^m 57	28 ^m 28	S 21
S 22	0 3 21	28 ^m 56'53	1 ^h 13	12 ^m 15	3 ^m 46	20 ^m 21	12 ^m 23	14 ^m 56	16 ^m R21	0 ^m 15	10 ^m 9	9 ^m 49	9 ^m 27	7 ^m 3	28 ^m 25	S 22
M23	0 7 18	29 ^m 55'39	13 ^m 4	13 ^m 51	4 ^m 58	21 ^m 0	12 ^m 36	15 ^m 4	16 ^m 21	0 ^m 14	10 ^m 8	9 ^m 39	9 ^m 24	7 ^m 10	28 ^m 23	M23
T 24	0 11 14	0 ^m 54'27	24 ^m 54	15 ^m 26	6 ^m 10	21 ^m 38	12 ^m 49	15 ^m 11	16 ^m 21	0 ^m 12	10 ^m 7	9 ^m 31	9 ^m 21	7 ^m 17	28 ^m 20	T 24
W25	0 15 11	1 ^m 53'18	6 ^m 11	17 ^m 0	7 ^m 22	22 ^m 17	13 ^m 1	15 ^m 18	16 ^m 21	0 ^m 10	10 ^m 6	9 ^m 27	9 ^m 18	7 ^m 23	28 ^m 18	W25
T 26	0 19 7	2 ^m 52'10	18 ^m 42	18 ^m 33	8 ^m 34	22 ^m 55	13 ^m 14	15 ^m 26	16 ^m 20	0 ^m 9	10 ^m 5	9 ^m 25	9 ^m 15	7 ^m 30	28 ^m 16	T 26
F 27	0 23 4	3 ^m 51'05	0 ^m 50	20 ^m 6	9 ^m 46	23 ^m 34	13 ^m 27	15 ^m 33	16 ^m 20	0 ^m 7	10 ^m 4	9 ^m 24	9 ^m 12	7 ^m 37	28 ^m 13	F 27
S 28	0 27 1	4 ^m 50'03	13 ^m 14	21 ^m 37	10 ^m 58	24 ^m 12	13 ^m 39	15 ^m 40	16 ^m 20	0 ^m 5	10 ^m 4	9 ^m 24	9 ^m 8	7 ^m 43	28 ^m 11	S 28
S 29	0 30 57	5 ^m 49'02	26 ^m 0	23 ^m 8	12 ^m 10	24 ^m 51	13 ^m 52	15 ^m 48	16 ^m 20	0 ^m 4	10 ^m 3	9 ^m 23	9 ^m 5	7 ^m 50	28 ^m 9	S 29
M30	0 34 54	6 ^m 48'04	9 ^m 12	24 ^m 37	13 ^m 22	25 ^m 29	14 ^m 4	15 ^m 55	16 ^m 19	0 ^m Y 2	10 ^m 8 2	9 ^m 321	9 ^m 3 2	7 ^m 57	28 ^m 7	M30

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	8n23	21n44	0s31	11n27	1n47	2s42	0n41	10n 0	1n 6	9n30	0n57	8n33	1n44	22n44	0s 0	0s58	1s24	0s31	16s15	22s55	23s 2	17n31	5s43	6n23			
M 2	8 2	18 17	1 40	10 43	1 46	3 13	0 39	9 45	1 6	9 25	0 57	8 30	1 44	22 44	0 0	0 58	1 24	0 32	16 15	22 55	23 2	17 33	5 44	6 23			
T 3	7 40	13 45	2 46	9 59	1 45	3 44	0 36	9 31	1 6	9 21	0 57	8 27	1 44	22 44	0 0	0 59	1 24	0 32	16 15	22 55	23 3	17 35	5 45	6 22			
W 4	7 18	8 22	3 43	9 14	1 43	4 15	0 34	9 16	1 6	9 16	0 57	8 24	1 44	22 45	0 0	1 0	1 24	0 32	16 15	22 56	23 3	17 37	5 46	6 22			
T 5	6 55	2 25	4 27	8 28	1 41	4 46	0 31	9 2	1 5	9 11	0 57	8 21	1 44	22 45	0 0	1 0	1 24	0 33	16 16	22 56	23 3	17 39	5 48	6 22			
F 6	6 33	3s45	4 55	7 41	1 38	5 16	0 28	8 47	1 5	9 6	0 57	8 18	1 44	22 45	0 0	1 1	1 24	0 33	16 16	22 57	23 3	17 41	5 49	6 22			
S 7	6 11	9 46	5 3	6 54	1 35	5 47	0 25	8 32	1 5	9 1	0 57	8 16	1 44	22 45	0 0	1 2	1 25	0 34	16 16	22 58	23 4	17 43	5 50	6 22			
S 8	5 48	15 13	4 51	6 7	1 31	6 18	0 22	8 18	1 5	8 56	0 57	8 13	1 44	22 45	0 0	1 2	1 25	0 34	16 16	22 59	23 4	17 45	5 51	6 22			
M 9	5 25	19 42	4 20	5 20	1 27	6 48	0 20	8 3	1 5	8 52	0 57	8 10	1 44	22 45	0 0	1 3	1 25	0 34	16 17	22 59	23 4	17 47	5 52	6 21			
T 10	5 3	22 55	3 32	4 33	1 22	7 18	0 17	7 48	1 5	8 47	0 57	8 7	1 44	22 45	0 0	1 4	1 25	0 35	16 17	23 0	23 4	17 49	5 53	6 21			
W11	4 40	24 38	2 33	3 45	1 17	7 48	0 14	7 33	1 4	8 42	0 57	8 4	1 44	22 45	0 0	1 4	1 25	0 35	16 17	23 0	23 5	17 50	5 54	6 21			
T 12	4 17	24 47	1 25	2 58	1 12	8 18	0 11	7 18	1 4	8 37	0 57	8 1	1 44	22 45	0 0	1 5	1 25	0 36	16 17	23 0	23 5	17 52	5 55	6 21			
F 13	3 54	23 25	0 14	2 11	1 7	8 48	0 8	7 3	1 4	8 32	0 57	7 59	1 44	22 45	0n 0	1 6	1 25	0 36	16 18	23 0	23 5	17 54	5 57	6 21			
S 14	3 31	20 47	0n56	1 24	1 1	9 18	0 5	6 48	1 4	8 27	0 58	7 56	1 45	22 45	0 0	1 6	1 25	0 37	16 18	23 0	23 5	17 56	5 58	6 20			
S 15	3 8	17 7	2 2	0 37	0 55	9 47	0 2	6 33	1 4	8 23	0 58	7 53	1 45	22 45	0 0	1 7	1 25	0 37	16 18	23 0	23 6	17 58	5 59	6 20			
M16	2 45	12 42	3 1	0s10	0 49	10 16	0s 2	6 18	1 3	8 18	0 58	7 50	1 45	22 45	0 0	1 8	1 25	0 37	16 18	23 0	23 6	18 0	6 0	6 20			
T 17	2 22	7 49	3 49	0 56	0 43	10 45	0 5	6 3	1 3	8 13	0 58	7 47	1 45	22 45	0 0	1 8	1 25	0 38	16 19	23 1	23 6	18 2	6 1	6 20			
W18	1 58	2 41	4 26	1 42	0 36	11 14	0 8	5 48	1 3	8 8	0 58	7 44	1 45	22 45	0 0	1 9	1 25	0 38	16 19	23 2	23 6	18 4	6 2	6 20			
T 19	1 35	2n28	4 50	2 28	0 29	11 43	0 11	5 33	1 3	8 3	0 58	7 42	1 45	22 45	0 0	1 10	1 25	0 39	16 19	23 3	23 7	18 6	6 3	6 19			
F 20	1 12	7 28	5 0	3 13	0 23	12 11	0 14	5 17	1 3	7 58	0 58	7 39	1 45	22 46	0 0	1 10	1 25	0 39	16 19	23 4	23 7	18 7	6 4	6 19			
S 21	0 49	12 7	4 56	3 58	0 16	12 39	0 18	5 2	1 3	7 54	0 58	7 36	1 45	22 46	0 0	1 11	1 25	0 40	16 20	23 5	23 7	18 9	6 5	6 19			
S 22	0 25	16 17	4 40	4 43	0 9	13 7	0 21	4 47	1 2	7 49	0 58	7 33	1 45	22 46	0 0	1 12	1 25	0 40	16 20	23 6	23 7	18 11	6 6	6 19			
M23	0 2	19 46	4 11	5 27	0 1	13 34	0 24	4 31	1 2	7 44	0 58	7 31	1 45	22 46	0 0	1 12	1 25	0 40	16 20	23 6	23 7	18 13	6 8	6 18			
T 24	0s22	22 26	3 32	6 10	0s 6	14 1	0 27	4 16	1 2	7 39	0 58	7 28	1 45	22 46	0 0	1 13	1 25	0 41	16 20	23 7	23 8	18 15	6 9	6 18			
W25	0 45	24 8	2 43	6 53	0 13	14 28	0 31	4 1	1 2	7 34	0 58	7 25	1 46	22 46	0 0	1 14	1 25	0 41	16 20	23 7	23 8	18 17	6 10	6 18			
T 26	1 9	24 45	1 47	7 35	0 20	14 55	0 34	3 45	1 1	7 30	0 59	7 22	1 46	22 46	0 0	1 14	1 25	0 42	16 21	23 7	23 8	18 18	6 11	6 17			
F 27	1 32	24 13	0 45	8 17	0 28	15 21	0 37	3 30	1 1	7 25	0 59	7 19	1 46	22 46	0 0	1 15	1 25	0 42	16 21	23 7	23 8	18 20	6 12	6 17			
S 28	1 55	22 28	0s20	8 58	0 35	15 47	0 41	3 14	1 1	7 20	0 59	7 17	1 46	22 45	0 0	1 16	1 25	0 43	16 21	23 7	23 9	18 22	6 13	6 17			
S 29	2 19	19 33	1 27	9 39	0 42	16 12	0 44	2 59	1 1	7 15	0 59	7 14	1 46	22 45	0 0	1 16	1 25	0 43	16 21	23 8	23 9	18 24	6 14	6 17			
M30	2s42	15n33	2s30	10s19	0s49	16s37	0s47	2n43	1n 1	7n11	0n59	7n11	1n46	22n45	0n 0	1s17	1s25	0s43	16s21	23s 8	23s 9	18n26	6s15	6n16			

ASTRODIENST EPHEMERIS for the year 1861

geocentric

OCTOBER 1861

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	0 38 50	7♂47'08	22♂52	26♂ 6	14♂34	26♂ 8	14♂17	16♂ 2	16♂R19	0♂R 0	10♂R 1	9♂R16	8♂59	8♂ 4	28♂R 5	T 1
W 2	0 42 47	8°46'15	7♂ 3	27°34	15°46	26°46	14°29	16° 9	16♂II18	29♂59	10♂ 0	9♂ 9	8°56	8°10	28♂≈ 3	W 2
T 3	0 46 43	9°45'23	21°40	29° 1	16°58	27°25	14°42	16°16	16°18	29°57	9°59	8°59	8°52	8°17	28° 1	T 3
F 4	0 50 40	10°44'34	6♂39	0♂27	18° 9	28° 4	14°54	16°24	16°17	29°55	9°58	8°48	8°49	8°24	27°59	F 4
S 5	0 54 36	11°43'46	21°49	1°53	19°21	28°42	15° 6	16°31	16°16	29°54	9°57	8°36	8°46	8°30	27°57	S 5
S 6	0 58 33	12°43'01	7♂ 0	3°17	20°33	29°21	15°19	16°38	16°16	29°52	9°56	8°26	8°43	8°37	27°55	S 6
M 7	1 2 29	13°42'18	22° 2	4°40	21°44	29°59	15°31	16°45	16°15	29°51	9°55	8°18	8°40	8°44	27°53	M 7
T 8	1 6 26	14°41'37	6♂46	6° 3	22°56	0♂38	15°43	16°52	16°14	29°49	9°54	8°13	8°37	8°51	27°51	T 8
W 9	1 10 23	15°40'57	21° 8	7°24	24° 7	1°17	15°55	16°59	16°13	29°47	9°53	8°10	8°33	8°57	27°50	W 9
T 10	1 14 19	16°40'20	5♂ 4	8°44	25°19	1°56	16° 7	17° 6	16°12	29°46	9°52	8°D 9	8°30	9° 4	27°48	T 10
F 11	1 18 16	17°39'43	18°37	10° 3	26°30	2°34	16°19	17°12	16°11	29°44	9°51	8°R 9	8°27	9°11	27°46	F 11
S 12	1 22 12	18°39'09	1♂48	11°21	27°42	3°13	16°31	17°19	16°10	29°43	9°50	8° 9	8°24	9°17	27°45	S 12
S 13	1 26 9	19°38'37	14°40	12°37	28°53	3°52	16°43	17°26	16° 9	29°41	9°49	8° 7	8°21	9°24	27°43	S 13
M14	1 30 5	20°38'06	27°17	13°52	0♂ 4	4°30	16°55	17°33	16° 8	29°40	9°48	8° 2	8°17	9°31	27°42	M14
T 15	1 34 2	21°37'37	9♂42	15° 6	1°16	5° 9	17° 7	17°40	16° 7	29°38	9°47	7°54	8°14	9°37	27°40	T 15
W16	1 37 58	22°37'09	21°57	16°17	2°27	5°48	17°18	17°46	16° 6	29°37	9°46	7°44	8°11	9°44	27°39	W16
T 17	1 41 55	23°36'44	4♂ 5	17°28	3°38	6°27	17°30	17°53	16° 5	29°35	9°45	7°31	8° 8	9°51	27°38	T 17
F 18	1 45 52	24°36'20	16° 6	18°36	4°49	7° 6	17°42	17°59	16° 3	29°34	9°44	7°18	8° 5	9°58	27°36	F 18
S 19	1 49 48	25°35'59	28° 2	19°42	6° 0	7°44	17°53	18° 6	16° 2	29°32	9°43	7° 4	8° 2	10° 4	27°35	S 19
S 20	1 53 45	26°35'39	9♂55	20°46	7°11	8°23	18° 5	18°12	16° 1	29°31	9°41	6°52	7°58	10°11	27°34	S 20
M21	1 57 41	27°35'22	21°45	21°47	8°22	9° 2	18°16	18°19	15°59	29°29	9°40	6°42	7°55	10°18	27°33	M21
T 22	2 1 38	28°35'07	3♂35	22°46	9°33	9°41	18°28	18°25	15°58	29°28	9°39	6°34	7°52	10°24	27°32	T 22
W23	2 5 34	29°34'54	15°27	23°41	10°43	10°20	18°39	18°32	15°56	29°26	9°38	6°29	7°49	10°31	27°31	W23
T 24	2 9 31	0♂34'43	27°25	24°34	11°54	10°59	18°50	18°38	15°55	29°25	9°37	6°27	7°46	10°38	27°30	T 24
F 25	2 13 27	1°34'34	9♂33	25°22	13° 5	11°38	19° 1	18°44	15°53	29°24	9°36	6°D27	7°43	10°44	27°29	F 25
S 26	2 17 24	2°34'28	21°55	26° 6	14°15	12°17	19°12	18°50	15°52	29°22	9°35	6°27	7°39	10°51	27°29	S 26
S 27	2 21 21	3°34'23	4♂36	26°46	15°26	12°56	19°23	18°56	15°50	29°21	9°34	6°R28	7°36	10°58	27°28	S 27
M28	2 25 17	4°34'21	17°42	27°20	16°36	13°35	19°34	19° 2	15°48	29°20	9°33	6°27	7°33	11° 5	27°27	M28
T 29	2 29 14	5°34'21	1♂15	27°49	17°46	14°14	19°45	19° 8	15°47	29°19	9°31	6°24	7°30	11°11	27°27	T 29
W30	2 33 10	6°34'23	15°18	28°11	18°57	14°53	19°56	19°14	15°45	29°17	9°30	6°19	7°27	11°18	27°26	W30
T 31	2 37 7	7♂34'28	29♂50	28♂27	20♂ 7	15♂32	20♂ 7	19♂20	15♂43	29♂16	9♂29	6♂11	7♂23	11♂25	27♂≈26	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	3s 5	10n37	3s28	10s58	0s57	17s 2	0s51	2n28	1n 0	7n 6	0n59	7n 9	1n46	22n45	0n 0	1s18
W 2	3 29	4 59	4 15	11 37	1 4	17 26	0 54	2 12	1 0	7 1	0 59	7 6	1 46	22 45	0 0	1 18
T 3	3 52	1s 5	4 47	12 15	1 11	17 50	0 57	1 57	1 0	6 57	0 59	7 3	1 46	22 45	0 0	1 19
F 4	4 15	7 14	5 0	12 52	1 18	18 13	1 1	1 41	1 0	6 52	0 59	7 1	1 47	22 45	0 0	1 20
S 5	4 39	13 1	4 52	13 28	1 25	18 36	1 4	1 25	0 59	6 47	0 59	6 58	1 47	22 45	0 0	1 20
S 6	5 2	18 1	4 24	14 4	1 32	18 59	1 7	1 10	0 59	6 43	1 0	6 55	1 47	22 45	0 0	1 21
M 7	5 25	21 48	3 38	14 39	1 39	19 21	1 11	0 54	0 59	6 38	1 0	6 53	1 47	22 45	0 0	1 21
T 8	5 48	24 3	2 38	15 12	1 46	19 43	1 14	0 39	0 59	6 33	1 0	6 50	1 47	22 45	0 0	1 22
W 9	6 11	24 38	1 29	15 46	1 52	20 4	1 17	0 23	0 58	6 29	1 0	6 48	1 47	22 45	0 0	1 23
T 10	6 33	23 38	0 16	16 18	1 59	20 25	1 20	0 7	0 58	6 24	1 0	6 45	1 47	22 45	0 0	1 23
F 11	6 56	21 15	0n55	16 49	2 5	20 45	1 24	0s 8	0 58	6 20	1 0	6 42	1 47	22 45	0 0	1 24
S 12	7 19	17 48	2 2	17 19	2 11	21 4	1 27	0 24	0 58	6 15	1 0	6 40	1 48	22 45	0 0	1 25
S 13	7 41	13 34	3 0	17 48	2 17	21 23	1 30	0 39	0 57	6 10	1 0	6 37	1 48	22 45	0 0	1 25
M14	8 4	8 50	3 49	18 17	2 22	21 42	1 33	0 55	0 57	6 6	1 1	6 35	1 48	22 44	0 0	1 26
T 15	8 26	3 50	4 26	18 44	2 28	22 0	1 36	1 11	0 57	6 2	1 1	6 32	1 48	22 44	0 0	1 26
W16	8 48	1n14	4 50	19 10	2 33	22 17	1 39	1 26	0 57	5 57	1 1	6 30	1 48	22 44	0 0	1 27
T 17	9 10	6 13	5 0	19 34	2 38	22 34	1 42	1 42	0 56	5 53	1 1	6 27	1 48	22 44	0 0	1 28
F 18	9 32	10 54	4 57	19 58	2 42	22 50	1 45	1 58	0 56	5 48	1 1	6 25	1 49	22 44	0 0	1 28
S 19	9 54	15 9	4 41	20 20	2 46	23 6	1 48	2 13	0 56	5 44	1 1	6 23	1 49	22 44	0 0	1 29
S 20	10 16	18 48	4 13	20 41	2 50	23 21	1 51	2 29	0 55	5 39	1 1	6 20	1 49	22 44	0 0	1 29
M21	10 37	21 39	3 34	21 0	2 53	23 36	1 54	2 44	0 55	5 35	1 2	6 18	1 49	22 44	0 0	1 30
T 22	10 59	23 35	2 45	21 18	2 55	23 49	1 57	3 0	0 55	5 31	1 2	6 15	1 49	22 43	0 0	1 30
W23	11 20	24 28	1 49	21 35	2 58	24 3	2 0	3 15	0 55	5 27	1 2	6 13	1 49	22 43	0 0	1 31
T 24	11 41	24 14	0 48	21 49	2 59	24 15	2 2	3 31	0 54	5 22	1 2	6 11	1 50	22 43	0 0	1 31
F 25	12 2	22 50	0s17	22 2	3 0	24 27	2 5	3 46	0 54	5 18	1 2	6 9	1 50	22 43	0 0	1 32
S 26	12 23	20 20	1 22	22 13	3 0	24 38	2 7	4 2	0 54	5 14	1 2	6 6	1 50	22 43	0 0	1 32
S 27	12 43	16 47	2 24	22 21	2 59	24 49	2 10	4 17	0 53	5 10	1 2	6 4	1 50	22 43	0 0	1 33
M28	13 3	12 20	3 22	22 28	2 58	24 59	2 12	4 33	0 53	5 5	1 3	6 2	1 50	22 42	0 0	1 33
T 29	13 23	7 9	4 10	22 32	2 55	25 8	2 15	4 48	0 53	5 1	1 3	6 0	1 50	22 42	0 0	1 34
W30	13 43	1 25	4 45	22 33	2 52	25 16	2 17	5 4	0 52	4 57	1 3	5 58	1 51	22 42	0 0	1 34
T 31	14s 3	4s34	5s 3	22s32	2s47	25s24	2s19	5s19	0n52	4n53	1n 3	5n55	1n51	22n42	0n 0	1s35

Julian Day Number = 2401049.5, Delta T = 8.96 sec

Ecliptic obliquity = 23°27'28", Nutation = 0°00'17", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 22°48'35", Lahiri = 21°55'35"

ASTRODIENST EPHEMERIS for the year 1861
geocentric

NOVEMBER 1861

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	2 41 3	8♉34'34	14♊46	28°R35	21♊17	16♊11	20♊17	19♊26	15°R41	29°R15	9°R28	6°R 3	7♊20	11♊31	27°R25	F 1
S 2	2 45 0	9°34'42	29°59	28♉35	22°27	16°50	20°28	19°32	15♊39	29°R14	9♊27	5♊54	7°17	11°38	27°R25	S 2
S 3	2 48 56	10°34'53	15♉19	28°26	23°37	17°29	20°38	19°37	15°37	29°12	9°26	5°45	7°14	11°45	27°25	S 3
M 4	2 52 53	11°35'05	0♊33	28° 7	24°47	18° 8	20°49	19°43	15°35	29°11	9°25	5°39	7°11	11°51	27°24	M 4
T 5	2 56 50	12°35'19	0♊32	27°39	25°57	18°47	20°59	19°49	15°33	29°10	9°24	5°35	7° 8	11°58	27°24	T 5
W 6	3 0 46	13°35'34	0♊38	27° 1	27° 6	19°26	21° 9	19°54	15°31	29° 9	9°22	5°D33	7° 4	12° 5	27°24	W 6
T 7	3 4 43	14°35'51	14°18	26°14	28°16	20° 5	21°19	20° 0	15°29	29° 8	9°21	5°33	7° 1	12°12	27°D24	T 7
F 8	3 8 39	15°36'10	27°59	25°17	29°25	20°45	21°29	20° 5	15°27	29° 7	9°20	5°34	6°58	12°18	27°24	F 8
S 9	3 12 36	16°36'30	11♊15	24°12	0♊35	21°24	21°39	20°10	15°25	29° 6	9°19	5°R35	6°55	12°25	27°24	S 9
S 10	3 16 32	17°36'51	24° 8	23° 0	1°44	22° 3	21°49	20°15	15°23	29° 5	9°18	5°35	6°52	12°32	27°24	S 10
M 11	3 20 29	18°37'13	6♊41	21°42	2°53	22°42	21°58	20°20	15°21	29° 4	9°17	5°33	6°49	12°38	27°24	M 11
T 12	3 24 25	19°37'37	19° 0	20°22	4° 2	23°21	22° 8	20°26	15°19	29° 3	9°16	5°30	6°45	12°45	27°25	T 12
W 13	3 28 22	20°38'02	1°Y 7	19° 2	5°11	24° 1	22°17	20°31	15°16	29° 2	9°15	5°24	6°42	12°52	27°25	W 13
T 14	3 32 19	21°38'29	13° 7	17°44	6°20	24°40	22°27	20°35	15°14	29° 1	9°14	5°16	6°39	12°58	27°25	T 14
F 15	3 36 15	22°38'57	25° 1	16°31	7°28	25°19	22°36	20°40	15°12	29° 1	9°12	5° 8	6°36	13° 5	27°26	F 15
S 16	3 40 12	23°39'27	6♊53	15°25	8°37	25°59	22°45	20°45	15° 9	29° 0	9°11	4°59	6°33	13°12	27°26	S 16
S 17	3 44 8	24°39'58	18°44	14°28	9°45	26°38	22°54	20°50	15° 7	28°59	9°10	4°52	6°29	13°18	27°27	S 17
M 18	3 48 5	25°40'31	0♊36	13°42	10°53	27°17	23° 3	20°54	15° 5	28°58	9° 9	4°45	6°26	13°25	27°28	M 18
T 19	3 52 1	26°41'05	12°30	13° 7	12° 2	27°57	23°12	20°59	15° 2	28°58	9° 8	4°41	6°23	13°32	27°28	T 19
W 20	3 55 58	27°41'41	24°39	12°43	13° 9	28°36	23°20	21° 3	15° 0	28°57	9° 7	4°39	6°20	13°39	27°29	W 20
T 21	3 59 54	28°42'18	6♊34	12°32	14°17	29°15	23°29	21° 7	14°58	28°56	9° 6	4°D38	6°17	13°45	27°30	T 21
F 22	4 3 51	29°42'57	18°49	12°D31	15°25	29°55	23°37	21°12	14°55	28°56	9° 5	4°39	6°14	13°52	27°31	F 22
S 23	4 7 48	0♊43'38	1♊16	12°41	16°32	0♉34	23°46	21°16	14°53	28°55	9° 4	4°41	6°10	13°59	27°32	S 23
S 24	4 11 44	1°44'20	14° 0	13° 1	17°40	1°14	23°54	21°20	14°50	28°54	9° 3	4°42	6° 7	14° 5	27°33	S 24
M 25	4 15 41	2°45'04	27° 3	13°30	18°47	1°53	24° 2	21°24	14°48	28°54	9° 2	4°R43	6° 4	14°12	27°34	M 25
T 26	4 19 37	3°45'49	10♊29	14° 7	19°53	2°33	24°10	21°28	14°45	28°53	9° 1	4°43	6° 1	14°19	27°35	T 26
W 27	4 23 34	4°46'36	24°20	14°52	21° 0	3°12	24°18	21°32	14°43	28°53	9° 0	4°42	5°58	14°25	27°36	W 27
T 28	4 27 30	5°47'24	8♊36	15°42	22° 7	3°52	24°26	21°35	14°40	28°53	8°59	4°39	5°55	14°32	27°37	T 28
F 29	4 31 27	6°48'14	23°15	16°38	23°13	4°31	24°33	21°39	14°38	28°52	8°58	4°35	5°51	14°39	27°39	F 29
S 30	4 35 23	7♊49'05	8♉13	17♉39	24♊19	5♉11	24♊41	21♊42	14♊35	28°52	8°57	4♊31	5♊48	14♊46	27°40	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	14s22	10s27	5s 1	22s28	2s41	25s31	2s21	5s34	0n52	4n49	1n 3	5n53	1n51	22n42	0n 0	1s35	1s24	0s56	16s24	23s19	23s15	19n21	6s40	6n 4	
S 2	14 42	15 49	4 39	22 21	2 33	25 38	2 24	5 50	0 51	4 45	1 3	5 51	1 51	22 42	0 0	1 36	1 24	0 56	16 24	23 20	23 15	19 23	6 41	6 4	
S 3	15 0	20 12	3 56	22 10	2 24	25 44	2 26	6 5	0 51	4 41	1 4	5 49	1 51	22 41	0 1	1 36	1 24	0 56	16 24	23 20	23 16	19 24	6 41	6 4	
M 4	15 19	23 9	2 56	21 55	2 13	25 49	2 28	6 20	0 51	4 37	1 4	5 47	1 52	22 41	0 1	1 37	1 24	0 57	16 24	23 20	23 16	19 26	6 42	6 3	
T 5	15 38	24 25	1 45	21 37	2 1	25 53	2 29	6 35	0 50	4 33	1 4	5 45	1 52	22 41	0 1	1 37	1 24	0 57	16 24	23 20	23 16	19 27	6 42	6 3	
W 6	15 56	23 57	0 29	21 15	1 47	25 57	2 31	6 50	0 50	4 30	1 4	5 43	1 52	22 41	0 1	1 37	1 24	0 57	16 24	23 20	23 16	19 29	6 42	6 2	
T 7	16 14	21 55	0n47	20 48	1 32	26 0	2 33	7 5	0 50	4 26	1 4	5 41	1 52	22 41	0 1	1 38	1 24	0 58	16 24	23 20	23 16	19 31	6 43	6 2	
F 8	16 31	18 39	1 58	20 18	1 15	26 2	2 34	7 20	0 49	4 22	1 5	5 39	1 52	22 40	0 1	1 38	1 24	0 58	16 24	23 20	23 16	19 32	6 43	6 1	
S 9	16 49	14 31	3 0	19 44	0 56	26 3	2 36	7 35	0 49	4 18	1 5	5 37	1 53	22 40	0 1	1 39	1 24	0 58	16 23	23 20	23 17	19 34	6 44	6 1	
S 10	17 6	9 51	3 52	19 7	0 36	26 4	2 37	7 50	0 49	4 15	1 5	5 36	1 53	22 40	0 1	1 39	1 24	0 58	16 23	23 20	23 17	19 35	6 44	6 1	
M11	17 23	4 53	4 30	18 28	0 16	26 4	2 39	8 5	0 48	4 11	1 5	5 34	1 53	22 40	0 1	1 39	1 24	0 59	16 23	23 20	23 17	19 37	6 44	6 0	
T 12	17 39	0n11	4 56	17 47	0n 5	26 3	2 40	8 20	0 48	4 7	1 5	5 32	1 53	22 39	0 1	1 40	1 24	0 59	16 23	23 21	23 17	19 39	6 45	6 0	
W13	17 55	5 9	5 7	17 5	0 25	26 2	2 41	8 35	0 48	4 4	1 5	5 30	1 54	22 39	0 1	1 40	1 24	0 59	16 23	23 21	23 17	19 40	6 45	5 59	
T 14	18 11	9 52	5 5	16 25	0 45	26 0	2 42	8 50	0 47	4 0	1 6	5 28	1 54	22 39	0 1	1 40	1 24	0 59	16 23	23 21	23 17	19 42	6 45	5 59	
F 15	18 27	14 11	4 50	15 46	1 4	25 57	2 43	9 4	0 47	3 57	1 6	5 27	1 54	22 39	0 1	1 41	1 24	1 0	16 23	23 21	23 18	19 43	6 45	5 58	
S 16	18 42	17 57	4 22	15 11	1 21	25 54	2 43	9 19	0 47	3 53	1 6	5 25	1 54	22 38	0 1	1 41	1 24	1 0	16 23	23 22	23 18	19 45	6 46	5 58	
S 17	18 57	20 59	3 43	14 39	1 37	25 50	2 44	9 34	0 46	3 50	1 6	5 23	1 54	22 38	0 1	1 41	1 24	1 0	16 23	23 22	23 18	19 46	6 46	5 58	
M18	19 12	23 8	2 54	14 12	1 50	25 45	2 45	9 48	0 46	3 47	1 6	5 22	1 55	22 38	0 1	1 41	1 24	1 0	16 23	23 22	23 18	19 48	6 46	5 57	
T 19	19 26	24 15	1 58	13 51	2 2	25 39	2 45	10 3	0 45	3 43	1 7	5 20	1 55	22 38	0 1	1 42	1 24	1 0	16 23	23 22	23 18	19 49	6 46	5 57	
W20	19 40	24 16	0 55	13 35	2 12	25 33	2 45	10 17	0 45	3 40	1 7	5 19	1 55	22 37	0 1	1 42	1 24	1 1	16 22	23 23	23 18	19 51	6 46	5 56	
T 21	19 53	23 7	0s11	13 24	2 19	25 26	2 46	10 31	0 45	3 37	1 7	5 17	1 55	22 37	0 1	1 42	1 24	1 1	16 22	23 23	23 19	19 53	6 46	5 56	
F 22	20 6	20 52	1 17	13 19	2 25	25 19	2 46	10 46	0 44	3 34	1 7	5 16	1 56	22 37	0 1	1 42	1 24	1 1	16 22	23 23	23 19	19 54	6 46	5 56	
S 23	20 19	17 36	2 21	13 18	2 29	25 10	2 46	11 0	0 44	3 31	1 8	5 14	1 56	22 37	0 1	1 43	1 24	1 1	16 22	23 22	23 19	19 56	6 47	5 55	
S 24	20 32	13 28	3 19	13 22	2 31	25 1	2 45	11 14	0 43	3 28	1 8	5 13	1 56	22 36	0 1	1 43	1 24	1 1	16 22	23 22	23 19	19 57	6 47	5 55	
M25	20 44	8 37	4 8	13 29	2 32	24 52	2 45	11 28	0 43	3 25	1 8	5 12	1 56	22 36	0 1	1 43	1 24	1 2	16 22	23 22	23 19	19 59	6 47	5 54	
T 26	20 55	3 14	4 46	13 41	2 31	24 42	2 45	11 42	0 43	3 22	1 8	5 10	1 57	22 36	0 1	1 43	1 24	1 2	16 22	23 22	23 19	20 0	6 47	5 54	
W27	21 6	2s28	5 8	13 55	2 30	24 31	2 44	11 56	0 42	3 19	1 8	5 9	1 57	22 36	0 1	1 43	1 24	1 2	16 21	23 22	23 19	20 2	6 47	5 54	
T 28	21 17	8 12	5 13	14 12	2 27	24 20	2 43	12 10	0 42	3 16	1 9	5 8	1 57	22 35	0 1	1 43	1 23	1 2	16 21	23 23	23 20	20 3	6 47	5 53	
F 29	21 28	13 38	4 57	14 31	2 24	24 8	2 42	12 23	0 41	3 13	1 9	5 7	1 57	22 35	0 1	1 44	1 23	1 2	16 21	23 23	23 20	20 5	6 46	5 53	
S 30	21s38	18s22	4s21	14s52	2n20	23s55	2s41	12s37	0n41	3n10	1n 9	5n 6	1n58	22n35	0n 1	1s44	1s23	1s 2	16s21	23s23	23s20	20n 6	6s46	5n52	

ASTRODIENST EPHEMERIS for the year 1861

geocentric

DECEMBER 1861

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

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	21s47	21s58	3s27	15s15	2n15	23s42	2s40	12s51	0n40	3n 8	1n 9	5n 4	1n58	22n34	0n 1	S 1
M 2	21 57	24 0	2 18	15 39	2 10	23 28	2 39	13 4	0 40	3 5	1 10	5 3	1 58	22 34	0 1	M 2
T 3	22 5	24 17	1 0	16 3	2 4	23 14	2 37	13 17	0 40	3 3	1 10	5 2	1 58	22 34	0 1	T 3
W 4	22 14	22 51	0n21	16 28	1 58	22 59	2 36	13 31	0 39	3 0	1 10	5 1	1 59	22 34	0 1	W 4
T 5	22 22	19 57	1 38	16 54	1 51	22 43	2 34	13 44	0 39	2 58	1 10	5 0	1 59	22 33	0 1	T 5
F 6	22 29	15 59	2 48	17 20	1 44	22 27	2 32	13 57	0 38	2 55	1 11	4 59	1 59	22 33	0 1	F 6
S 7	22 36	11 19	3 45	17 46	1 38	22 11	2 30	14 10	0 38	2 53	1 11	4 59	1 59	22 33	0 1	S 7
S 8	22 43	6 17	4 29	18 11	1 30	21 54	2 28	14 23	0 37	2 51	1 11	4 58	2 0	22 32	0 1	S 8
M 9	22 49	1 9	4 59	18 37	1 23	21 37	2 26	14 36	0 37	2 48	1 11	4 57	2 0	22 32	0 1	M 9
T 10	22 55	3n55	5 14	19 2	1 16	21 19	2 23	14 49	0 36	2 46	1 12	4 56	2 0	22 32	0 1	T 10
W 11	23 0	8 44	5 15	19 27	1 8	21 0	2 20	15 1	0 36	2 44	1 12	4 55	2 0	22 32	0 1	W 11
T 12	23 5	13 10	5 2	19 51	1 1	20 42	2 17	15 14	0 35	2 42	1 12	4 55	2 1	22 31	0 1	T 12
F 13	23 9	17 4	4 36	20 15	0 53	20 22	2 14	15 26	0 35	2 40	1 12	4 54	2 1	22 31	0 1	F 13
S 14	23 13	20 18	3 58	20 37	0 46	20 3	2 11	15 38	0 34	2 38	1 13	4 54	2 1	22 31	0 1	S 14
S 15	23 17	22 41	3 11	21 0	0 38	19 43	2 8	15 51	0 34	2 37	1 13	4 53	2 2	22 30	0 1	S 15
M 16	23 19	22 4	2 14	21 21	0 31	19 22	2 4	16 3	0 33	2 35	1 13	4 52	2 2	22 30	0 1	M 16
T 17	23 23	24 22	1 11	21 41	0 23	19 2	2 0	16 15	0 33	2 33	1 13	4 52	2 2	22 30	0 1	T 17
W 18	23 24	23 29	0 4	22 1	0 16	18 41	1 57	16 26	0 32	2 32	1 14	4 52	2 2	22 30	0 1	W 18
T 19	23 26	21 28	1s 4	22 20	0 8	18 19	1 52	16 38	0 32	2 30	1 14	4 51	2 3	22 29	0 1	T 19
F 20	23 27	18 24	2 10	22 37	0 1	17 57	1 48	16 50	0 31	2 29	1 14	4 51	2 3	22 29	0 1	F 20
S 21	23 27	14 25	3 10	22 54	0s 6	17 35	1 44	17 1	0 31	2 27	1 14	4 51	2 3	22 29	0 1	S 21
S 22	23 27	9 43	4 2	23 9	0 13	17 13	1 39	17 12	0 30	2 26	1 15	4 50	2 4	22 28	0 1	S 22
M 23	23 27	4 30	4 43	23 24	0 20	16 50	1 34	17 24	0 30	2 25	1 15	4 50	2 4	22 28	0 1	M 23
T 24	23 26	1s 1	5 9	23 37	0 27	16 27	1 29	17 35	0 29	2 23	1 15	4 50	2 4	22 28	0 1	T 24
W 25	23 25	6 36	5 18	23 49	0 33	16 4	1 24	17 46	0 29	2 22	1 15	4 50	2 4	22 28	0 1	W 25
T 26	23 23	11 59	5 8	24 0	0 40	15 41	1 18	17 57	0 28	2 21	1 16	4 50	2 5	22 27	0 1	T 26
F 27	23 21	16 49	4 39	24 10	0 46	15 17	1 13	18 7	0 28	2 20	1 16	4 50	2 5	22 27	0 1	F 27
S 28	23 18	20 44	3 53	24 18	0 52	14 54	1 7	18 18	0 27	2 19	1 16	4 50	2 5	22 27	0 1	S 28
S 29	23 15	23 22	2 50	24 25	0 58	14 30	1 1	18 28	0 26	2 18	1 17	4 50	2 5	22 27	0 1	S 29
M 30	23 12	24 24	1 36	24 31	1 4	14 6	0 55	18 39	0 26	2 18	1 17	4 50	2 6	22 26	0 1	M 30
T 31	23s 8	23s43	0s16	24s36	1s10	13s41	0s48	18s49	0n25	2n17	1n17	4n50	2n 6	22n26	0n 1	T 31

Julian Day Number = 2401110.5, Delta T = 8.97 sec
 Ecliptic obliquity = 23°27'27", Nutation = 0°00'16", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 22°48'43", Lahiri = 21°55'44"