



# Astrodienst Ephemeris Tables for the year 1860

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 1860

## geocentric

JANUARY 1860

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	6 39 31	9°35'17"	4°45'52"	17°14'14"	3°38'09"	11°18'25"	21°18'35"	25°18'31"	4°18'24"	24°18'33"	6°18'38"	11°18'34"	12°18'49"	26°18'43"	19°18'47"	S 1
M 2	6 43 28	10°52'27"	17°03'38"	18°06'06"	4°24'24"	12°02'22"	21°28'27"	25°28'29"	4°18'22"	24°18'34"	6°18'38"	11°18'34"	12°18'46"	26°18'50"	19°18'50"	M 2
T 3	6 47 24	11°53'36"	29°33'36"	19°01'19"	5°39'39"	12°39'39"	21°19'21"	25°26'26"	4°21'21"	24°18'35"	6°18'38"	11°18'33"	12°18'43"	26°18'56"	19°18'54"	T 3
W 4	6 51 21	12°54'45"	12°28'26"	20°00'00"	6°53'53"	13°16'16"	21°11'21"	25°23'23"	4°19'19"	24°18'36"	6°18'37"	11°18'30"	12°18'39"	27°03'03"	19°18'58"	W 4
T 5	6 55 17	13°55'54"	25°43'43"	21°03'03"	8°08'08"	13°53'53"	21°03'21"	25°20'20"	4°17'17"	24°18'37"	6°18'37"	11°18'26"	12°18'36"	27°10'10"	20°01'01"	T 5
F 6	6 59 14	14°57'03"	9°12'28"	22°08'08"	9°23'23"	14°30'30"	20°55'55"	25°17'17"	4°15'15"	24°18'38"	6°18'37"	11°18'22"	12°18'33"	27°16'16"	20°05'05"	F 6
S 7	7 3 10	15°58'11"	23°38'38"	23°16'16"	10°37'37"	15°07'07"	20°47'47"	25°14'14"	4°13'13"	24°18'39"	6°18'36"	11°18'18"	12°18'30"	27°23'23"	20°09'09"	S 7
S 8	7 7 7	16°59'19"	8°28'11"	24°26'26"	11°52'52"	15°44'44"	20°39'39"	25°11'11"	4°12'12"	24°18'40"	6°18'36"	11°18'15"	12°18'27"	27°30'30"	20°13'13"	S 8
M 9	7 11 4	18°02'27"	22°58'58"	25°38'38"	13°07'07"	16°21'21"	20°31'31"	25°07'07"	4°10'10"	24°18'41"	6°18'36"	11°18'12"	12°18'24"	27°36'36"	20°17'17"	M 9
T 10	7 15 0	19°13'35"	7°12'54"	26°52'52"	14°21'21"	16°58'58"	20°23'23"	25°04'04"	4°09'09"	24°18'42"	6°18'35"	11°18'12"	12°18'20"	27°43'43"	20°20'20"	T 10
W 11	7 18 57	20°24'42"	22°50'50"	28°08'08"	15°36'36"	17°35'35"	20°15'15"	25°00'00"	4°07'07"	24°18'44"	6°18'35"	11°18'12"	12°18'17"	27°50'50"	20°24'24"	W 11
T 12	7 22 53	21°34'49"	7°12'28"	29°25'25"	16°51'51"	18°12'12"	20°07'07"	24°57'57"	4°06'06"	24°18'45"	6°18'35"	11°18'13"	12°18'14"	27°56'56"	20°28'28"	T 12
F 13	7 26 50	22°45'55"	22°12'12"	0°34'44"	18°05'05"	18°48'48"	19°59'59"	24°53'53"	4°04'04"	24°18'46"	6°18'35"	11°18'14"	12°18'11"	28°03'03"	20°32'32"	F 13
S 14	7 30 46	23°6'02"	6°22'28"	2°04'04"	19°20'20"	19°25'25"	19°51'51"	24°50'50"	4°03'03"	24°18'47"	6°18'35"	11°18'16"	12°18'08"	28°10'10"	20°36'36"	S 14
S 15	7 34 43	24°7'08"	20°25'25"	3°25'25"	20°34'34"	20°02'02"	19°43'43"	24°46'46"	4°01'01"	24°18'49"	6°18'35"	11°18'16"	12°18'05"	28°16'16"	20°40'40"	S 15
M 16	7 38 39	25°8'15"	4°18'15"	4°47'47"	21°49'49"	20°39'39"	19°35'35"	24°42'42"	4°00'00"	24°18'50"	6°18'34"	11°18'16"	12°18'01"	28°23'23"	20°44'44"	M 16
T 17	7 42 36	26°9'21"	17°20'20"	6°10'10"	23°03'03"	21°16'16"	19°27'27"	24°38'38"	3°59'59"	24°18'51"	6°18'34"	11°18'15"	11°58'58"	28°30'30"	20°48'48"	T 17
W 18	7 46 33	27°10'27"	0°12'12"	7°34'34"	24°18'18"	21°52'52"	19°19'19"	24°34'34"	3°57'57"	24°18'53"	6°18'34"	11°18'13"	11°55'55"	28°36'36"	20°52'52"	W 18
T 19	7 50 29	28°11'32"	13°06'06"	8°59'59"	25°32'32"	22°29'29"	19°11'11"	24°30'30"	3°56'56"	24°18'54"	6°18'34"	11°18'12"	11°52'52"	28°43'43"	20°56'56"	T 19
F 20	7 54 26	29°12'37"	25°38'38"	10°25'25"	26°46'46"	23°06'06"	19°03'03"	24°26'26"	3°55'55"	24°18'56"	6°18'34"	11°18'10"	11°49'49"	28°50'50"	21°00'00"	F 20
S 21	7 58 22	0°13'42"	7°23'57"	11°51'51"	28°01'01"	23°42'42"	18°55'55"	24°22'22"	3°54'54"	24°18'57"	6°18'34"	11°18'08"	11°45'45"	28°56'56"	21°05'05"	S 21
S 22	8 2 19	1°14'46"	20°07'07"	13°19'19"	29°15'15"	24°19'19"	18°47'47"	24°18'18"	3°53'53"	24°18'59"	6°18'34"	11°18'07"	11°42'42"	29°03'03"	21°09'09"	S 22
M 23	8 6 15	2°15'49"	2°15'49"	14°47'47"	0°18'29"	24°56'56"	18°40'40"	24°13'13"	3°52'52"	25°00'00"	6°18'34"	11°18'06"	11°39'39"	29°09'09"	21°13'13"	M 23
T 24	8 10 12	3°16'51"	14°03'03"	16°16'16"	1°44'44"	25°32'32"	18°32'32"	24°09'09"	3°51'51"	25°02'02"	6°18'34"	11°18'06"	11°36'36"	29°16'16"	21°17'17"	T 24
W 25	8 14 8	4°17'52"	25°52'52"	17°45'45"	2°58'58"	26°09'09"	18°25'25"	24°04'04"	3°50'50"	25°03'03"	6°18'34"	11°18'06"	11°33'33"	29°23'23"	21°21'21"	W 25
T 26	8 18 5	5°18'53"	7°18'40"	19°15'15"	4°12'12"	26°45'45"	18°17'17"	24°00'00"	3°49'49"	25°05'05"	6°18'34"	11°18'07"	11°30'30"	29°29'29"	21°25'25"	T 26
F 27	8 22 2	6°19'52"	19°27'27"	20°46'46"	5°26'26"	27°21'21"	18°10'10"	23°56'56"	3°48'48"	25°06'06"	6°18'35"	11°18'07"	11°26'26"	29°36'36"	21°30'30"	F 27
S 28	8 25 58	7°20'50"	1°19'19"	22°18'18"	6°40'40"	27°58'58"	18°02'02"	23°51'51"	3°48'48"	25°08'08"	6°18'35"	11°18'08"	11°23'23"	29°43'43"	21°34'34"	S 28
S 29	8 29 55	8°21'47"	13°17'17"	23°50'50"	7°54'54"	28°34'34"	17°55'55"	23°46'46"	3°47'47"	25°10'10"	6°18'35"	11°18'08"	11°20'20"	29°49'49"	21°38'38"	S 29
M 30	8 33 51	9°22'43"	25°27'27"	25°23'23"	9°08'08"	29°10'10"	17°48'48"	23°42'42"	3°46'46"	25°11'11"	6°18'35"	11°18'09"	11°17'17"	29°56'56"	21°42'42"	M 30
T 31	8 37 48	10°23'38"	7°18'53"	26°23'57"	10°18'22"	29°18'47"	17°48'47"	23°42'47"	3°46'47"	25°11'13"	6°18'35"	11°18'09"	11°14'14"	0°18'18"	21°47'47"	T 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
S 1	23s 6	5n47	4n12	20s38	2n13	21s 2	1s36	14s21	0n58	22n 1	0n17	14n15	1n18	20n56	0s 6	3s20	1s17	1s46	16s23	17s20	16s59	11s27	9s 3	6n 9			
M 2	23 1	11 6	4 46	20 51	2 5	20 45	1 37	14 32	0 58	22 2	0 18	14 16	1 18	20 56	0 6	3 20	1 16	1 46	16 23	17 20	17 0	11 24	9 3	6 8			
T 3	22 56	16 6	5 7	21 5	1 56	20 27	1 37	14 44	0 58	22 4	0 18	14 17	1 18	20 56	0 6	3 19	1 16	1 46	16 23	17 20	17 1	11 21	9 2	6 8			
W 4	22 50	20 33	5 14	21 18	1 47	20 9	1 38	14 56	0 57	22 5	0 18	14 18	1 18	20 55	0 6	3 19	1 16	1 46	16 22	17 21	17 1	11 18	9 1	6 8			
T 5	22 44	24 8	5 4	21 31	1 38	19 50	1 38	15 7	0 57	22 6	0 18	14 19	1 19	20 55	0 6	3 19	1 16	1 45	16 22	17 22	17 2	11 15	9 0	6 7			
F 6	22 37	26 27	4 37	21 44	1 30	19 30	1 39	15 18	0 56	22 8	0 18	14 20	1 19	20 55	0 6	3 18	1 16	1 45	16 22	17 23	17 3	11 12	8 59	6 7			
S 7	22 30	27 11	3 53	21 57	1 21	19 11	1 39	15 29	0 56	22 9	0 18	14 22	1 19	20 55	0 6	3 18	1 16	1 45	16 21	17 24	17 4	11 9	8 58	6 7			
S 8	22 23	26 4	2 52	22 9	1 12	18 50	1 39	15 41	0 56	22 10	0 18	14 23	1 19	20 54	0 6	3 17	1 16	1 45	16 21	17 25	17 5	11 6	8 57	6 7			
M 9	22 15	23 8	1 39	22 20	1 3	18 29	1 40	15 52	0 55	22 12	0 19	14 24	1 19	20 54	0 6	3 17	1 16	1 44	16 21	17 26	17 6	11 3	8 56	6 6			
T 10	22 6	18 36	0 18	22 31	0 54	18 8	1 40	16 2	0 55	22 13	0 19	14 25	1 19	20 54	0 6	3 16	1 16	1 44	16 20	17 26	17 7	10 59	8 55	6 6			
W 11	21 58	12 55	1s 4	22 42	0 45	17 45	1 40	16 13	0 54	22 15	0 19	14 27	1 20	20 53	0 6	3 16	1 16	1 44	16 20	17 26	17 8	10 56	8 54	6 6			
T 12	21 48	6 32	2 21	22 51	0 37	17 23	1 40	16 24	0 54	22 16	0 19	14 28	1 20	20 53	0 6	3 15	1 16	1 44	16 20	17 26	17 9	10 53	8 53	6 6			
F 13	21 39	0s 5	3 28	22 59	0 28	17 0	1 39	16 34	0 54	22 17	0 19	14 30	1 20	20 53	0 6	3 15	1 16	1 43	16 19	17 25	17 9	10 50	8 52	6 6			
S 14	21 29	6 33	4 20	23 7	0 20	16 36	1 39	16 45	0 53	22 18	0 19	14 31	1 20	20 53	0 6	3 14	1 16	1 43	16 19	17 25	17 10	10 47	8 51	6 5			
S 15	21 18	12 33	4 56	23 13	0 11	16 13	1 39	16 55	0 53	22 20	0 19	14 32	1 20	20 52	0 6	3 14	1 16	1 43	16 19	17 25	17 11	10 44	8 50	6 5			
M 16	21 7	17 48	5 14	23 19	0 3	15 48	1 39	17 5	0 52	22 21	0 20	14 34	1 21	20 52	0 6	3 13	1 16	1 43	16 18	17 25	17 12	10 41	8 49	6 5			
T 17	20 56	22 3	5 15	23 24	0s 5	15 23	1 38	17 15	0 52	22 22	0 20	14 35	1 21	20 52	0 6	3 12	1 16	1 42	16 18	17 25	17 13	10 38	8 48	6 5			
W 18	20 45	25 7	4 59	23 27	0 12	14 58	1 38	17 25	0 51	22 24	0 20	14 37	1 21	20 52	0 6	3 12	1 16	1 42	16 17	17 25	17 14	10 35	8 47	6 5			
T 19	20 32	26 50	4 29	23 29	0 20	14 33	1 37	17 35	0 51	22 25	0 20	14 38	1 21	20 51	0 6	3 11	1 16	1 42	16 17	17 26	17 15	10 32	8 46	6 4			
F 20	20 20	27 9	3 46	23 30	0 27	14 7	1 36	17 45	0 50	22 26	0 20	14 40	1 21	20 51	0 6	3 11	1 16	1 41	16 17	17 26	17 16	10 29	8 45	6 4			
S 21	20 7	26 7	2 54	23 30	0 34	13 40	1 36	17 55	0 50	22 27	0 20	14 41	1 21	20 51	0 6	3 10	1 16	1 41	16 16	17 27	17 17	10 26	8 44	6 4			
S 22	19 54	23 50	1 54	23 29	0 41	13 14	1 35	18 4	0 49	22 29	0 20	14 43	1 22	20 51	0 6	3 9	1 16	1 41	16 16	17 27	17 17	10 22	8 43	6 4			
M 23	19 40	20 30	0 50	23 26	0 48	12 46	1 34	18 13	0 49	22 30	0 20	14 45	1 22	20 51	0 6	3 9	1 16	1 40	16 16	17 27	17 18	10 19	8 42	6 4			
T 24	19 26	16 22	0n16	23 22	0 55	12 19	1 33	18 23	0 48	22 31	0 21	14 46	1 22	20 51	0 6	3 8	1 16	1 40	16 15	17 27	17 19	10 16	8 40	6 3			
W 25	19 12	11 38	1 21	23 17	1 1	11 51	1 32	18 32	0 48	22 32	0 21	14 48	1 22	20 50	0 6	3 8	1 16	1 40	16 15	17 27	17 20	10 13	8 39	6 3			
T 26	18 57	6 30	2 22	23 11	1 7	11 23	1 31	18 41	0 47	22 33	0 21	14 49	1 22	20 50	0 6	3 7	1 16	1 39	16 15	17 27	17 21	10 10	8 38	6 3			
F 27	18 42	1 9	3 18	23 3	1 13	10 55	1 30	18 50	0 47	22 34	0 21	14 51	1 22	20 50	0 6	3 6	1 16	1 39	16 14	17 27	17 22	10 7	8 37	6 3			
S 28	18 27	4n16	4 5	22 54	1 18	10 26	1 28	18 58	0 46	22 35	0 21	14 53	1 22	20 50	0 6	3 6	1 16	1 38	16 14	17 27	17 23	10 4	8 36	6 3			
S 29	18 11	9 34	4 41	22 44	1 24	9 57	1 27	19 7	0 46	22 36	0 21	14 54	1 23	20 50	0 6	3 5	1 16	1 38	16 14	17 27	17 24	10 1	8 34	6 3			
M 30	17 55	14 36	5 6	22 32	1 29	9 58	1 26	19 15	0 45	22 37	0 21	14 56	1 23	20 50	0 6	3 4	1 16	1 38	16 13	17 27	17 24	9 58	8 33	6 3			
T 31	17s39	19n 9	5n18	22s19	1s33	8s59	1s24	19s24	0n45	22n38	0n21	14n58	1n23	20n50	0s 6	3s 3	1s16	1s37	16s13	17s27	17s25	9s54	8s32	6n 9			

## ASTRODIENST EPHEMERIS for the year 1860

**FEBRUARY 1860**

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	8 41 44	11≈24°31	20♂39	28♂32	11♂36	0♂23	17°R34	23°R32	3°R45	25♂15	6♂36	11≈9	11≈11	0♂9	21≈51	W 1
T 2	8 45 41	12°25'23	3♂49	0≈7	12°50	0°59	17♂28	23♂28	3♂45	25°17	6°36	11°9	11°7	0°16	21°55	T 2
F 3	8 49 37	13°26'13	17°25	1°43	14°4	1°35	17°21	23°23	3°44	25°19	6°36	11°9	11°4	0°23	22°0	F 3
S 4	8 53 34	14°27'03	1♂29	3°19	15°18	2°11	17°15	23°18	3°44	25°20	6°36	11°9	11°1	0°29	22°4	S 4
S 5	8 57 31	15°27'50	15°59	4°57	16°32	2°48	17°8	23°13	3°43	25°22	6°37	11°10	10°58	0°36	22°8	S 5
M 6	9 1 27	16°28'37	0♂50	6°35	17°45	3°24	17°2	23°9	3°43	25°24	6°37	11°10	10°55	0°43	22°13	M 6
T 7	9 5 24	17°29'21	15°57	8°14	18°59	4°0	16°56	23°4	3°43	25°26	6°37	11°R10	10°51	0°49	22°17	T 7
W 8	9 9 20	18°30'05	1♂11	9°53	20°12	4°36	16°50	22°59	3°43	25°28	6°38	11°10	10°48	0°56	22°21	W 8
T 9	9 13 17	19°30'47	16°20	11°34	21°26	5°11	16°44	22°54	3°43	25°30	6°38	11°9	10°45	1°3	22°26	T 9
F 10	9 17 13	20°31'28	1♂17	13°15	22°39	5°47	16°39	22°49	3°42	25°32	6°39	11°8	10°42	1°9	22°30	F 10
S 11	9 21 10	21°32'08	15°53	14°57	23°53	6°23	16°33	22°44	3°D42	25°34	6°39	11°7	10°39	1°16	22°34	S 11
S 12	9 25 6	22°32'47	0♂5	16°40	25°6	6°59	16°28	22°40	3°42	25°36	6°40	11°5	10°36	1°23	22°39	S 12
M13	9 29 3	23°33'25	13°51	18°24	26°19	7°35	16°23	22°35	3°43	25°38	6°40	11°5	10°32	1°29	22°43	M13
T 14	9 33 0	24°34'01	27°11	20°9	27°33	8°10	16°18	22°30	3°43	25°40	6°41	11°D 5	10°29	1°36	22°47	T 14
W15	9 36 56	25°34'37	10♂7	21°54	28°46	8°46	16°13	22°25	3°43	25°42	6°41	11°5	10°26	1°43	22°52	W15
T 16	9 40 53	26°35'11	22°43	23°41	29°59	9°22	16°8	22°20	3°43	25°44	6°42	11°6	10°23	1°49	22°56	T 16
F 17	9 44 49	27°35'44	5♂2	25°28	1°Y12	9°57	16°4	22°15	3°43	25°46	6°42	11°7	10°20	1°56	23°0	F 17
S 18	9 48 46	28°36'16	17°10	27°16	2°25	10°33	15°59	22°10	3°44	25°48	6°43	11°9	10°17	2°2	23°5	S 18
S 19	9 52 42	29°36'46	29°7	29°5	3°38	11°8	15°55	22°6	3°44	25°50	6°43	11°10	10°13	2°9	23°9	S 19
M20	9 56 39	0♂37'15	10≈59	0♂55	4°51	11°43	15°51	22°1	3°45	25°52	6°44	11°R11	10°10	2°16	23°13	M20
T 21	10 0 36	1°37'42	22°48	2°46	6°3	12°19	15°48	21°56	3°45	25°54	6°45	11°10	10°7	2°22	23°17	T 21
W22	10 4 32	2°38'07	4♂36	4°38	7°16	12°54	15°44	21°51	3°46	25°56	6°45	11°8	10°4	2°29	23°22	W22
T 23	10 8 29	3°38'31	16°24	6°30	8°29	13°29	15°41	21°47	3°46	25°58	6°46	11°6	10°1	2°36	23°26	T 23
F 24	10 12 25	4°38'53	28°16	8°23	9°41	14°4	15°37	21°42	3°47	26°0	6°47	11°2	9°57	2°42	23°30	F 24
S 25	10 16 22	5°39'13	10Y13	10°17	10°54	14°39	15°34	21°37	3°48	26°2	6°47	10°58	9°54	2°49	23°35	S 25
S 26	10 20 18	6°39'31	22°17	12°11	12°6	15°14	15°32	21°33	3°48	26°5	6°48	10°53	9°51	2°56	23°39	S 26
M27	10 24 15	7°39'48	4♂31	14°5	13°19	15°49	15°29	21°28	3°49	26°7	6°49	10°49	9°48	3°2	23°43	M27
T 28	10 28 11	8°40'02	16°59	16°0	14°31	16°24	15°26	21°23	3°50	26°9	6°50	10°46	9°45	3°9	23°47	T 28
W29	10 32 8	9♂40'15	29♂42	17♂55	15Y43	16♂59	15♂24	21♂19	3♂51	26♂11	6♂51	10≈44	9≈42	3♂16	23≈51	W29

Day	☉	☾			♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
W 1	17s22	22n58	5n14	22s 4	1s38	8s29	1s23	19s32	0n44	22n39	0n21	14n59	1n23	20n50	0s 6	3 s 3	1s16	1s37	16s13	17s27	17s26	9s51	8s31	6n 2
T 2	17 5	25 44	4 54	21 48	1 42	8 0	1 21	19 40	0 43	22 40	0 21	15 1	1 23	20 49	0 6	3 2	1 16	1 36	16 12	17 27	17 27	9 48	8 29	6 2
F 3	16 48	27 7	4 17	21 31	1 46	7 30	1 19	19 48	0 43	22 41	0 22	15 3	1 23	20 49	0 6	3 1	1 16	1 36	16 12	17 27	17 28	9 45	8 28	6 2
S 4	16 31	26 50	3 23	21 12	1 49	6 59	1 17	19 56	0 42	22 42	0 22	15 4	1 23	20 49	0 6	3 1	1 16	1 36	16 11	17 27	17 29	9 42	8 27	6 2
S 5	16 13	24 45	2 16	20 52	1 53	6 29	1 16	20 3	0 41	22 43	0 22	15 6	1 23	20 49	0 6	3 0	1 16	1 35	16 11	17 26	17 30	9 39	8 26	6 2
M 6	15 55	20 55	0 57	20 30	1 56	5 58	1 14	20 11	0 41	22 44	0 22	15 8	1 24	20 49	0 6	2 59	1 15	1 35	16 11	17 26	17 31	9 36	8 24	6 2
T 7	15 36	15 39	0s27	20 7	1 58	5 28	1 12	20 18	0 40	22 45	0 22	15 9	1 24	20 49	0 6	2 58	1 15	1 34	16 10	17 26	17 31	9 33	8 23	6 2
W 8	15 18	9 22	1 49	19 43	2 0	4 57	1 10	20 26	0 40	22 46	0 22	15 11	1 24	20 49	0 6	2 58	1 15	1 34	16 10	17 26	17 32	9 30	8 22	6 2
T 9	14 59	2 35	3 3	19 17	2 2	4 26	1 7	20 33	0 39	22 47	0 22	15 13	1 24	20 49	0 6	2 57	1 15	1 33	16 10	17 27	17 33	9 26	8 20	6 2
F 10	14 40	4s14	4 4	18 50	2 4	3 55	1 5	20 40	0 38	22 47	0 22	15 15	1 24	20 49	0 6	2 56	1 15	1 33	16 9	17 27	17 34	9 23	8 19	6 2
S 11	14 20	10 40	4 47	18 21	2 5	3 24	1 3	20 47	0 37	22 48	0 22	15 16	1 24	20 49	0 6	2 55	1 15	1 33	16 9	17 27	17 35	9 20	8 18	6 2
S 12	14 1	16 22	5 11	17 51	2 5	2 53	1 1	20 53	0 37	22 49	0 22	15 18	1 24	20 49	0 6	2 54	1 15	1 32	16 9	17 28	17 36	9 17	8 16	6 2
M13	13 41	21 3	5 17	17 19	2 6	2 21	0 58	21 0	0 36	22 50	0 22	15 20	1 24	20 49	0 5	2 54	1 15	1 32	16 8	17 28	17 37	9 14	8 15	6 2
T 14	13 21	24 29	5 5	16 46	2 5	1 50	0 56	21 6	0 35	22 50	0 23	15 21	1 24	20 49	0 5	2 53	1 15	1 31	16 8	17 28	17 37	9 11	8 14	6 2
W15	13 0	26 34	4 38	16 11	2 5	1 18	0 53	21 13	0 35	22 51	0 23	15 23	1 24	20 49	0 5	2 52	1 15	1 31	16 8	17 28	17 38	9 8	8 12	6 2
T 16	12 40	27 13	3 57	15 35	2 4	0 47	0 51	21 19	0 34	22 52	0 23	15 25	1 25	20 49	0 5	2 51	1 15	1 30	16 7	17 27	17 39	9 4	8 11	6 2
F 17	12 19	26 29	3 7	14 58	2 2	0 15	0 48	21 25	0 33	22 52	0 23	15 26	1 25	20 49	0 5	2 50	1 15	1 30	16 7	17 27	17 40	9 1	8 10	6 2
S 18	11 58	24 29	2 9	14 19	2 0	0n16	0 45	21 31	0 32	22 53	0 23	15 28	1 25	20 50	0 5	2 49	1 15	1 29	16 7	17 27	17 41	8 58	8 8	6 2
S 19	11 37	21 36	1 6	13 38	1 58	0 48	0 43	21 37	0 31	22 53	0 23	15 30	1 25	20 50	0 5	2 49	1 15	1 29	16 6	17 26	17 42	8 55	8 7	6 2
M20	11 16	17 20	0 0	12 56	1 55	1 19	0 40	21 42	0 31	22 54	0 23	15 31	1 25	20 50	0 5	2 48	1 15	1 28	16 6	17 26	17 43	8 52	8 6	6 2
T 21	10 54	12 55	1n 4	12 13	1 51	1 51	0 37	21 48	0 30	22 54	0 23	15 33	1 25	20 50	0 5	2 47	1 15	1 28	16 6	17 26	17 43	8 49	8 4	6 2
W22	10 33	7 53	2 6	11 29	1 47	2 22	0 34	21 53	0 29	22 55	0 23	15 34	1 25	20 50	0 5	2 46	1 15	1 27	16 5	17 27	17 44	8 46	8 3	6 2
T 23	10 11	2 34	3 2	10 43	1 42	2 54	0 31	21 58	0 28	22 55	0 23	15 36	1 25	20 50	0 5	2 45	1 15	1 27	16 5	17 28	17 45	8 43	8 1	6 2
F 24	9 49	2n51	3 51	9 56	1 37	3 25	0 28	22 3	0 27	22 56	0 23	15 38	1 25	20 50	0 5	2 44	1 15	1 26	16 5	17 29	17 46	8 39	8 0	6 2
S 25	9 27	8 11	4 30	9 8	1 31	3 56	0 25	22 8	0 26	22 56	0 23	15 39	1 25	20 50	0 5	2 44	1 15	1 26	16 4	17 30	17 47	8 36	7 59	6 2
S 26	9 4	13 17	4 58	8 18	1 25	4 27	0 22	22 13	0 26	22 57	0 23	15 41	1 25	20 51	0 5	2 43	1 15	1 25	16 4	17 31	17 48	8 33	7 57	6 2
M27	8 42	17 56	5 12	7 28	1 18	4 59	0 18	22 18	0 25	22 57	0 23	15 42	1 25	20 51	0 5	2 42	1 15	1 25	16 4	17 32	17 49	8 30	7 56	6 2
T 28	8 20	21 54	5 12	6 36	1 10	5 30	0 15	22 22	0 24	22 57	0 24	15 44	1 25	20 51	0 5	2 41	1 15	1 24	16 4	17 33	17 49	8 27	7 54	6 2
W29	7s57	24n56	4n57	5s44	1s 2	6n 1	0s12	22s27	0n23	22n58	0n24	15n45	1n25	20n51	0s 5	2s40	1s15	1s24	16s 3	17s33	17s50	8s24	7s53	6n 2

Julian Day Number = 2400441.5. Delta T = 8.99 sec

Ecliptic obliquity =  $23^{\circ}27'33''$ , Nutation =  $0^{\circ}00'14''$ , out-of-bounds declination in red

Avanamsha: Fagan/Bradley = 22°47'11. Lahiri = 21°54'12

ASTRODIENST EPHEMERIS for the year 1860  
geocentric

MARCH 1860

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	10 36 4	10 <sup>h</sup> 40'25	12 <sup>h</sup> 45	19 <sup>h</sup> 49	16 <sup>h</sup> 55	17 <sup>h</sup> 33	15 <sup>h</sup> 22	21 <sup>h</sup> 14	3 <sup>h</sup> 52	26 <sup>h</sup> 13	6 <sup>h</sup> 51	10 <sup>h</sup> 44	9 <sup>h</sup> 38	3 <sup>h</sup> 22	23 <sup>h</sup> 56	T 1
F 2	10 40 1	11 <sup>h</sup> 40'33	26 <sup>h</sup> 10	21 <sup>h</sup> 44	18 <sup>h</sup> 7	18 <sup>h</sup> 8	15 <sup>h</sup> 20	21 <sup>h</sup> 10	3 <sup>h</sup> 53	26 <sup>h</sup> 16	6 <sup>h</sup> 52	10 <sup>h</sup> 45	9 <sup>h</sup> 35	3 <sup>h</sup> 29	24 <sup>h</sup> 0	F 2
S 3	10 43 58	12 <sup>h</sup> 40'40	10 <sup>h</sup> 0	23 <sup>h</sup> 37	19 <sup>h</sup> 19	18 <sup>h</sup> 42	15 <sup>h</sup> 19	21 <sup>h</sup> 6	3 <sup>h</sup> 54	26 <sup>h</sup> 18	6 <sup>h</sup> 53	10 <sup>h</sup> 46	9 <sup>h</sup> 32	3 <sup>h</sup> 36	24 <sup>h</sup> 4	S 3
S 4	10 47 54	13 <sup>h</sup> 40'44	24 <sup>h</sup> 16	25 <sup>h</sup> 30	20 <sup>h</sup> 31	19 <sup>h</sup> 17	15 <sup>h</sup> 17	21 <sup>h</sup> 1	3 <sup>h</sup> 55	26 <sup>h</sup> 20	6 <sup>h</sup> 54	10 <sup>h</sup> 48	9 <sup>h</sup> 29	3 <sup>h</sup> 42	24 <sup>h</sup> 8	S 4
M 5	10 51 51	14 <sup>h</sup> 40'45	8 <sup>h</sup> 56	27 <sup>h</sup> 21	21 <sup>h</sup> 43	19 <sup>h</sup> 51	15 <sup>h</sup> 16	20 <sup>h</sup> 57	3 <sup>h</sup> 56	26 <sup>h</sup> 22	6 <sup>h</sup> 55	10 <sup>h</sup> 48	9 <sup>h</sup> 26	3 <sup>h</sup> 49	24 <sup>h</sup> 12	M 5
T 6	10 55 47	15 <sup>h</sup> 40'45	23 <sup>h</sup> 55	29 <sup>h</sup> 10	22 <sup>h</sup> 54	20 <sup>h</sup> 26	15 <sup>h</sup> 15	20 <sup>h</sup> 53	3 <sup>h</sup> 58	26 <sup>h</sup> 25	6 <sup>h</sup> 56	10 <sup>h</sup> 48	9 <sup>h</sup> 22	3 <sup>h</sup> 56	24 <sup>h</sup> 16	T 6
W 7	10 59 44	16 <sup>h</sup> 40'43	9 <sup>h</sup> 7	0 <sup>h</sup> 57	24 <sup>h</sup> 6	21 <sup>h</sup> 0	15 <sup>h</sup> 14	20 <sup>h</sup> 49	3 <sup>h</sup> 59	26 <sup>h</sup> 27	6 <sup>h</sup> 57	10 <sup>h</sup> 45	9 <sup>h</sup> 19	4 <sup>h</sup> 2	24 <sup>h</sup> 20	W 7
T 8	11 3 40	17 <sup>h</sup> 40'38	24 <sup>h</sup> 21	2 <sup>h</sup> 42	25 <sup>h</sup> 17	21 <sup>h</sup> 34	15 <sup>h</sup> 13	20 <sup>h</sup> 45	4 <sup>h</sup> 0	26 <sup>h</sup> 29	6 <sup>h</sup> 58	10 <sup>h</sup> 41	9 <sup>h</sup> 16	4 <sup>h</sup> 9	24 <sup>h</sup> 24	T 8
F 9	11 7 37	18 <sup>h</sup> 40'32	9 <sup>h</sup> 29	4 <sup>h</sup> 23	26 <sup>h</sup> 29	22 <sup>h</sup> 8	15 <sup>h</sup> 13	20 <sup>h</sup> 41	4 <sup>h</sup> 2	26 <sup>h</sup> 31	6 <sup>h</sup> 59	10 <sup>h</sup> 36	9 <sup>h</sup> 13	4 <sup>h</sup> 16	24 <sup>h</sup> 29	F 9
S 10	11 11 33	19 <sup>h</sup> 40'24	24 <sup>h</sup> 19	6 <sup>h</sup> 1	27 <sup>h</sup> 40	22 <sup>h</sup> 42	15 <sup>h</sup> 12	20 <sup>h</sup> 37	4 <sup>h</sup> 3	26 <sup>h</sup> 34	7 <sup>h</sup> 0	10 <sup>h</sup> 30	9 <sup>h</sup> 10	4 <sup>h</sup> 22	24 <sup>h</sup> 33	S 10
S 11	11 15 30	20 <sup>h</sup> 40'14	8 <sup>h</sup> 45	7 <sup>h</sup> 34	28 <sup>h</sup> 51	23 <sup>h</sup> 16	15 <sup>h</sup> D12	20 <sup>h</sup> 33	4 <sup>h</sup> 5	26 <sup>h</sup> 36	7 <sup>h</sup> 1	10 <sup>h</sup> 24	9 <sup>h</sup> 7	4 <sup>h</sup> 29	24 <sup>h</sup> 37	S 11
M12	11 19 27	21 <sup>h</sup> 40'03	22 <sup>h</sup> 43	9 <sup>h</sup> 3	0 <sup>h</sup> 2	23 <sup>h</sup> 50	15 <sup>h</sup> 12	20 <sup>h</sup> 29	4 <sup>h</sup> 6	26 <sup>h</sup> 38	7 <sup>h</sup> 2	10 <sup>h</sup> 19	9 <sup>h</sup> 3	4 <sup>h</sup> 36	24 <sup>h</sup> 41	M12
T 13	11 23 23	22 <sup>h</sup> 39'50	6 <sup>h</sup> 11	10 <sup>h</sup> 26	1 <sup>h</sup> 13	24 <sup>h</sup> 24	15 <sup>h</sup> 13	20 <sup>h</sup> 25	4 <sup>h</sup> 8	26 <sup>h</sup> 40	7 <sup>h</sup> 3	10 <sup>h</sup> 16	9 <sup>h</sup> 0	4 <sup>h</sup> 42	24 <sup>h</sup> 44	T 13
W14	11 27 20	23 <sup>h</sup> 39'35	19 <sup>h</sup> 12	11 <sup>h</sup> 44	2 <sup>h</sup> 24	24 <sup>h</sup> 57	15 <sup>h</sup> 13	20 <sup>h</sup> 22	4 <sup>h</sup> 9	26 <sup>h</sup> 43	7 <sup>h</sup> 4	10 <sup>h</sup> D15	8 <sup>h</sup> 57	4 <sup>h</sup> 49	24 <sup>h</sup> 48	W14
T 15	11 31 16	24 <sup>h</sup> 39'19	1 <sup>h</sup> 38	12 <sup>h</sup> 56	3 <sup>h</sup> 35	25 <sup>h</sup> 31	15 <sup>h</sup> 14	20 <sup>h</sup> 18	4 <sup>h</sup> 11	26 <sup>h</sup> 45	7 <sup>h</sup> 5	10 <sup>h</sup> 15	8 <sup>h</sup> 54	4 <sup>h</sup> 56	24 <sup>h</sup> 52	T 15
F 16	11 35 13	25 <sup>h</sup> 39'00	14 <sup>h</sup> 5	14 <sup>h</sup> 1	4 <sup>h</sup> 45	26 <sup>h</sup> 4	15 <sup>h</sup> 15	20 <sup>h</sup> 15	4 <sup>h</sup> 13	26 <sup>h</sup> 47	7 <sup>h</sup> 6	10 <sup>h</sup> 16	8 <sup>h</sup> 51	5 <sup>h</sup> 2	24 <sup>h</sup> 56	F 16
S 17	11 39 9	26 <sup>h</sup> 38'40	26 <sup>h</sup> 7	14 <sup>h</sup> 59	5 <sup>h</sup> 56	26 <sup>h</sup> 37	15 <sup>h</sup> 16	20 <sup>h</sup> 11	4 <sup>h</sup> 14	26 <sup>h</sup> 49	7 <sup>h</sup> 7	10 <sup>h</sup> 18	8 <sup>h</sup> 48	5 <sup>h</sup> 9	25 <sup>h</sup> 0	S 17
S 18	11 43 6	27 <sup>h</sup> 38'19	8 <sup>h</sup> 0	15 <sup>h</sup> 50	7 <sup>h</sup> 6	27 <sup>h</sup> 11	15 <sup>h</sup> 17	20 <sup>h</sup> 8	4 <sup>h</sup> 16	26 <sup>h</sup> 52	7 <sup>h</sup> 8	10 <sup>h</sup> R18	8 <sup>h</sup> 44	5 <sup>h</sup> 16	25 <sup>h</sup> 4	S 18
M19	11 47 2	28 <sup>h</sup> 37'55	19 <sup>h</sup> 47	16 <sup>h</sup> 34	8 <sup>h</sup> 16	27 <sup>h</sup> 44	15 <sup>h</sup> 18	20 <sup>h</sup> 4	4 <sup>h</sup> 18	26 <sup>h</sup> 54	7 <sup>h</sup> 9	10 <sup>h</sup> 18	8 <sup>h</sup> 41	5 <sup>h</sup> 22	25 <sup>h</sup> 8	M19
T 20	11 50 59	29 <sup>h</sup> 37'29	1 <sup>h</sup> 34	17 <sup>h</sup> 10	9 <sup>h</sup> 26	28 <sup>h</sup> 17	15 <sup>h</sup> 20	20 <sup>h</sup> 1	4 <sup>h</sup> 20	26 <sup>h</sup> 56	7 <sup>h</sup> 10	10 <sup>h</sup> 15	8 <sup>h</sup> 38	5 <sup>h</sup> 29	25 <sup>h</sup> 11	T 20
W21	11 54 56	0 <sup>h</sup> 37'02	13 <sup>h</sup> 22	17 <sup>h</sup> 38	10 <sup>h</sup> 36	28 <sup>h</sup> 50	15 <sup>h</sup> 22	19 <sup>h</sup> 58	4 <sup>h</sup> 22	26 <sup>h</sup> 59	7 <sup>h</sup> 11	10 <sup>h</sup> 10	8 <sup>h</sup> 35	5 <sup>h</sup> 36	25 <sup>h</sup> 15	W21
T 22	11 58 52	1 <sup>h</sup> 36'32	25 <sup>h</sup> 15	17 <sup>h</sup> 58	11 <sup>h</sup> 46	29 <sup>h</sup> 23	15 <sup>h</sup> 24	19 <sup>h</sup> 55	4 <sup>h</sup> 24	27 <sup>h</sup> 1	7 <sup>h</sup> 12	10 <sup>h</sup> 3	8 <sup>h</sup> 32	5 <sup>h</sup> 42	25 <sup>h</sup> 19	T 22
F 23	12 2 49	2 <sup>h</sup> 36'01	7 <sup>h</sup> 14	18 <sup>h</sup> 11	12 <sup>h</sup> 56	29 <sup>h</sup> 55	15 <sup>h</sup> 26	19 <sup>h</sup> 52	4 <sup>h</sup> 26	27 <sup>h</sup> 3	7 <sup>h</sup> 13	9 <sup>h</sup> 54	8 <sup>h</sup> 28	5 <sup>h</sup> 49	25 <sup>h</sup> 22	F 23
S 24	12 6 45	3 <sup>h</sup> 35'27	19 <sup>h</sup> 21	18 <sup>h</sup> R15	14 <sup>h</sup> 6	0 <sup>h</sup> 28	15 <sup>h</sup> 28	19 <sup>h</sup> 49	4 <sup>h</sup> 28	27 <sup>h</sup> 5	7 <sup>h</sup> 15	9 <sup>h</sup> 44	8 <sup>h</sup> 25	5 <sup>h</sup> 56	25 <sup>h</sup> 26	S 24
S 25	12 10 42	4 <sup>h</sup> 34'52	1 <sup>h</sup> 36	18 <sup>h</sup> 12	15 <sup>h</sup> 15	1 <sup>h</sup> 0	15 <sup>h</sup> 31	19 <sup>h</sup> 47	4 <sup>h</sup> 30	27 <sup>h</sup> 8	7 <sup>h</sup> 16	9 <sup>h</sup> 33	8 <sup>h</sup> 22	6 <sup>h</sup> 2	25 <sup>h</sup> 30	S 25
M26	12 14 38	5 <sup>h</sup> 34'14	14 <sup>h</sup> 2	18 <sup>h</sup> 2	16 <sup>h</sup> 25	1 <sup>h</sup> 32	15 <sup>h</sup> 34	19 <sup>h</sup> 44	4 <sup>h</sup> 32	27 <sup>h</sup> 10	7 <sup>h</sup> 17	9 <sup>h</sup> 24	8 <sup>h</sup> 19	6 <sup>h</sup> 9	25 <sup>h</sup> 33	M26
T 27	12 18 35	6 <sup>h</sup> 33'34	26 <sup>h</sup> 39	17 <sup>h</sup> 44	17 <sup>h</sup> 34	2 <sup>h</sup> 5	15 <sup>h</sup> 37	19 <sup>h</sup> 41	4 <sup>h</sup> 34	27 <sup>h</sup> 12	7 <sup>h</sup> 18	9 <sup>h</sup> 15	8 <sup>h</sup> 16	6 <sup>h</sup> 15	25 <sup>h</sup> 37	T 27
W28	12 22 31	7 <sup>h</sup> 32'52	9 <sup>h</sup> 29	17 <sup>h</sup> 21	18 <sup>h</sup> 43	2 <sup>h</sup> 37	15 <sup>h</sup> 40	19 <sup>h</sup> 39	4 <sup>h</sup> 37	27 <sup>h</sup> 14	7 <sup>h</sup> 19	9 <sup>h</sup> 10	8 <sup>h</sup> 13	6 <sup>h</sup> 22	25 <sup>h</sup> 40	W28
T 29	12 26 28	8 <sup>h</sup> 32'07	22 <sup>h</sup> 33	16 <sup>h</sup> 51	19 <sup>h</sup> 52	3 <sup>h</sup> 9	15 <sup>h</sup> 43	19 <sup>h</sup> 37	4 <sup>h</sup> 39	27 <sup>h</sup> 17	7 <sup>h</sup> 21	9 <sup>h</sup> 6	8 <sup>h</sup> 9	6 <sup>h</sup> 29	25 <sup>h</sup> 44	T 29
F 30	12 30 25	9 <sup>h</sup> 31'21	5 <sup>h</sup> 25	16 <sup>h</sup> 16	21 <sup>h</sup> 1	3 <sup>h</sup> 40	15 <sup>h</sup> 47	19 <sup>h</sup> 34	4 <sup>h</sup> 41	27 <sup>h</sup> 19	7 <sup>h</sup> 22	9 <sup>h</sup> D 5	8 <sup>h</sup> 6	6 <sup>h</sup> 35	25 <sup>h</sup> 47	F 30
S 31	12 34 21	10 <sup>h</sup> 30'31	19 <sup>h</sup> 36	15 <sup>h</sup> 37	22 <sup>h</sup> 8	4 <sup>h</sup> 12	15 <sup>h</sup> 50	19 <sup>h</sup> 32	4 <sup>h</sup> 44	27 <sup>h</sup> 21	7 <sup>h</sup> 23	9 <sup>h</sup> 5	8 <sup>h</sup> 3	6 <sup>h</sup> 42	25 <sup>h</sup> 50	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	decl	lat	decl	lat	decl	lat	
T 1	7s34	26n45	4n26	4s51	0s53	6n31	0s 9	22s31	0n22	22n58	0n24	15n47	1n25	20n51	0s 5	2s39	1s15	1s23	16s 3	17s33	17s51	8s21	7s52	6n 2										
F 2	7 11	27 5	3 40	3 57	0 43	7 2	0 5	22 35	0 21	22 58	0 24	15 48	1 25	20 51	0 5	2 38	1 15	1 22	16 3	17 33	17 52	8 17	7 50	6 2										
S 3	6 48	25 45	2 41	3 3	0 33	7 32	0 2	22 39	0 20	22 58	0 24	15 50	1 25	20 52	0 5	2 37	1 15	1 22	16 2	17 33	17 53	8 14	7 49	6 2										
S 4	6 25	22 45	1 29	2 8	0 23	8 3	0n 2	22 43	0 19	22 59	0 24	15 51	1 25	20 52	0 5	2 36	1 15	1 21	16 2	17 32	17 54	8 11	7 47	6 2										
M 5	6 2	18 12	0 10	1 14	0 12	8 33	0 5	22 46	0 18	22 59	0 24	15 52	1 25	20 52	0 5	2 36	1 15	1 21	16 2	17 32	17 55	8 8	7 46	6 2										
T 6	5 39	12 27	1s11	0 20	0n 0	9 3	0 9	22 50	0 17	22 59	0 24	15 54	1 25	20 52	0 5	2 35	1 15	1 20	16 2	17 32	17 55	8 5	7 44	6 2										
W 7	5 16	5 52	2 28	0n34	0 12	9 33	0 12	22 53	0 16	22 59	0 24	15 55	1 25	20 53	0 5	2 34	1 15	1 20	16 1	17 33	17 56	8 2	7 43	6 2										
T 8	4 52	1s 3	3 35	1 27	0 25	10 2	0 16	22 57	0 15	22 59	0 24	15 56	1 25	20 53	0 5	2 33	1 15	1 19	16 1	17 34	17 57	7 58	7 42	6 2										
F 9	4 29	7 50	4 26	2 19	0 37	10 31	0 19	23 0	0 14	22 59	0 24	15 58	1 25	20 53	0 5	2 32	1 15	1 19	16 1	17 36	17 58	7 55	7 40	6 3										
S 10	4 6	14 3	4 58	3 10	0 50	11 0	0 23	23 3	0 13	22 59	0 24	15 59	1 25	20 53	0 5	2 31	1 15	1 18	16 0	17 37	17 59	7 52	7 39	6 3										
S 11	3 42	19 19	5 10	3 59	1 4	11 29	0 27	23 6	0 12	22 59	0 24	16 0	1 25	20 54	0 5	2 30	1 15	1 18	16 0	17 39	18 0	7 49	7 37	6 3										
M12	3 18	23 21	5 3	4 46	1 17	11 58	0 30	23 9	0 10	23 0	0 24	16 1	1 25	20 54	0 5	2 29	1 15	1 17	16 0	17 40	18 0	7 46	7 36	6 3										
T 13	2 55	25 57	4 40	5 31	1 30	12 26	0 34	23 11	0 9	23 0	0 24	16 3	1 26	20 54	0 5	2 28	1 15	1 17	16 0	17 41	18 1	7 43	7 35	6 3										
W14	2 31	27 2	4 2	6 13	1 43	12 54	0 38	23 14	0 8	23 0	0 24	16 4	1 25	20 55	0 5	2 28	1 15	1 16	15 59	17 41	18 2	7 40	7 33	6 3										
T 15	2 8	26 40	3 14	6 53	1 56	13 22	0 41	23 16	0 7	22 59	0 24	16 5	1 25	20 55	0 5	2 27	1 15	1 15	15 59	17 41	18 3	7 36	7 32	6 3										
F 16	1 44	24 59	2 17	7 30	2 8	13 49	0 45	23 18	0 6	22 59	0 24	16 6	1 25	20 55	0 5	2 26	1 15	1 15	15 59	17 41	18 4	7 33	7 30	6 3										
S 17	1 20	22 11	1 16	8 3	2 20	14 16	0 49	23 21	0 4	22 59	0 24	16 7	1 25	20 56	0 5	2 25	1 15	1 14	15 59	17 41	18 5	7 30	7 29	6 4										
S 18	0 56	18 29	0 13	8 34	2 31	14 43	0 52	23 23	0 3	22 59	0 24	16 8	1 25	20 56	0 5	2 24	1 15	1 14	15 59	17 40	18 5	7 27	7 28	6 4										
M19	0 33	14 5	0n51	9 0	2 42	15 10	0 56	23 24	0 2	22 59	0 24	16 9	1 25	20 56	0 5	2 23	1 15	1 13	15 58	17 41	18 6	7 24	7 26	6 4										
T 20	0 9	9 11	1 52	9 23	2 51	15 36	1 0	23 26	0 1	22 59	0 25	16 10	1 25	20 57	0 5	2 22	1 15	1 13	15 58	17 41	18 7	7 21	7 25	6 4										
W21	0n15	3 57	2 49	9 42	3 0	16 1	1 4	23 28	0s 1	22 59	0 25	16 11	1 25	20 57	0 5	2 21	1 15	1 12	15 58	17 43	18 8	7 17	7 23	6 4										
T 22	0 38	1n26	3 38	9 56	3 7	16 27	1 7	23 29	0 2	22 59	0 25	16 12	1 25	20 57	0 5	2 20	1 15	1 12	15 58	17 44	18 9	7 14	7 22	6 4										
F 23	1 2	6 49	4 18	10 7	3 13	16 52	1 11	23 31	0 3	22 58	0 25	16 13	1 25	20 58	0 5	2 19	1 15	1 11	15 57	17 47	18 10	7 11	7 21	6 5										
S 24	1 26	11 59	4 46	10 13	3 18	17 16	1 15	23 32	0 5	22 58	0 25	16 14	1 25	20 58	0 5	2 19	1 15	1 10	15 57	17 50	18 10	7 8	7 19	6 5										
S 25	1 49	16 46	5 2	10 15	3 22	17 41	1 19	23 33	0 6	22 58	0 25	16 15	1 25	20 59	0 5	2 18	1 15	1 10	15 57	17 52	18 11	7 5	7 18	6 5										
M26	2 13	20 54	5 4	10 13	3 24	18 4	1 22	23 35	0 8	22 58	0 25	16 16	1 25	20 59	0 5	2 17	1 15	1 9	15 57	17 55	18 12	7 2	7 17	6 5										
T 27	2 36	24 9	4 51	10 7	3 24	18 28	1 26	23 36	0 9	22 57	0 25	16 16	1 25	20 59	0 5	2 16	1 15	1 9	15 57	17 57	18 13	6 58	7 15	6 5										
W28	3 0	26 14	4 24	9 56	3 23	18 51	1 30	23 36	0 10	22 57	0 25	16 17	1 25	21 0	0 5	2 15	1 15	1 8	15 56	17 59	18 14	6 55	7 14	6 6										
T 29	3 23	26 57	3 42	9 42	3 20	19 13	1 33	23 37	0 12	22 57	0 25	16 18	1 25	21 0	0 5	2 14	1 15	1 8	15 56	18 0	18 15	6 52	7 13	6 6										
F 30	3 47	26 7	2 48	9 24	3 15	19 35	1 37	23 38	0 13	22 56	0 25	16 19	1 25	21 1	0 5	2 13	1 15	1 7	15 56	18 0	18 15	6 49	7 11	6 6										
S 31	4n10	23n43	1n42	9n 3	3n 8	19n57	1n41	23s39	0s15	22n56	0n25	16n19	1n25	21n 1	0s 5	2s12	1s15	1s 7	15s56	18s 0	18s16	6s46	7s10	6n 6										



ASTRODIENST EPHEMERIS for the year 1860  
geocentric

MAY 1860

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	14 36 34	10♈48'44	12♐29	14♊10	25♊58	19♈1	19♈2	19♏16	6♊12	28♈25	8♈4	6♈14	6♈25	10♈9	27♈12	T 1
W 2	14 40 31	11°46'52	27°1	15°10	26°59	19°26	19°10	19°17	6°16	28°26	8°6	6°9	6°21	10°15	27°14	W 2
T 3	14 44 27	12°44'58	11♌39	16°13	28°0	19°50	19°19	19°19	6°19	28°28	8°7	6°1	6°18	10°22	27°16	T 3
F 4	14 48 24	13°43'03	26°16	17°19	29°0	20°15	19°27	19°20	6°22	28°30	8°8	5°51	6°15	10°29	27°18	F 4
S 5	14 52 20	14°41'05	10♍46	18°27	0♈0	20°38	19°36	19°22	6°26	28°32	8°10	5°40	6°12	10°35	27°19	S 5
S 6	14 56 17	15°39'07	25°0	19°39	1°0	21°2	19°45	19°23	6°29	28°33	8°11	5°29	6°9	10°42	27°21	S 6
M 7	15 0 14	16°37'06	8♌54	20°52	1°59	21°25	19°54	19°25	6°32	28°35	8°12	5°18	6°5	10°49	27°22	M 7
T 8	15 4 10	17°35'04	22°25	22°8	2°58	21°48	20°3	19°27	6°36	28°37	8°14	5°10	6°2	10°55	27°24	T 8
W 9	15 8 7	18°33'01	5♍30	23°27	3°57	22°11	20°12	19°29	6°39	28°38	8°15	5°5	5°59	11°2	27°25	W 9
T 10	15 12 3	19°30'56	18°11	24°48	4°55	22°33	20°22	19°31	6°42	28°40	8°16	5°1	5°56	11°9	27°27	T 10
F 11	15 16 0	20°28'50	0♎33	26°11	5°53	22°55	20°31	19°33	6°46	28°41	8°18	5°D 0	5°53	11°15	27°28	F 11
S 12	15 19 56	21°26'43	12°38	27°37	6°50	23°16	20°41	19°35	6°49	28°43	8°19	5°0	5°50	11°22	27°29	S 12
S 13	15 23 53	22°24'35	24°33	29°4	7°46	23°37	20°50	19°37	6°53	28°44	8°20	5°R 1	5°46	11°29	27°30	S 13
M14	15 27 49	23°22'25	6♈23	0♈34	8°43	23°57	21°0	19°40	6°56	28°46	8°22	5°0	5°43	11°35	27°31	M14
T 15	15 31 46	24°20'14	18°13	2°7	9°38	24°18	21°10	19°42	7°0	28°47	8°23	4°57	5°40	11°42	27°32	T 15
W16	15 35 43	25°18'02	0♊7	3°41	10°33	24°37	21°20	19°45	7°3	28°49	8°24	4°52	5°37	11°49	27°33	W16
T 17	15 39 39	26°15'48	12°11	5°18	11°28	24°57	21°30	19°48	7°7	28°50	8°26	4°45	5°34	11°56	27°34	T 17
F 18	15 43 36	27°13'34	24°27	6°56	12°22	25°15	21°40	19°50	7°10	28°52	8°27	4°35	5°31	12°2	27°35	F 18
S 19	15 47 32	28°11'18	6♌58	8°37	13°15	25°34	21°50	19°53	7°14	28°53	8°28	4°24	5°27	12°9	27°36	S 19
S 20	15 51 29	29°9'01	19°44	10°21	14°8	25°52	22°0	19°56	7°17	28°54	8°30	4°13	5°24	12°16	27°37	S 20
M21	15 55 25	0♊6'43	2♊46	12°6	15°1	26°9	22°11	19°59	7°21	28°56	8°31	4°2	5°21	12°22	27°38	M21
T 22	15 59 22	1°4'23	16°1	13°53	15°52	26°26	22°21	20°3	7°24	28°57	8°32	3°53	5°18	12°29	27°38	T 22
W23	16 3 18	2°2'03	29°29	15°43	16°43	26°42	22°32	20°6	7°28	28°58	8°33	3°46	5°15	12°36	27°39	W23
T 24	16 7 15	2°59'41	13♌8	17°35	17°33	26°58	22°42	20°9	7°31	29°0	8°35	3°42	5°11	12°42	27°39	T 24
F 25	16 11 12	3°57'17	26°56	19°29	18°23	27°13	22°53	20°13	7°35	29°1	8°36	3°40	5°8	12°49	27°40	F 25
S 26	16 15 8	4°54'52	10♏51	21°25	19°12	27°28	23°4	20°16	7°38	29°2	8°37	3°D40	5°5	12°56	27°40	S 26
S 27	16 19 5	5°52'26	24°52	23°23	20°0	27°42	23°15	20°20	7°42	29°3	8°38	3°41	5°2	13°2	27°40	S 27
M28	16 23 1	6°49'58	8♐59	25°23	20°47	27°56	23°26	20°24	7°45	29°4	8°40	3°R41	4°59	13°9	27°41	M28
T 29	16 26 58	7°47'29	23°11	27°25	21°33	28°9	23°37	20°28	7°49	29°5	8°41	3°40	4°56	13°16	27°41	T 29
W30	16 30 54	8°44'58	7♌26	29°29	22°19	28°22	23°48	20°31	7°52	29°6	8°42	3°37	4°52	13°22	27°41	W30
T 31	16 34 51	9♊42'26	21♌40	1♊35	23♌3	28♌34	23♌59	20♏35	7♊56	29♈7	8♈43	3♈32	4♈49	13♈29	27♈41	T 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
T 1	15n 5	4n 8	2s59	2n54	2s55	26n30	3n 6	23s23	1s18	22n32	0n26	16n22	1n23	21n17	0s 5	1s48
W 2	15 23	2s24	3 54	3 15	2 58	26 33	3 8	23 23	1 20	22 31	0 26	16 22	1 23	21 18	0 4	1 47
T 3	15 41	8 49	4 34	3 37	3 0	26 36	3 9	23 22	1 23	22 30	0 26	16 21	1 23	21 18	0 4	1 47
F 4	15 58	14 45	4 56	4 0	3 2	26 37	3 10	23 21	1 26	22 28	0 26	16 21	1 23	21 19	0 4	1 46
S 5	16 15	19 48	4 59	4 25	3 3	26 39	3 11	23 20	1 28	22 27	0 26	16 20	1 23	21 20	0 4	1 45
S 6	16 32	23 37	4 44	4 52	3 3	26 39	3 12	23 19	1 31	22 26	0 26	16 20	1 23	21 20	0 4	1 45
M 7	16 49	25 56	4 11	5 19	3 3	26 40	3 13	23 18	1 34	22 25	0 26	16 19	1 23	21 21	0 4	1 44
T 8	17 5	26 39	3 25	5 48	3 2	26 39	3 14	23 17	1 37	22 23	0 26	16 19	1 23	21 21	0 4	1 43
W 9	17 22	25 50	2 30	6 19	3 1	26 38	3 14	23 16	1 40	22 22	0 26	16 18	1 23	21 22	0 4	1 43
T 10	17 37	23 41	1 28	6 50	2 59	26 36	3 14	23 16	1 43	22 21	0 26	16 17	1 23	21 22	0 4	1 42
F 11	17 53	20 26	0 24	7 23	2 56	26 34	3 15	23 15	1 46	22 19	0 26	16 16	1 23	21 23	0 4	1 42
S 12	18 8	16 23	0n40	7 56	2 53	26 31	3 15	23 14	1 49	22 18	0 26	16 16	1 23	21 24	0 4	1 41
S 13	18 23	11 45	1 42	8 31	2 49	26 28	3 15	23 14	1 52	22 17	0 26	16 15	1 22	21 24	0 4	1 40
M14	18 38	6 43	2 39	9 7	2 45	26 24	3 14	23 13	1 55	22 15	0 26	16 14	1 22	21 25	0 4	1 40
T 15	18 52	1 28	3 28	9 43	2 40	26 20	3 14	23 13	1 58	22 14	0 26	16 13	1 22	21 25	0 4	1 39
W16	19 6	3n52	4 9	10 20	2 34	26 15	3 14	23 12	2 1	22 12	0 26	16 12	1 22	21 26	0 4	1 39
T 17	19 20	9 7	4 40	10 58	2 28	26 10	3 13	23 12	2 5	22 11	0 26	16 11	1 22	21 27	0 4	1 38
F 18	19 33	14 6	4 58	11 37	2 22	26 4	3 12	23 12	2 8	22 9	0 26	16 10	1 22	21 27	0 4	1 38
S 19	19 46	18 36	5 2	12 16	2 15	25 58	3 11	23 12	2 11	22 7	0 26	16 9	1 22	21 28	0 4	1 37
S 20	19 59	22 22	4 52	12 55	2 7	25 51	3 10	23 12	2 15	22 6	0 27	16 8	1 22	21 28	0 4	1 37
M21	20 11	25 4	4 26	13 35	1 59	25 44	3 8	23 12	2 18	22 4	0 27	16 7	1 22	21 29	0 4	1 36
T 22	20 23	26 28	3 45	14 15	1 51	25 36	3 6	23 12	2 22	22 2	0 27	16 6	1 22	21 30	0 4	1 36
W23	20 35	26 19	2 52	14 56	1 42	25 28	3 5	23 12	2 25	22 1	0 27	16 5	1 22	21 30	0 4	1 35
T 24	20 46	24 35	1 47	15 36	1 33	25 19	3 3	23 13	2 29	21 59	0 27	16 4	1 22	21 31	0 4	1 35
F 25	20 57	21 23	0 36	16 17	1 23	25 10	3 0	23 13	2 33	21 57	0 27	16 3	1 22	21 31	0 4	1 34
S 26	21 8	16 55	0s38	16 57	1 14	25 1	2 58	23 14	2 36	21 55	0 27	16 2	1 22	21 32	0 4	1 34
S 27	21 18	11 30	1 51	17 37	1 4	24 51	2 55	23 15	2 40	21 54	0 27	16 1	1 22	21 32	0 4	1 33
M28	21 28	5 28	2 57	18 16	0 53	24 41	2 52	23 16	2 44	21 52	0 27	15 59	1 21	21 33	0 4	1 33
T 29	21 38	0s52	3 53	18 55	0 43	24 31	2 49	23 17	2 48	21 50	0 27	15 58	1 21	21 34	0 4	1 33
W30	21 47	7 9	4 35	19 32	0 32	24 20	2 46	23 18	2 52	21 48	0 27	15 57	1 21	21 34	0 4	1 32
T 31	21n55	13s 5	5s 0	20n 9	0s21	24n 9	2n42	23s20	2s56	21n46	0n27	15n55	1n21	21n35	0s 4	1s32

Julian Day Number = 2400531.5, Delta T = 8.97 sec  
Ecliptic obliquity = 23°27'32, Nutation = 0°00'13, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 22°47'24, Lahiri = 21°54'24



# ASTRODIENST EPHEMERIS for the year 1860

## geocentric

JUNE 1860

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	16 38 48	10 <sup>II</sup> 39°53	5 <sup>III</sup> 51	3 <sup>II</sup> 42	23 <sup>III</sup> 47	28 <sup>III</sup> 45	24 <sup>III</sup> 10	20 <sup>III</sup> 40	7 <sup>II</sup> 59	29 <sup>III</sup> 9	8 <sup>III</sup> 45	3°R25	4 <sup>III</sup> 46	13 <sup>III</sup> 36	27°R41	F 1
S 2	16 42 44	11°37'18	19°54	5°51	24°29	28°56	24°22	20°44	8° 3	29° 9	8°46	3 <sup>III</sup> 17	4°43	13°42	27 <sup>III</sup> 41	S 2
S 3	16 46 41	12°34'43	3 <sup>III</sup> 44	8° 0	25°11	29° 6	24°33	20°48	8° 6	29°10	8°47	3° 8	4°40	13°49	27°41	S 3
M 4	16 50 37	13°32'07	17°18	10°11	25°52	29°16	24°45	20°52	8°10	29°11	8°48	3° 1	4°37	13°56	27°41	M 4
T 5	16 54 34	14°29'30	0 <sup>III</sup> 34	12°22	26°31	29°24	24°56	20°57	8°13	29°12	8°49	2°55	4°33	14° 2	27°41	T 5
W 6	16 58 30	15°26'52	13°29	14°34	27° 9	29°33	25° 8	21° 1	8°17	29°13	8°50	2°51	4°30	14° 9	27°40	W 6
T 7	17 2 27	16°24'13	26° 6	16°46	27°46	29°40	25°19	21° 6	8°20	29°14	8°52	2°49	4°27	14°16	27°40	T 7
F 8	17 6 23	17°21'34	8 <sup>III</sup> 25	18°58	28°22	29°47	25°31	21°10	8°24	29°15	8°53	2°D49	4°24	14°22	27°39	F 8
S 9	17 10 20	18°18'54	20°31	21°10	28°57	29°53	25°43	21°15	8°27	29°15	8°54	2°50	4°21	14°29	27°39	S 9
S 10	17 14 17	19°16'14	2 <sup>III</sup> 27	23°21	29°30	29°59	25°55	21°20	8°31	29°16	8°55	2°52	4°17	14°36	27°38	S 10
M 11	17 18 13	20°13'33	14°18	25°31	0 <sup>III</sup> 2	0 <sup>III</sup> 4	26° 7	21°25	8°34	29°17	8°56	2°53	4°14	14°42	27°38	M 11
T 12	17 22 10	21°10'52	26° 9	27°40	0°33	0° 8	26°19	21°30	8°38	29°18	8°57	2°R53	4°11	14°49	27°37	T 12
W 13	17 26 6	22° 8'10	8°Y 6	29°48	1° 2	0°11	26°31	21°35	8°41	29°18	8°58	2°52	4° 8	14°56	27°36	W 13
T 14	17 30 3	23° 5'28	20°12	1 <sup>III</sup> 54	1°29	0°13	26°43	21°40	8°45	29°19	8°59	2°49	4° 5	15° 2	27°36	T 14
F 15	17 33 59	24° 2'46	2 <sup>III</sup> 33	3°59	1°55	0°15	26°55	21°45	8°48	29°19	9° 0	2°44	4° 2	15° 9	27°35	F 15
S 16	17 37 56	25° 0'03	15°11	6° 2	2°20	0°16	27° 7	21°50	8°52	29°20	9° 1	2°38	3°58	15°16	27°34	S 16
S 17	17 41 52	25°57'20	28° 8	8° 3	2°42	0°R17	27°19	21°55	8°55	29°20	9° 2	2°32	3°55	15°22	27°33	S 17
M 18	17 45 49	26°54'37	11 <sup>III</sup> 24	10° 2	3° 3	0°16	27°32	22° 1	8°58	29°21	9° 3	2°26	3°52	15°29	27°32	M 18
T 19	17 49 46	27°51'53	24°59	11°59	3°22	0°15	27°44	22° 6	9° 2	29°21	9° 4	2°22	3°49	15°36	27°31	T 19
W 20	17 53 42	28°49'09	8 <sup>III</sup> 50	13°53	3°40	0°13	27°56	22°12	9° 5	29°22	9° 5	2°18	3°46	15°43	27°30	W 20
T 21	17 57 39	29°46'25	22°54	15°46	3°55	0°10	28° 9	22°17	9° 9	29°22	9° 6	2°16	3°43	15°49	27°29	T 21
F 22	18 1 35	0 <sup>III</sup> 43'40	7 <sup>III</sup> 7	17°36	4° 8	0° 7	28°21	22°23	9°12	29°23	9° 7	2°D16	3°39	15°56	27°27	F 22
S 23	18 5 32	1°40'54	21°24	19°25	4°19	0° 2	28°34	22°29	9°15	29°23	9° 8	2°17	3°36	16° 3	27°26	S 23
S 24	18 9 28	2°38'08	5 <sup>III</sup> 43	21°11	4°29	29 <sup>III</sup> 57	28°46	22°34	9°19	29°23	9° 9	2°18	3°33	16° 9	27°25	S 24
M 25	18 13 25	3°35'21	20° 0	22°54	4°36	29°52	28°59	22°40	9°22	29°23	9°10	2°20	3°30	16°16	27°23	M 25
T 26	18 17 21	4°32'34	4 <sup>III</sup> 13	24°36	4°40	29°45	29°12	22°46	9°25	29°24	9°10	2°R20	3°27	16°23	27°22	T 26
W 27	18 21 18	5°29'46	18°19	26°15	4°43	29°38	29°24	22°52	9°28	29°24	9°11	2°20	3°23	16°29	27°20	W 27
T 28	18 25 15	6°26'58	2 <sup>III</sup> 17	27°52	4°R43	29°30	29°37	22°58	9°32	29°24	9°12	2°18	3°20	16°36	27°19	T 28
F 29	18 29 11	7°24'09	16° 6	29°27	4°41	29°22	29°50	23° 4	9°35	29°24	9°13	2°15	3°17	16°43	27°17	F 29
S 30	18 33 8	8 <sup>III</sup> 21'20	29 <sup>III</sup> 43	1 <sup>III</sup> 0	4 <sup>III</sup> 36	29 <sup>III</sup> 12	0 <sup>III</sup> 2	23 <sup>III</sup> 10	9 <sup>III</sup> 38	29 <sup>III</sup> 24	9 <sup>III</sup> 14	2 <sup>III</sup> 12	3 <sup>III</sup> 14	16 <sup>III</sup> 49	27 <sup>III</sup> 16	S 30

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	22n 4	18s17	5s 6	20n44	0s10	23n58	2n38	23s21	3s 0	21n44	0n27	15n54	1n21	21n35	0s 4	1s32	1s17	0s42	15s56	19s24	19s 5	3s28	6s14	6n26	
S 2	22 12	22 26	4 53	21 18	0n 0	23 46	2 34	23 23	3 4	21 42	0 27	15 53	1 21	21 36	0 4	1 31	1 18	0 42	15 56	19 26	19 6	3 25	6 14	6 26	
S 3	22 19	25 14	4 24	21 50	0 11	23 34	2 30	23 25	3 8	21 40	0 27	15 51	1 21	21 36	0 4	1 31	1 18	0 41	15 56	19 28	19 7	3 22	6 14	6 27	
M 4	22 27	26 30	3 40	22 21	0 21	23 22	2 25	23 27	3 12	21 38	0 27	15 50	1 21	21 37	0 4	1 31	1 18	0 41	15 56	19 30	19 8	3 19	6 14	6 27	
T 5	22 33	26 12	2 45	22 49	0 32	23 10	2 21	23 29	3 16	21 36	0 27	15 48	1 21	21 38	0 4	1 30	1 18	0 41	15 56	19 31	19 8	3 16	6 13	6 27	
W 6	22 40	24 28	1 42	23 15	0 41	22 58	2 15	23 31	3 20	21 34	0 27	15 47	1 21	21 38	0 4	1 30	1 18	0 41	15 56	19 32	19 9	3 12	6 13	6 28	
T 7	22 46	21 32	0 36	23 39	0 51	22 45	2 10	23 34	3 24	21 32	0 27	15 45	1 21	21 39	0 4	1 30	1 18	0 41	15 57	19 33	19 10	3 9	6 13	6 28	
F 8	22 51	17 41	0n30	24 0	1 0	22 32	2 4	23 37	3 29	21 30	0 27	15 44	1 21	21 39	0 4	1 29	1 18	0 40	15 57	19 33	19 11	3 6	6 13	6 28	
S 9	22 57	13 10	1 34	24 18	1 9	22 19	1 58	23 40	3 33	21 28	0 27	15 42	1 21	21 40	0 4	1 29	1 18	0 40	15 57	19 32	19 11	3 3	6 13	6 29	
S 10	23 1	8 13	2 34	24 34	1 16	22 6	1 52	23 43	3 37	21 26	0 27	15 41	1 21	21 40	0 4	1 29	1 18	0 40	15 57	19 32	19 12	3 0	6 12	6 29	
M 11	23 6	3 1	3 26	24 47	1 24	21 53	1 46	23 46	3 42	21 24	0 27	15 39	1 21	21 41	0 4	1 29	1 18	0 40	15 57	19 32	19 13	2 56	6 12	6 29	
T 12	23 10	2n17	4 9	24 57	1 30	21 39	1 39	23 49	3 46	21 21	0 27	15 37	1 21	21 42	0 4	1 28	1 18	0 40	15 58	19 32	19 14	2 53	6 12	6 30	
W 13	23 14	7 32	4 42	25 4	1 36	21 26	1 31	23 53	3 51	21 19	0 28	15 36	1 21	21 42	0 4	1 28	1 18	0 40	15 58	19 32	19 14	2 50	6 12	6 30	
T 14	23 17	12 34	5 3	25 8	1 42	21 12	1 24	23 57	3 55	21 17	0 28	15 34	1 21	21 43	0 4	1 28	1 18	0 40	15 58	19 33	19 15	2 47	6 12	6 30	
F 15	23 19	17 13	5 10	25 10	1 46	20 59	1 16	24 1	4 0	21 15	0 28	15 32	1 21	21 43	0 4	1 28	1 18	0 40	15 58	19 34	19 16	2 44	6 12	6 31	
S 16	23 22	21 13	5 3	25 9	1 50	20 46	1 8	24 5	4 4	21 12	0 28	15 31	1 21	21 44	0 4	1 28	1 18	0 39	15 58	19 35	19 17	2 41	6 12	6 31	
S 17	23 24	24 18	4 40	25 6	1 53	20 32	0 59	24 9	4 9	21 10	0 28	15 29	1 20	21 44	0 4	1 28	1 18	0 39	15 59	19 37	19 17	2 37	6 12	6 31	
M 18	23 25	26 10	4 2	25 0	1 55	20 19	0 50	24 14	4 13	21 8	0 28	15 27	1 20	21 45	0 4	1 27	1 18	0 39	15 59	19 38	19 18	2 34	6 12	6 32	
T 19	23 26	26 31	3 9	24 52	1 57	20 5	0 41	24 19	4 18	21 5	0 28	15 25	1 20	21 45	0 4	1 27	1 18	0 39	15 59	19 39	19 19	2 31	6 12	6 32	
W 20	23 27	25 14	2 4	24 41	1 58	19 52	0 32	24 23	4 22	21 3	0 28	15 23	1 20	21 46	0 4	1 27	1 18	0 39	15 59	19 40	19 20	2 28	6 12	6 32	
T 21	23 28	22 21	0 51	24 29	1 58	19 39	0 22	24 29	4 27	21 0	0 28	15 22	1 20	21 46	0 4	1 27	1 19	0 39	15 59	19 40	19 20	2 25	6 12	6 33	
F 22	23 27	18 5	0s26	24 14	1 57	19 25	0 12	24 34	4 32	20 58	0 28	15 20	1 20	21 47	0 4	1 27	1 19	0 39	16 0	19 40	19 21	2 21	6 12	6 33	
S 23	23 27	12 45	1 43	23 58	1 56	19 13	0 1	24 39	4 36	20 55	0 28	15 18	1 20	21 47	0 4	1 27	1 19	0 39	16 0	19 40	19 22	2 18	6 13	6 33	
S 24	23 26	6 44	2 53	23 40	1 54	19 0	0s10	24 45	4 41	20 53	0 28	15 16	1 20	21 48	0 4	1 27	1 19	0 39	16 0	19 40	19 23	2 15	6 13	6 34	
M 25	23 25	0 24	3 52	23 20	1 51	18 47	0 21	24 50	4 45	20 50	0 28	15 14	1 20	21 48	0 4	1 27	1 19	0 39	16 0	19 39	19 23	2 12	6 13	6 34	
T 26	23 23	5s54	4 37	23 0	1 48	18 35	0 33	24 56	4 50	20 48	0 28	15 12	1 20	21 49	0 4	1 27	1 19	0 39	16 1	19 39	19 24	2 9	6 13	6 34	
W 27	23 21	11 52	5 4	22 37	1 44	18 22	0 45	25 2	4 54	20 45	0 28	15 10	1 20	21 49	0 4	1 27	1 19	0 39	16 1	19 39	19 25	2 6	6 13	6 35	
T 28	23 18	17 11	5 14	22 14	1 40	18 10	0 57	25 8	4 58	20 43	0 28	15 8	1 20	21 50	0 4	1 27	1 19	0 39	16 1	19 40	19 26	2 2	6 14	6 35	
F 29	23 15	21 31	5 5	21 49	1 34	17 10	1 10	25 14	5 3	20 40	0 28	15 6	1 20	21 50	0 4	1 27	1 19	0 39	16 1	19 40	19 26	2 5	6 14	6 35	
S 30	23n12	24s38	4s39	21n24	1n29	17n47	1s23	25s20	5s 7	20n37	0n28	15n 4	1n20	21n51	0s 4	1s27	1s19	0s39	16s 2	19s41	19s27	1s56	6s14	6n35	

# ASTRODIENST EPHEMERIS for the year 1860

## geocentric

JULY 1860

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
S 1	18 37 4	9 <sup>58</sup> 18'31	13 <sup>57</sup> 7	2 <sup>50</sup> 30	4 <sup>50</sup> R29	29 <sup>50</sup> R 2	0 <sup>50</sup> 15	23 <sup>50</sup> 17	9 <sup>50</sup> II41	29 <sup>50</sup> II24	9 <sup>50</sup> II14	2 <sup>50</sup> R 9	3 <sup>50</sup> ≈11	16 <sup>50</sup> II56	27 <sup>50</sup> R14	S 1
M 2	18 41 1	10 <sup>58</sup> 15'42	26 <sup>58</sup> 16	3 <sup>58</sup> 58	4 <sup>58</sup> 20	28 <sup>58</sup> 52	0 <sup>58</sup> 28	23 <sup>58</sup> 23	9 <sup>58</sup> 44	29 <sup>58</sup> R24	9 <sup>58</sup> 15	2 <sup>58</sup> ≈6	3 <sup>58</sup> ° 8	17 <sup>58</sup> ° 3	27 <sup>58</sup> ≈12	M 2
T 3	18 44 57	11 <sup>58</sup> 12'52	9 <sup>58</sup> 31	5 <sup>58</sup> 23	4 <sup>58</sup> ° 8	28 <sup>58</sup> 41	0 <sup>58</sup> 41	23 <sup>58</sup> 29	9 <sup>58</sup> 48	29 <sup>58</sup> 24	9 <sup>58</sup> 16	2 <sup>58</sup> ° 3	3 <sup>58</sup> ° 4	17 <sup>58</sup> ° 9	27 <sup>58</sup> 10	T 3
W 4	18 48 54	12 <sup>58</sup> 10'03	21 <sup>58</sup> 51	6 <sup>58</sup> 47	3 <sup>58</sup> 54	28 <sup>58</sup> 29	0 <sup>58</sup> 54	23 <sup>58</sup> 35	9 <sup>58</sup> 51	29 <sup>58</sup> 24	9 <sup>58</sup> 17	2 <sup>58</sup> ° 2	3 <sup>58</sup> ° 1	17 <sup>58</sup> 16	27 <sup>58</sup> ° 8	W 4
T 5	18 52 51	13 <sup>58</sup> 7'14	4 <sup>58</sup> ≈16	8 <sup>58</sup> ° 7	3 <sup>58</sup> 37	28 <sup>58</sup> 17	1 <sup>58</sup> ° 7	23 <sup>58</sup> 42	9 <sup>58</sup> 54	29 <sup>58</sup> 24	9 <sup>58</sup> 17	2 <sup>58</sup> D 2	2 <sup>58</sup> 58	17 <sup>58</sup> 23	27 <sup>58</sup> ° 6	T 5
F 6	18 56 47	14 <sup>58</sup> 4'24	16 <sup>58</sup> 29	9 <sup>58</sup> 26	3 <sup>58</sup> 18	28 <sup>58</sup> ° 4	1 <sup>58</sup> 20	23 <sup>58</sup> 48	9 <sup>58</sup> 57	29 <sup>58</sup> 24	9 <sup>58</sup> 18	2 <sup>58</sup> ° 2	2 <sup>58</sup> 55	17 <sup>58</sup> 29	27 <sup>58</sup> ° 4	F 6
S 7	19 0 44	15 <sup>58</sup> 1'35	28 <sup>58</sup> 31	10 <sup>58</sup> 42	2 <sup>58</sup> 57	27 <sup>58</sup> 50	1 <sup>58</sup> 33	23 <sup>58</sup> 55	10 <sup>58</sup> ° 0	29 <sup>58</sup> 24	9 <sup>58</sup> 19	2 <sup>58</sup> ° 3	2 <sup>58</sup> 52	17 <sup>58</sup> 36	27 <sup>58</sup> ° 2	S 7
S 8	19 4 40	15 <sup>58</sup> 58'47	10 <sup>58</sup> II26	11 <sup>58</sup> 55	2 <sup>58</sup> 34	27 <sup>58</sup> 37	1 <sup>58</sup> 46	24 <sup>58</sup> ° 1	10 <sup>58</sup> ° 3	29 <sup>58</sup> 24	9 <sup>58</sup> 19	2 <sup>58</sup> ° 5	2 <sup>58</sup> 49	17 <sup>58</sup> 43	27 <sup>58</sup> ° 0	S 8
M 9	19 8 37	16 <sup>58</sup> 55'59	22 <sup>58</sup> 17	13 <sup>58</sup> ° 6	2 <sup>58</sup> ° 9	27 <sup>58</sup> 22	1 <sup>58</sup> 59	24 <sup>58</sup> ° 8	10 <sup>58</sup> ° 6	29 <sup>58</sup> 23	9 <sup>58</sup> 20	2 <sup>58</sup> ° 6	2 <sup>58</sup> 45	17 <sup>58</sup> 50	26 <sup>58</sup> 58	M 9
T 10	19 12 33	17 <sup>58</sup> 53'11	4 <sup>58</sup> II8	14 <sup>58</sup> 14	1 <sup>58</sup> 41	27 <sup>58</sup> ° 7	2 <sup>58</sup> 12	24 <sup>58</sup> 14	10 <sup>58</sup> ° 9	29 <sup>58</sup> 23	9 <sup>58</sup> 21	2 <sup>58</sup> ° 7	2 <sup>58</sup> 42	17 <sup>58</sup> 56	26 <sup>58</sup> 56	T 10
W 11	19 16 30	18 <sup>58</sup> 50'23	16 <sup>58</sup> ° 5	15 <sup>58</sup> 20	1 <sup>58</sup> 12	26 <sup>58</sup> 52	2 <sup>58</sup> 25	24 <sup>58</sup> 21	10 <sup>58</sup> 12	29 <sup>58</sup> 23	9 <sup>58</sup> 21	2 <sup>58</sup> R 8	2 <sup>58</sup> 39	18 <sup>58</sup> ° 3	26 <sup>58</sup> 54	W 11
T 12	19 20 26	19 <sup>58</sup> 47'37	28 <sup>58</sup> 12	16 <sup>58</sup> 22	0 <sup>58</sup> 41	26 <sup>58</sup> 37	2 <sup>58</sup> 38	24 <sup>58</sup> 28	10 <sup>58</sup> 15	29 <sup>58</sup> 23	9 <sup>58</sup> 22	2 <sup>58</sup> ° 7	2 <sup>58</sup> 36	18 <sup>58</sup> 10	26 <sup>58</sup> 52	T 12
F 13	19 24 23	20 <sup>58</sup> 44'50	10 <sup>58</sup> II32	17 <sup>58</sup> 22	0 <sup>58</sup> ° 9	26 <sup>58</sup> 21	2 <sup>58</sup> 51	24 <sup>58</sup> 34	10 <sup>58</sup> 18	29 <sup>58</sup> 22	9 <sup>58</sup> 22	2 <sup>58</sup> ° 7	2 <sup>58</sup> 33	18 <sup>58</sup> 16	26 <sup>58</sup> 49	F 13
S 14	19 28 19	21 <sup>58</sup> 42'05	23 <sup>58</sup> 11	18 <sup>58</sup> 19	29 <sup>58</sup> 535	26 <sup>58</sup> ° 5	3 <sup>58</sup> ° 4	24 <sup>58</sup> 41	10 <sup>58</sup> 21	29 <sup>58</sup> 22	9 <sup>58</sup> 23	2 <sup>58</sup> ° 6	2 <sup>58</sup> 29	18 <sup>58</sup> 23	26 <sup>58</sup> 47	S 14
S 15	19 32 16	22 <sup>58</sup> 39'20	6 <sup>58</sup> II12	19 <sup>58</sup> 12	29 <sup>58</sup> ° 0	25 <sup>58</sup> 48	3 <sup>58</sup> 17	24 <sup>58</sup> 48	10 <sup>58</sup> 23	29 <sup>58</sup> 22	9 <sup>58</sup> 23	2 <sup>58</sup> ° 5	2 <sup>58</sup> 26	18 <sup>58</sup> 30	26 <sup>58</sup> 45	S 15
M 16	19 36 13	23 <sup>58</sup> 36'36	19 <sup>58</sup> 35	20 <sup>58</sup> ° 2	28 <sup>58</sup> 24	25 <sup>58</sup> 32	3 <sup>58</sup> 31	24 <sup>58</sup> 55	10 <sup>58</sup> 26	29 <sup>58</sup> 21	9 <sup>58</sup> 24	2 <sup>58</sup> ° 3	2 <sup>58</sup> 23	18 <sup>58</sup> 36	26 <sup>58</sup> 42	M 16
T 17	19 40 9	24 <sup>58</sup> 33'52	3 <sup>58</sup> 52	20 <sup>58</sup> 49	27 <sup>58</sup> 48	25 <sup>58</sup> 15	3 <sup>58</sup> 44	25 <sup>58</sup> ° 2	10 <sup>58</sup> 29	29 <sup>58</sup> 21	9 <sup>58</sup> 24	2 <sup>58</sup> ° 3	2 <sup>58</sup> 20	18 <sup>58</sup> 43	26 <sup>58</sup> 40	T 17
W 18	19 44 6	25 <sup>58</sup> 31'09	17 <sup>58</sup> 30	21 <sup>58</sup> 33	27 <sup>58</sup> 11	24 <sup>58</sup> 58	3 <sup>58</sup> 57	25 <sup>58</sup> ° 9	10 <sup>58</sup> 32	29 <sup>58</sup> 20	9 <sup>58</sup> 25	2 <sup>58</sup> ° 2	2 <sup>58</sup> 17	18 <sup>58</sup> 50	26 <sup>58</sup> 37	W 18
T 19	19 48 2	26 <sup>58</sup> 28'27	1 <sup>58</sup> 56	22 <sup>58</sup> 12	26 <sup>58</sup> 33	24 <sup>58</sup> 41	4 <sup>58</sup> 10	25 <sup>58</sup> 16	10 <sup>58</sup> 34	29 <sup>58</sup> 20	9 <sup>58</sup> 25	2 <sup>58</sup> D 2	2 <sup>58</sup> 14	18 <sup>58</sup> 56	26 <sup>58</sup> 35	T 19
F 20	19 51 59	27 <sup>58</sup> 25'45	16 <sup>58</sup> 33	22 <sup>58</sup> 48	25 <sup>58</sup> 56	24 <sup>58</sup> 24	4 <sup>58</sup> 23	25 <sup>58</sup> 23	10 <sup>58</sup> 37	29 <sup>58</sup> 19	9 <sup>58</sup> 26	2 <sup>58</sup> ° 2	2 <sup>58</sup> 10	19 <sup>58</sup> ° 3	26 <sup>58</sup> 32	F 20
S 21	19 55 55	28 <sup>58</sup> 23'03	1 <sup>58</sup> II17	23 <sup>58</sup> 20	25 <sup>58</sup> 19	24 <sup>58</sup> ° 8	4 <sup>58</sup> 37	25 <sup>58</sup> 30	10 <sup>58</sup> 40	29 <sup>58</sup> 19	9 <sup>58</sup> 26	2 <sup>58</sup> ° 2	2 <sup>58</sup> ° 7	19 <sup>58</sup> 10	26 <sup>58</sup> 30	S 21
S 22	19 59 52	29 <sup>58</sup> 20'22	16 <sup>58</sup> ° 0	23 <sup>58</sup> 47	24 <sup>58</sup> 42	23 <sup>58</sup> 51	4 <sup>58</sup> 50	25 <sup>58</sup> 37	10 <sup>58</sup> 42	29 <sup>58</sup> 18	9 <sup>58</sup> 27	2 <sup>58</sup> ° 3	2 <sup>58</sup> ° 4	19 <sup>58</sup> 16	26 <sup>58</sup> 27	S 22
M 23	20 3 49	0 <sup>58</sup> 17'41	0 <sup>58</sup> ≈35	24 <sup>58</sup> 11	24 <sup>58</sup> ° 6	23 <sup>58</sup> 34	5 <sup>58</sup> ° 3	25 <sup>58</sup> 44	10 <sup>58</sup> 45	29 <sup>58</sup> 17	9 <sup>58</sup> 27	2 <sup>58</sup> ° 3	2 <sup>58</sup> ° 1	19 <sup>58</sup> 23	26 <sup>58</sup> 25	M 23
T 24	20 7 45	1 <sup>58</sup> 15'01	14 <sup>58</sup> 59	24 <sup>58</sup> 30	23 <sup>58</sup> 31	23 <sup>58</sup> 18	5 <sup>58</sup> 16	25 <sup>58</sup> 51	10 <sup>58</sup> 47	29 <sup>58</sup> 17	9 <sup>58</sup> 27	2 <sup>58</sup> ° 3	1 <sup>58</sup> 58	19 <sup>58</sup> 30	26 <sup>58</sup> 22	T 24
W 25	20 11 42	2 <sup>58</sup> 12'21	29 <sup>58</sup> ° 8	24 <sup>58</sup> 44	22 <sup>58</sup> 57	23 <sup>58</sup> ° 2	5 <sup>58</sup> 30	25 <sup>58</sup> 59	10 <sup>58</sup> 50	29 <sup>58</sup> 16	9 <sup>58</sup> 28	2 <sup>58</sup> ° 3	1 <sup>58</sup> 55	19 <sup>58</sup> 36	26 <sup>58</sup> 19	W 25
T 26	20 15 38	3 <sup>58</sup> ° 9'41	13 <sup>58</sup> II0	24 <sup>58</sup> 53	22 <sup>58</sup> 24	22 <sup>58</sup> 46	5 <sup>58</sup> 43	26 <sup>58</sup> ° 6	10 <sup>58</sup> 52	29 <sup>58</sup> 15	9 <sup>58</sup> 28	2 <sup>58</sup> ° 3	1 <sup>58</sup> 51	19 <sup>58</sup> 43	26 <sup>58</sup> 16	T 26
F 27	20 19 35	4 <sup>58</sup> ° 7'02	26 <sup>58</sup> 35	24 <sup>58</sup> R57	21 <sup>58</sup> 53	22 <sup>58</sup> 31	5 <sup>58</sup> 56	26 <sup>58</sup> 13	10 <sup>58</sup> 55	29 <sup>58</sup> 14	9 <sup>58</sup> 28	2 <sup>58</sup> ° 3	1 <sup>58</sup> 48	19 <sup>58</sup> 50	26 <sup>58</sup> 14	F 27
S 28	20 23 31	5 <sup>58</sup> ° 4'24	9 <sup>58</sup> II52	24 <sup>58</sup> 57	21 <sup>58</sup> 23	22 <sup>58</sup> 16	6 <sup>58</sup> 10	26 <sup>58</sup> 20	10 <sup>58</sup> 57	29 <sup>58</sup> 14	9 <sup>58</sup> 28	2 <sup>58</sup> ° 3	1 <sup>58</sup> 45	19 <sup>58</sup> 57	26 <sup>58</sup> 11	S 28
S 29	20 27 28	6 <sup>58</sup> ° 1'46	22 <sup>58</sup> 55	24 <sup>58</sup> 51	20 <sup>58</sup> 55	22 <sup>58</sup> ° 1	6 <sup>58</sup> 23	26 <sup>58</sup> 28	11 <sup>58</sup> ° 0	29 <sup>58</sup> 13	9 <sup>58</sup> 29	2 <sup>58</sup> ° 4	1 <sup>58</sup> 42	20 <sup>58</sup> ° 3	26 <sup>58</sup> ° 8	S 29
M 30	20 31 24	6 <sup>58</sup> 59'09	5 <sup>58</sup> II42	24 <sup>58</sup> 40	20 <sup>58</sup> 29	21 <sup>58</sup> 47	6 <sup>58</sup> 36	26 <sup>58</sup> 35	11 <sup>58</sup> ° 2	29 <sup>58</sup> 12	9 <sup>58</sup> 29	2 <sup>58</sup> ° 4	1 <sup>58</sup> 39	20 <sup>58</sup> 10	26 <sup>58</sup> ° 5	M 30
T 31	20 35 21	7 <sup>58</sup> 15'32	18 <sup>58</sup> II17	24 <sup>58</sup> 23	20 <sup>58</sup> 5	21 <sup>58</sup> 33	6 <sup>58</sup> 49	26 <sup>58</sup> 42	11 <sup>58</sup> II4	29 <sup>58</sup> II11	9 <sup>58</sup> 29	2 <sup>58</sup> ≈4	1 <sup>58</sup> ≈35	20 <sup>58</sup> II17	26 <sup>58</sup> ≈2	T 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	lat
S 1	23n 8	26s19	3s57	20n57	1n22	17n36	1s36	25s26	5s11	20n35	0n28	15n 2	1n20	21n51	0s 4	1s27	1s19	0s39	16s 2	19s42	19s28	1s53	6s14	6n36
M 2	23 4	26 29	3 4	20 30	1 16	17 25	1 49	25 32	5 15	20 32	0 29	15 0	1 20	21 52	0 4	1 27	1 19	0 39	16 2	19 43	19 28	1 50	6 15	6 36
T 3	22 59	25 11	2 3	20 3	1 8	17 15	2 3	25 39	5 19	20 29	0 29	14 58	1 20	21 52	0 4	1 27	1 19	0 39	16 2	19 43	19 29	1 46	6 15	6 36
W 4	22 54	22 36	0 56	19 34	1 1	17 5	2 17	25 45	5 23	20 26	0 29	14 56	1 20	21 53	0 4	1 27	1 19	0 39	16 3	19 43	19 30	1 43	6 15	6 36
T 5	22 49	19 0	0n12	19 5	0 52	16 55	2 31	25 52	5 27	20 24	0 29	14 53	1 20	21 53	0 4	1 27	1 19	0 39	16 3	19 43	19 31	1 40	6 16	6 37
F 6	22 43	14 39	1 19	18 36	0 43	16 46	2 45	25 58	5 31	20 21	0 29	14 51	1 20	21 54	0 4	1 27	1 19	0 39	16 3	19 43	19 31	1 37	6 16	6 37
S 7	22 37	9 47	2 21	18 7	0 34	16 37	2 59	26 4	5 35	20 18	0 29	14 49	1 20	21 54	0 4	1 27	1 19	0 39	16 4	19 43	19 32	1 34	6 17	6 37
S 8	22 30	4 38	3 17	17 37	0 24	16 28	3 13	26 11	5 38	20 15	0 29	14 47	1 20	21 55	0 4	1 27	1 19	0 39	16 4	19 43	19 33	1 31	6 17	6 37
M 9	22 23	0n40	4 3	17 8	0 14	16 20	3 27	26 17	5 42	20 12	0 29	14 45	1 20	21 55	0 4	1 27	1 19	0 39	16 4	19 42	19 34	1 27	6 18	6 38
T 10	22 16	5 55	4 40	16 38	0 4	16 12	3 41	26 23	5 45	20 9	0 29	14 43	1 20	21 56	0 4	1 28	1 19	0 39	16 4	19 42	19 34	1 24	6 18	6 38
W 11	22 8	11 0	5 4	16 8	0s 7	16 5	3 55	26 29	5 48	20 7	0 29	14 40	1 20	21 56	0 4	1 28	1 20	0 40	16 5	19 42	19 35	1 21	6 19	6 38
T 12	22 0	15 45	5 16	15 39	0 18	15 58	4 9	26 36	5 51	20 4	0 29	14 38	1 20	21 56	0 4	1 28	1 20	0 40	16 5	19 42	19 36	1 18	6 19	6 38
F 13	21 51	19 57	5 13	15 10	0 30	15 51	4 23	26 42	5 54	20 1	0 29	14 36	1 20	21 57	0 4	1 28	1 20	0 40	16 5	19 42	19 36	1 15	6 20	6 39
S 14	21 42	23 21	4 55	14 41	0 42	15 45	4 36	26 48	5 57	19 58	0 29	14 34	1 20	21 57	0 4	1 28	1 20	0 40	16 6	19 43	19 37	1 12	6 20	6 39
S 15	21 33	25 40	4 22	14 13	0 54	15 40	4 49	26 53	6 0	19 55	0 29	14 31	1 20	21 58	0 4	1 28	1 20	0 40	16 6	19 43	19 38	1 8	6 21	6 39
M 16	21 24	26 36	3 34	13 46	1 7	15 34	5 2	26 59	6 2	19 52	0 29	14 29	1 20	21 58	0 4	1 29	1 20	0 40	16 6	19 43	19 39	1 5	6 22	6 39
T 17	21 14	25 57	2 32	13 19	1 19	15 30	5 14	27 4	6 5	19 49	0 30	14 27	1 20	21 58	0 4	1 29	1 20	0 40	16 6	19 43	19 39	1 2	6 22	6 39
W 18	21 3	23 38	1 20	12 53	1 32	15 25	5 25	27 10	6 7	19 46	0 30	14 24	1 20	21 59	0 4	1 29	1 20	0 40	16 7	19 43	19 40	0 59	6 23	6 40
T 19	20 53	19 45	0 1	12 27	1 45	15 21	5 36	27 15	6 9	19 43	0 30	14 22	1 20	21 59	0 4	1 29	1 20	0 41	16 7	19 43	19 41	0 56	6 24	6 40
F 20	20 41	14 37	1s20	12 3	1 59	15 18	5 47	27 20	6 11	19 40	0 30	14 20	1 20	22 0	0 4	1 30	1 20	0 41	16 7	19 43	19 41	0 53	6 24	6 40
S 21	20 30	8 36	2 35	11 40	2 12	15 15	5 56	27 25	6 12	19 36	0 30	14 17	1 20	22 0	0 4	1 30	1 20	0 41	16 8	19 43	19 42	0 49	6 25	6 40
S 22	20 18	2 8	3 40	11 19	2 25	15 12	6 5	27 29	6 14	19 33	0 30	14 15	1 20	22 0	0 4	1 30	1 20	0 41	16 8	19 43	19 43	0 46	6 26	6 40
M 23	20 6	4s22	4 31	10 58	2 39	15 10	6 14	27 33	6 15	19 30	0 30	14 12	1 20	22 1	0 4	1 31	1 20	0 41	16 8	19 43	19 44	0 43	6 26	6 40
T 24	19 54	10 34	5 3	10 40	2 52	15 8	6 21	27 37	6 16	19 27	0 30	14 10	1 20	22 1	0 4	1 31	1 20	0 41	16 9	19 43	19 44	0 40	6 27	6 41
W 25	19 41	16 6	5 17	10 23	3 5	15 7	6 28	27 41	6 17	19 24	0 30	14 7	1 20	22 1	0 4	1 31	1 20	0 42	16 9	19 43	19 45	0 37	6 28	6 41
T 26	19 28	20 42	5 11	10 8	3 18	15 6	6 34	27 45	6 18	19 21	0 30	14 5	1 20	22 2	0 4	1 31	1 20	0 42	16 9	19 43	19 46	0 34	6 29	6 41
F 27	19 15	24 5	4 49	9 54	3 31	15 6	6 40	27 48	6 18	19 18	0 30	14 3	1 20	22 2	0 4	1 32	1 20	0 42	16 10	19 43	19 46	0 30	6 29	6 41
S 28	19 1	26 5	4 11	9 43	3 43	15 6	6 44	27 51	6 19	19 14	0 30	14 0	1 20	22 3	0 4	1 32	1 20	0 42	16 10	19 43	19 47	0 27	6 30	6 41
S 29	18 47	26 36	3 21	9 34	3 54	15 6	6 48	27 53	6 19	19 11	0 30	13 58	1 20	22 3	0 4	1 33	1 20	0 43	16 10	19 43	19 48	0 24	6 31	6 41
M 30	18 32	25 41	2 21	9 27	4 5	15 7	6 52	27 56	6 19	19 8	0 31	13 55	1 20	22 3	0 4	1 33	1 20	0 43	16 10	19 43	19 49	0 21	6 32	6 41
T 31	18n18	23s28	1s16	9n23	4s15	15n 8	6s54	27s58	6s19	19n 5	0n31	13n53	1n20	22n 4	0s 4	1s33	1s20	0s43	16s11	19s43	19s49	0s18	6s33	6n41



ASTRODIENST EPHEMERIS for the year 1860  
geocentric

AUGUST 1860

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	20 39 18	8♂53'56	0♂39	24°R 2	19°R44	21°R20	7♂ 3	26♂50	11♂ 7	29°R10	9♂29	2°R 5	1♂32	20♂23	25°R59	W 1
T 2	20 43 14	9°51'21	12°52	23♂36	19♂24	21♂ 7	7°16	26°57	11° 9	29♂ 9	9°29	2♂ 4	1°29	20°30	25♂57	T 2
F 3	20 47 11	10°48'47	24°55	23° 5	19° 7	20°55	7°29	27° 4	11°11	29° 8	9°29	2° 4	1°26	20°37	25°54	F 3
S 4	20 51 7	11°46'14	6♂52	22°30	18°52	20°43	7°42	27°12	11°13	29° 7	9°30	2° 3	1°23	20°43	25°51	S 4
S 5	20 55 4	12°43'42	18°44	21°51	18°40	20°33	7°56	27°19	11°15	29° 6	9°30	2° 1	1°20	20°50	25°48	S 5
M 6	20 59 0	13°41'12	0♂35	21° 8	18°30	20°22	8° 9	27°27	11°17	29° 5	9°30	2° 0	1°16	20°57	25°45	M 6
T 7	21 2 57	14°38'42	12°26	20°23	18°22	20°13	8°22	27°34	11°19	29° 4	9°30	1°58	1°13	21° 3	25°42	T 7
W 8	21 6 53	15°36'14	24°23	19°35	18°17	20° 4	8°35	27°42	11°21	29° 3	9°30	1°57	1°10	21°10	25°39	W 8
T 9	21 10 50	16°33'47	6♂28	18°47	18°14	19°56	8°48	27°49	11°23	29° 2	9°R30	1°56	1° 7	21°17	25°36	T 9
F 10	21 14 47	17°31'22	18°46	17°58	18°D14	19°49	9° 2	27°57	11°25	29° 1	9°30	1°D56	1° 4	21°24	25°33	F 10
S 11	21 18 43	18°28'58	1♂22	17° 9	18°16	19°42	9°15	28° 4	11°27	29° 0	9°30	1°56	1° 1	21°30	25°30	S 11
S 12	21 22 40	19°26'36	14°19	16°23	18°20	19°36	9°28	28°12	11°29	28°59	9°30	1°57	0°57	21°37	25°27	S 12
M13	21 26 36	20°24'16	27°40	15°38	18°26	19°31	9°41	28°20	11°30	28°57	9°30	1°58	0°54	21°44	25°24	M13
T 14	21 30 33	21°21'56	11♂28	14°57	18°35	19°27	9°54	28°27	11°32	28°56	9°30	2° 0	0°51	21°50	25°21	T 14
W15	21 34 29	22°19'39	25°42	14°20	18°46	19°24	10° 7	28°35	11°34	28°55	9°29	2°R 0	0°48	21°57	25°17	W15
T 16	21 38 26	23°17'22	10♂19	13°49	18°59	19°21	10°20	28°42	11°35	28°54	9°29	2° 0	0°45	22° 4	25°14	T 16
F 17	21 42 22	24°15'08	25°13	13°23	19°13	19°19	10°34	28°50	11°37	28°52	9°29	1°59	0°41	22°10	25°11	F 17
S 18	21 46 19	25°12'54	10♂18	13° 3	19°30	19°18	10°47	28°58	11°38	28°51	9°29	1°57	0°38	22°17	25° 8	S 18
S 19	21 50 16	26°10'42	25°24	12°50	19°49	19°D18	11° 0	29° 5	11°40	28°50	9°29	1°54	0°35	22°24	25° 5	S 19
M20	21 54 12	27° 8'30	10♂21	12°D45	20° 9	19°19	11°13	29°13	11°41	28°49	9°29	1°51	0°32	22°30	25° 2	M20
T 21	21 58 9	28° 6'21	25° 2	12°47	20°31	19°21	11°26	29°20	11°43	28°47	9°28	1°48	0°29	22°37	24°59	T 21
W22	22 2 5	29° 4'12	9♂21	12°56	20°55	19°23	11°39	29°28	11°44	28°46	9°28	1°45	0°26	22°44	24°56	W22
T 23	22 6 2	0♂ 2'05	23°16	13°14	21°21	19°26	11°51	29°36	11°45	28°44	9°28	1°44	0°22	22°51	24°53	T 23
F 24	22 9 58	0°59'58	6♂48	13°40	21°48	19°30	12° 4	29°43	11°47	28°43	9°27	1°D44	0°19	22°57	24°50	F 24
S 25	22 13 55	1°57'54	19°56	14°13	22°17	19°35	12°17	29°51	11°48	28°42	9°27	1°45	0°16	23° 4	24°47	S 25
S 26	22 17 51	2°55'50	2♂45	14°55	22°47	19°41	12°30	29°59	11°49	28°40	9°27	1°46	0°13	23°11	24°44	S 26
M27	22 21 48	3°53'48	15°17	15°44	23°19	19°48	12°43	0♂ 6	11°50	28°39	9°26	1°48	0°10	23°17	24°41	M27
T 28	22 25 45	4°51'47	27°36	16°40	23°52	19°55	12°56	0°14	11°51	28°37	9°26	1°R49	0° 7	23°24	24°38	T 28
W29	22 29 41	5°49'47	9♂45	17°43	24°26	20° 3	13° 8	0°21	11°52	28°36	9°26	1°49	0° 3	23°31	24°35	W29
T 30	22 33 38	6°47'49	21°46	18°53	25° 2	20°12	13°21	0°29	11°53	28°34	9°25	1°47	0° 0	23°37	24°32	T 30
F 31	22 37 34	7♂45'53	3♂41	20♂ 9	25♂39	20♂21	13♂34	0♂37	11♂54	28♂33	9♂25	1♂43	29♂57	23♂44	24♂29	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	18n 3	20s 9	0s 8	9n21	4s25	15n 9	6s56	28s 0	6s19	19n 1	0n31	13n50	1n20	22n 4	0s 4	1s34
T 2	17 48	16 1	0n59	9 22	4 33	15 10	6 57	28 1	6 18	18 58	0 31	13 48	1 20	22 4	0 4	1 34
F 3	17 32	11 17	2 3	9 26	4 40	15 12	6 57	28 3	6 18	18 55	0 31	13 45	1 20	22 4	0 4	1 35
S 4	17 16	6 12	3 1	9 32	4 45	15 14	6 57	28 4	6 17	18 51	0 31	13 43	1 20	22 5	0 4	1 35
S 5	17 0	0 55	3 51	9 40	4 49	15 17	6 57	28 5	6 16	18 48	0 31	13 40	1 20	22 5	0 4	1 35
M 6	16 44	4n21	4 30	9 51	4 52	15 19	6 55	28 5	6 15	18 45	0 31	13 38	1 20	22 5	0 4	1 36
T 7	16 27	9 29	4 58	10 5	4 52	15 22	6 54	28 6	6 14	18 41	0 31	13 35	1 20	22 6	0 4	1 36
W 8	16 10	14 18	5 13	10 20	4 51	15 25	6 51	28 6	6 12	18 38	0 31	13 32	1 20	22 6	0 4	1 37
T 9	15 53	18 38	5 15	10 38	4 49	15 28	6 49	28 5	6 11	18 35	0 31	13 30	1 20	22 6	0 4	1 37
F 10	15 36	22 16	5 3	10 57	4 44	15 31	6 46	28 5	6 9	18 31	0 32	13 27	1 21	22 6	0 4	1 38
S 11	15 18	24 56	4 35	11 18	4 37	15 34	6 42	28 4	6 8	18 28	0 32	13 25	1 21	22 7	0 4	1 38
S 12	15 0	26 24	3 54	11 40	4 29	15 37	6 38	28 3	6 6	18 24	0 32	13 22	1 21	22 7	0 4	1 39
M13	14 42	26 25	2 58	12 2	4 19	15 41	6 34	28 2	6 4	18 21	0 32	13 20	1 21	22 7	0 4	1 39
T 14	14 23	24 48	1 51	12 26	4 7	15 44	6 30	28 1	6 2	18 18	0 32	13 17	1 21	22 7	0 4	1 40
W15	14 5	21 35	0 35	12 49	3 54	15 47	6 25	27 59	6 0	18 14	0 32	13 14	1 21	22 8	0 4	1 40
T 16	13 46	16 56	0s46	13 11	3 39	15 50	6 20	27 57	5 58	18 11	0 32	13 12	1 21	22 8	0 4	1 41
F 17	13 27	11 10	2 4	13 34	3 24	15 54	6 15	27 55	5 55	18 7	0 32	13 9	1 21	22 8	0 4	1 41
S 18	13 8	4 42	3 15	13 55	3 7	15 57	6 9	27 53	5 53	18 4	0 32	13 7	1 21	22 8	0 4	1 42
S 19	12 48	2s 2	4 13	14 15	2 50	16 0	6 4	27 51	5 50	18 0	0 32	13 4	1 21	22 9	0 4	1 42
M20	12 28	8 34	4 52	14 33	2 33	16 3	5 58	27 48	5 48	17 57	0 33	13 1	1 21	22 9	0 4	1 43
T 21	12 9	14 31	5 12	14 50	2 15	16 6	5 52	27 45	5 45	17 53	0 33	12 59	1 21	22 9	0 4	1 44
W22	11 48	19 32	5 11	15 5	1 57	16 8	5 46	27 42	5 42	17 50	0 33	12 56	1 21	22 9	0 4	1 44
T 23	11 28	23 19	4 52	15 17	1 39	16 11	5 39	27 39	5 40	17 46	0 33	12 53	1 21	22 9	0 4	1 45
F 24	11 8	25 41	4 17	15 27	1 21	16 13	5 33	27 35	5 37	17 43	0 33	12 51	1 21	22 9	0 4	1 45
S 25	10 47	26 33	3 29	15 34	1 3	16 15	5 26	27 32	5 34	17 39	0 33	12 48	1 21	22 10	0 4	1 46
S 26	10 26	25 58	2 32	15 38	0 46	16 17	5 20	27 28	5 31	17 36	0 33	12 46	1 21	22 10	0 4	1 47
M27	10 5	24 4	1 29	15 40	0 30	16 18	5 13	27 24	5 28	17 32	0 33	12 43	1 22	22 10	0 4	1 47
T 28	9 44	21 2	0 23	15 38	0 14	16 19	5 6	27 20	5 25	17 29	0 33	12 40	1 22	22 10	0 4	1 48
W29	9 23	17 8	0n43	15 33	0n 1	16 20	4 59	27 16	5 22	17 25	0 33	12 38	1 22	22 10	0 4	1 48
T 30	9 1	12 35	1 47	15 25	0 15	16 21	4 52	27 12	5 19	17 22	0 34	12 35	1 22	22 10	0 4	1 49
F 31	8n40	7s36	2n45	15n14	0n28	16n21	4s45	27s 7	5s16	17n18	0n34	12n33	1n22	22n11	0s 4	1s50

Julian Day Number = 2400623.5, Delta T = 8.95 sec  
Ecliptic obliquity = 23°27'31", Nutation = 0°00'16", out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 22°47'36", Lahiri = 21°54'37"

ASTRODIENST EPHEMERIS for the year 1860  
geocentric

SEPTEMBER 1860

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	22 41 31	8♍43'58	15♋34	21♏30	26♊17	20♊32	13♏46	0♍44	11♏55	28°R31	9°R24	1°R38	29♊54	23♋51	24°R26	S 1
S 2	22 45 27	9°42'05	27°25	22°57	26°56	20°43	13°59	0°52	11°56	28°30	9°24	1°32	29°51	23°57	24°23	S 2
M 3	22 49 24	10°40'13	9°16	24°29	27°37	20°55	14°11	0°59	11°56	28°28	9°23	1°24	29°47	24° 4	24°20	M 3
T 4	22 53 20	11°38'24	21°10	26° 5	28°18	21° 7	14°24	1° 7	11°57	28°26	9°23	1°17	29°44	24°11	24°17	T 4
W 5	22 57 17	12°36'36	3♊ 8	27°45	29° 1	21°21	14°36	1°14	11°58	28°25	9°22	1°11	29°41	24°18	24°14	W 5
T 6	23 1 13	13°34'51	15°14	29°28	29°44	21°35	14°49	1°22	11°58	28°23	9°22	1° 5	29°38	24°24	24°11	T 6
F 7	23 5 10	14°33'07	27°31	1♍14	0♏29	21°49	15° 1	1°29	11°59	28°22	9°21	1° 2	29°35	24°31	24° 9	F 7
S 8	23 9 7	15°31'26	10♏ 4	3° 2	1°14	22° 4	15°13	1°37	11°59	28°20	9°21	1°D 0	29°32	24°38	24° 6	S 8
S 9	23 13 3	16°29'47	22°55	4°51	2° 0	22°20	15°25	1°44	12° 0	28°18	9°20	1° 0	29°28	24°44	24° 3	S 9
M10	23 17 0	17°28'10	6♊ 9	6°42	2°48	22°37	15°38	1°52	12° 0	28°17	9°19	1° 1	29°25	24°51	24° 0	M10
T 11	23 20 56	18°26'35	19°49	8°35	3°36	22°54	15°50	1°59	12° 1	28°15	9°19	1° 3	29°22	24°58	23°58	T 11
W12	23 24 53	19°25'02	3♏57	10°27	4°25	23°12	16° 2	2° 7	12° 1	28°14	9°18	1°R 3	29°19	25° 4	23°55	W12
T 13	23 28 49	20°23'31	18°31	12°21	5°14	23°30	16°14	2°14	12° 1	28°12	9°17	1° 2	29°16	25°11	23°52	T 13
F 14	23 32 46	21°22'02	3♍28	14°14	6° 5	23°49	16°26	2°21	12° 1	28°10	9°17	0°58	29°12	25°18	23°50	F 14
S 15	23 36 43	22°20'35	18°40	16° 7	6°56	24° 9	16°38	2°29	12° 1	28° 9	9°16	0°53	29° 9	25°25	23°47	S 15
S 16	23 40 39	23°19'11	3♊58	18° 0	7°47	24°29	16°50	2°36	12° 2	28° 7	9°15	0°45	29° 6	25°31	23°45	S 16
M17	23 44 36	24°17'47	19°10	19°53	8°40	24°50	17° 1	2°43	12°R 2	28° 5	9°15	0°37	29° 3	25°38	23°42	M17
T 18	23 48 32	25°16'26	4♏ 7	21°45	9°33	25°12	17°13	2°51	12° 2	28° 4	9°14	0°29	29° 0	25°45	23°40	T 18
W19	23 52 29	26°15'07	18°40	23°36	10°27	25°33	17°25	2°58	12° 1	28° 2	9°13	0°23	28°57	25°51	23°37	W19
T 20	23 56 25	27°13'49	2♊45	25°27	11°21	25°56	17°36	3° 5	12° 1	28° 0	9°12	0°18	28°53	25°58	23°35	T 20
F 21	0 0 22	28°12'33	16°20	27°17	12°16	26°19	17°48	3°12	12° 1	27°59	9°11	0°15	28°50	26° 5	23°32	F 21
S 22	0 4 18	29°11'19	29°29	29° 6	13°11	26°42	17°59	3°19	12° 1	27°57	9°11	0°D15	28°47	26°11	23°30	S 22
S 23	0 8 15	0♏10'07	12♊13	0♏54	14° 7	27° 6	18°11	3°27	12° 1	27°55	9°10	0°15	28°44	26°18	23°28	S 23
M24	0 12 11	1° 8'56	24°39	2°41	15° 4	27°31	18°22	3°34	12° 0	27°54	9° 9	0°R16	28°41	26°25	23°26	M24
T25	0 16 8	2° 7'47	6♋49	4°28	16° 1	27°56	18°33	3°41	12° 0	27°52	9° 8	0°16	28°38	26°32	23°23	T25
W26	0 20 5	3° 6'39	18°50	6°13	16°58	28°21	18°44	3°48	12° 0	27°50	9° 7	0°14	28°34	26°38	23°21	W26
T27	0 24 1	4° 5'33	0♋44	7°58	17°56	28°47	18°55	3°55	11°59	27°49	9° 6	0°10	28°31	26°45	23°19	T27
F 28	0 27 58	5° 4'30	12°35	9°42	18°55	29°13	19° 6	4° 2	11°59	27°47	9° 5	0° 3	28°28	26°52	23°17	F 28
S 29	0 31 54	6° 3'28	24°25	11°24	19°54	29°40	19°17	4° 8	11°58	27°45	9° 5	29♊53	28°25	26°58	23°15	S 29
S 30	0 35 51	7♊ 2'28	6°17	13♊ 6	20♏53	0♋ 7	19♏28	4♍15	11♏57	27°44	9° 4	29♊42	28♊22	27♋ 5	23°13	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
S 1	8n18	2s23	3n35	14n59	0n41	16n21	4s38	27s 2	5s13	17n15	0n34	12n30	1n22	22n11	0s 4	1s50	1s22	0s54	16s20	19s49	20s11	1n23	7s 5	6n40			
S 2	7 56	2n54	4 17	14 42	0 52	16 21	4 31	26 57	5 9	17 11	0 34	12 27	1 22	22 11	0 4	1 51	1 22	0 54	16 21	19 50	20 12	1 26	7 7	6 40			
M 3	7 34	8 4	4 47	14 21	1 2	16 20	4 24	26 52	5 6	17 8	0 34	12 25	1 22	22 11	0 4	1 52	1 22	0 54	16 21	19 52	20 13	1 29	7 8	6 40			
T 4	7 12	12 57	5 4	13 57	1 11	16 19	4 17	26 47	5 3	17 4	0 34	12 22	1 22	22 11	0 4	1 52	1 22	0 55	16 21	19 53	20 13	1 32	7 9	6 40			
W 5	6 50	17 24	5 9	13 30	1 19	16 18	4 10	26 42	5 0	17 1	0 34	12 19	1 22	22 11	0 4	1 53	1 22	0 55	16 22	19 55	20 14	1 35	7 10	6 39			
T 6	6 28	21 11	5 0	13 1	1 26	16 16	4 3	26 37	4 57	16 57	0 34	12 17	1 22	22 11	0 4	1 53	1 22	0 56	16 22	19 56	20 15	1 38	7 11	6 39			
F 7	6 5	24 7	4 37	12 29	1 32	16 13	3 56	26 31	4 54	16 54	0 35	12 14	1 23	22 11	0 4	1 54	1 22	0 56	16 22	19 57	20 15	1 41	7 12	6 39			
S 8	5 43	25 56	4 0	11 55	1 38	16 11	3 49	26 25	4 50	16 50	0 35	12 12	1 23	22 11	0 4	1 55	1 22	0 57	16 22	19 57	20 16	1 45	7 13	6 39			
S 9	5 20	26 27	3 11	11 19	1 42	16 8	3 42	26 19	4 47	16 47	0 35	12 9	1 23	22 11	0 4	1 55	1 22	0 57	16 23	19 57	20 17	1 48	7 14	6 39			
M10	4 57	25 29	2 10	10 41	1 45	16 4	3 35	26 13	4 44	16 43	0 35	12 7	1 23	22 11	0 3	1 56	1 22	0 57	16 23	19 57	20 17	1 51	7 15	6 38			
T 11	4 34	22 59	1 0	10 1	1 47	16 0	3 28	26 7	4 41	16 40	0 35	12 4	1 23	22 11	0 3	1 57	1 22	0 58	16 23	19 57	20 18	1 54	7 17	6 38			
W12	4 12	19 2	0s16	9 19	1 48	15 56	3 20	26 1	4 37	16 36	0 35	12 1	1 23	22 12	0 3	1 57	1 22	0 58	16 23	19 56	20 19	1 57	7 18	6 38			
T 13	3 49	13 49	1 33	8 37	1 49	15 51	3 13	25 55	4 34	16 33	0 35	11 59	1 23	22 12	0 3	1 58	1 22	0 59	16 24	19 57	20 19	2 0	7 19	6 38			
F 14	3 26	7 41	2 45	7 53	1 49	15 45	3 6	25 48	4 31	16 29	0 35	11 56	1 23	22 12	0 3	1 59	1 22	0 59	16 24	19 57	20 20	2 3	7 20	6 37			
S 15	3 2	1 0	3 47	7 8	1 48	15 40	2 59	25 41	4 28	16 26	0 36	11 54	1 23	22 12	0 3	1 59	1 22	1 0	16 24	19 59	20 21	2 6	7 21	6 37			
S 16	2 39	5s45	4 33	6 23	1 47	15 33	2 53	25 34	4 24	16 22	0 36	11 51	1 23	22 12	0 3	2 0	1 22	1 0	16 24	20 0	20 21	2 9	7 22	6 37			
M17	2 16	12 8	5 0	5 37	1 45	15 27	2 46	25 27	4 21	16 19	0 36	11 49	1 24	22 12	0 3	2 1	1 22	1 0	16 25	20 2	20 22	2 12	7 23	6 37			
T 18	1 53	17 41	5 5	4 50	1 42	15 20	2 39	25 20	4 18	16 16	0 36	11 46	1 24	22 12	0 3	2 1	1 22	1 1	16 25	20 4	20 23	2 16	7 24	6 36			
W19	1 29	22 2	4 51	4 3	1 39	15 12	2 32	25 13	4 15	16 12	0 36	11 44	1 24	22 12	0 3	2 2	1 22	1 1	16 25	20 5	20 23	2 19	7 25	6 36			
T 20	1 6	24 57	4 19	3 16	1 35	15 4	2 25	25 6	4 12	16 9	0 36	11 41	1 24	22 12	0 3	2 3	1 22	1 2	16 25	20 6	20 24	2 22	7 26	6 36			
F 21	0 43	26 17	3 33	2 29	1 32	14 55	2 18	24 58	4 8	16 5	0 36	11 39	1 24	22 12	0 3	2 3	1 22	1 2	16 25	20 7	20 25	2 25	7 27	6 35			
S 22	0 19	26 4	2 37	1 42	1 27	14 46	2 12	24 50	4 5	16 2	0 37	11 36	1 24	22 12	0 3	2 4	1 22	1 3	16 26	20 7	20 25	2 28	7 28	6 35			
S 23	0s 4	24 28	1 35	0 54	1 23	14 37	2 5	24 43	4 2	15 59	0 37	11 34	1 24	22 12	0 3	2 5	1 22	1 3	16 26	20 7	20 26	2 31	7 29	6 35			
M24	0 27	21 42	0 30	0 7	1 18	14 27	1 58	24 35	3 59	15 55	0 37	11 31	1 24	22 12	0 3	2 5	1 22	1 3	16 26	20 7	20 27	2 34	7 30	6 35			
T25	0 51	18 1	0n35	0s40	1 12	14 16	1 52	24 26	3 56	15 52	0 37	11 29	1 25	22 11	0 3	2 6	1 22	1 4	16 26	20 7	20 27	2 37	7 31	6 34			
W26	1 14	13 39	1 37	1 27	1 7	14 5	1 45	24 18	3 53	15 49	0 37	11 26	1 25	22 11	0 3	2 7	1 22	1 4	16 26	20 7	20 28	2 40	7 32	6 34			
T27	1 38	8 49	2 35	2 14	1 1	13 54	1 39	24 10	3 49	15 45	0 37	11 24	1 25	22 11	0 3	2 7	1 22	1 5	16 27	20 8	20 28	2 43	7 33	6 34			
F 28	2 1	3 41	3 25	3 0	0 55	13 42	1 33	24 1	3 46	15 42	0 38	11 22	1 25	22 11	0 3	2 8	1 22	1 5	16 27	20 9	20 29	2 46	7 34	6 33			
S 29	2 24	1n33	4 6	3 46	0 49	13 30	1 26	23 53	3 43	15 39	0 38	11 19	1 25	22 11	0 3	2 9	1 22	1 6	16 27	20 11	20 30	2 50	7 35	6 33			
S 30	2s48	6n44	4n37	4s32	0n43	13n17	1s20	23s44	3s40	15n36	0n38	11n17	1n25	22n11	0s 3	2s 9	1s22	1s 6	16s27	20s14	20s30	2n53	7s36	6n33			

ASTRODIENST EPHEMERIS for the year 1860  
geocentric

OCTOBER 1860

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Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
M 1	0 39 47	8♌ 1'30	18♏12	14♌47	21♏53	0♌34	19♏39	4♏22	11°R57	27°R42	9°R 3	29°R29	28♌18	27♏12	23°R11	M 1
T 2	0 43 44	9° 0'34	0♌12	16°28	22°53	1° 2	19°50	4°29	11°II56	27°R40	9♌ 2	29♌16	28°15	27°18	23°R10	T 2
W 3	0 47 40	9°59'41	12°17	18° 7	23°54	1°30	20° 0	4°36	11°55	27°39	9° 1	29° 4	28°12	27°25	23° 8	W 3
T 4	0 51 37	10°58'50	24°29	19°46	24°55	1°59	20°11	4°42	11°54	27°37	9° 0	28°54	28° 9	27°32	23° 6	T 4
F 5	0 55 34	11°58'01	6♏52	21°23	25°57	2°28	20°21	4°49	11°53	27°36	8°59	28°46	28° 6	27°39	23° 4	F 5
S 6	0 59 30	12°57'14	19°26	23° 0	26°59	2°57	20°31	4°55	11°52	27°34	8°58	28°42	28° 3	27°45	23° 3	S 6
S 7	1 3 27	13°56'29	2♏16	24°37	28° 1	3°27	20°42	5° 2	11°52	27°32	8°57	28°39	27°59	27°52	23° 1	S 7
M 8	1 7 23	14°55'47	15°24	26°12	29° 3	3°57	20°52	5° 8	11°50	27°31	8°56	28°D39	27°56	27°59	23° 0	M 8
T 9	1 11 20	15°55'08	28°55	27°47	0♏6	4°27	21° 2	5°15	11°49	27°29	8°55	28°R39	27°53	28° 5	22°58	T 9
W10	1 15 16	16°54'30	12♏50	29°21	1° 9	4°58	21°12	5°21	11°48	27°28	8°54	28°39	27°50	28°12	22°57	W10
T 11	1 19 13	17°53'55	27°11	0♏54	2°13	5°29	21°22	5°28	11°47	27°26	8°53	28°36	27°47	28°19	22°55	T 11
F 12	1 23 9	18°53'22	11♏56	2°27	3°17	6° 0	21°31	5°34	11°46	27°25	8°52	28°31	27°44	28°26	22°54	F 12
S 13	1 27 6	19°52'52	26°59	3°59	4°21	6°32	21°41	5°40	11°45	27°23	8°51	28°23	27°40	28°32	22°53	S 13
S 14	1 31 3	20°52'23	12♌12	5°30	5°26	7° 4	21°50	5°46	11°43	27°22	8°50	28°13	27°37	28°39	22°52	S 14
M15	1 34 59	21°51'57	27°24	7° 1	6°30	7°36	22° 0	5°52	11°42	27°20	8°49	28° 2	27°34	28°46	22°50	M15
T 16	1 38 56	22°51'32	12♏25	8°31	7°35	8° 8	22° 9	5°58	11°41	27°19	8°47	27°51	27°31	28°52	22°49	T 16
W17	1 42 52	23°51'10	27° 5	10° 0	8°41	8°41	22°18	6° 4	11°39	27°17	8°46	27°41	27°28	28°59	22°48	W17
T 18	1 46 49	24°50'49	11♏18	11°29	9°46	9°14	22°27	6°10	11°38	27°16	8°45	27°33	27°24	29° 6	22°47	T 18
F 19	1 50 45	25°50'31	25° 1	12°57	10°52	9°48	22°36	6°16	11°36	27°14	8°44	27°28	27°21	29°12	22°46	F 19
S 20	1 54 42	26°50'14	8♌15	14°24	11°58	10°21	22°45	6°22	11°35	27°13	8°43	27°25	27°18	29°19	22°46	S 20
S 21	1 58 38	27°49'59	21° 2	15°51	13° 5	10°55	22°54	6°27	11°33	27°12	8°42	27°25	27°15	29°26	22°45	S 21
M22	2 2 35	28°49'45	3♌28	17°16	14°11	11°29	23° 3	6°33	11°31	27°10	8°41	27°25	27°12	29°33	22°44	M22
T 23	2 6 32	29°49'33	15°37	18°41	15°18	12° 3	23°11	6°39	11°30	27° 9	8°40	27°24	27° 9	29°39	22°43	T 23
W24	2 10 28	0♏49'23	27°35	20° 6	16°25	12°38	23°19	6°44	11°28	27° 8	8°39	27°22	27° 5	29°46	22°43	W24
T 25	2 14 25	1°49'14	9♏27	21°29	17°32	13°12	23°28	6°50	11°26	27° 6	8°38	27°17	27° 2	29°53	22°42	T 25
F 26	2 18 21	2°49'07	21°17	22°52	18°40	13°47	23°36	6°55	11°24	27° 5	8°36	27°10	26°59	29°59	22°42	F 26
S 27	2 22 18	3°49'02	3♏8	24°14	19°47	14°22	23°44	7° 0	11°23	27° 4	8°35	26°59	26°56	0♏6	22°41	S 27
S 28	2 26 14	4°48'59	15° 3	25°34	20°55	14°58	23°52	7° 6	11°21	27° 3	8°34	26°46	26°53	0°13	22°41	S 28
M29	2 30 11	5°48'57	27° 5	26°54	22° 3	15°33	23°59	7°11	11°19	27° 1	8°33	26°32	26°49	0°20	22°41	M29
T 30	2 34 7	6°48'58	9♏14	28°12	23°12	16° 9	24° 7	7°16	11°17	27° 0	8°32	26°18	26°46	0°26	22°41	T 30
W31	2 38 4	7♏49'00	21♌31	29♏30	24♏20	16♌45	24♏14	7♏21	11°II15	26°R59	8♌31	26♌5	26♌43	0♏33	22°40	W31

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒		♓		♈	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	3s11	11n42	4n56	5s17	0n36	13n 3	1s14	23s35	3s37	15n32	0n38	11n15	1n25	22n11	0s 3	2s10	1s22	1s 6	16s27	20s17	20s31	2n56	7s37	6n32	
T 2	3 34	16 15	5 1	6 1	0 29	12 50	1 8	23 26	3 34	15 29	0 38	11 12	1 26	22 11	0 3	2 11	1 22	1 7	16 27	20 19	20 32	2 59	7 38	6 32	
W 3	3 58	20 11	4 53	6 46	0 23	12 35	1 2	23 16	3 31	15 26	0 38	11 10	1 26	22 11	0 3	2 11	1 22	1 7	16 28	20 22	20 32	3 2	7 39	6 31	
T 4	4 21	23 18	4 32	7 29	0 16	12 21	0 56	23 7	3 28	15 23	0 38	11 8	1 26	22 11	0 3	2 12	1 22	1 8	16 28	20 24	20 33	3 5	7 40	6 31	
F 5	4 44	25 23	3 58	8 12	0 9	12 6	0 50	22 57	3 25	15 20	0 39	11 5	1 26	22 11	0 3	2 13	1 22	1 8	16 28	20 25	20 34	3 8	7 41	6 31	
S 6	5 7	26 13	3 12	8 55	0 2	11 50	0 44	22 48	3 22	15 16	0 39	11 3	1 26	22 11	0 3	2 13	1 22	1 9	16 28	20 26	20 34	3 11	7 42	6 30	
S 7	5 30	25 41	2 15	9 37	0s 5	11 34	0 39	22 38	3 19	15 13	0 39	11 1	1 26	22 10	0 3	2 14	1 22	1 9	16 28	20 27	20 35	3 14	7 42	6 30	
M 8	5 53	23 43	1 10	10 18	0 12	11 18	0 33	22 28	3 17	15 10	0 39	10 59	1 27	22 10	0 3	2 14	1 22	1 9	16 28	20 27	20 35	3 17	7 43	6 30	
T 9	6 16	20 22	0s 1	10 59	0 19	11 1	0 28	22 18	3 14	15 7	0 39	10 56	1 27	22 10	0 3	2 15	1 22	1 10	16 28	20 27	20 36	3 20	7 44	6 29	
W10	6 39	15 47	1 14	11 39	0 26	10 44	0 22	22 7	3 11	15 4	0 39	10 54	1 27	22 10	0 3	2 16	1 22	1 10	16 28	20 27	20 37	3 23	7 45	6 29	
T 11	7 2	10 11	2 25	12 18	0 33	10 26	0 17	21 57	3 8	15 1	0 40	10 52	1 27	22 10	0 3	2 16	1 22	1 11	16 29	20 27	20 37	3 26	7 46	6 28	
F 12	7 24	3 54	3 27	12 57	0 40	10 8	0 11	21 46	3 5	14 58	0 40	10 50	1 27	22 10	0 3	2 17	1 22	1 11	16 29	20 28	20 38	3 30	7 47	6 28	
S 13	7 47	2s44	4 17	13 35	0 46	9 50	0 6	21 36	3 2	14 55	0 40	10 48	1 27	22 10	0 3	2 17	1 22	1 11	16 29	20 30	20 39	3 33	7 47	6 28	
S 14	8 9	9 15	4 49	14 12	0 53	9 31	0 1	21 25	3 0	14 52	0 40	10 46	1 28	22 9	0 3	2 18	1 22	1 12	16 29	20 32	20 39	3 36	7 48	6 27	
M15	8 32	15 13	5 0	14 49	1 0	9 11	0n 4	21 14	2 57	14 49	0 40	10 43	1 28	22 9	0 3	2 19	1 22	1 12	16 29	20 34	20 40	3 39	7 49	6 27	
T 16	8 54	20 11	4 51	15 24	1 7	8 52	0 9	21 3	2 54	14 47	0 41	10 41	1 28	22 9	0 3	2 19	1 22	1 13	16 29	20 37	20 40	3 42	7 50	6 26	
W17	9 16	23 46	4 22	15 59	1 13	8 32	0 14	20 51	2 51	14 44	0 41	10 39	1 28	22 9	0 3	2 20	1 22	1 13	16 29	20 39	20 41	3 45	7 50	6 26	
T 18	9 38	25 45	3 38	16 33	1 20	8 12	0 18	20 40	2 49	14 41	0 41	10 37	1 28	22 9	0 3	2 20	1 22	1 13	16 29	20 40	20 42	3 48	7 51	6 26	
F 19	10 0	26 4	2 42	17 7	1 26	7 51	0 23	20 28	2 46	14 38	0 41	10 35	1 28	22 8	0 3	2 21	1 22	1 14	16 29	20 41	20 42	3 51	7 52	6 25	
S 20	10 21	24 51	1 39	17 39	1 33	7 30	0 27	20 17	2 43	14 36	0 41	10 33	1 29	22 8	0 3	2 21	1 22	1 14	16 29	20 42	20 43	3 54	7 52	6 25	
S 21	10 43	22 22	0 34	18 10	1 39	7 9	0 32	20 5	2 41	14 33	0 42	10 31	1 29	22 8	0 3	2 22	1 22	1 15	16 29	20 42	20 44	3 57	7 53	6 24	
M22	11 4	18 53	0n32	18 41	1 45	6 47	0 36	19 53	2 38	14 30	0 42	10 29	1 29	22 8	0 3	2 23	1 22	1 15	16 29	20 42	20 44	4 0	7 54	6 24	
T 23	11 25	14 39	1 35	19 10	1 51	6 25	0 40	19 41	2 35	14 28	0 42	10 28	1 29	22 8	0 3	2 23	1 22	1 15	16 29	20 42	20 45	4 3	7 54	6 23	
W24	11 46	9 56	2 32	19 39	1 56	6 3	0 45	19 28	2 33	14 25	0 42	10 26	1 29	22 7	0 3	2 24	1 22	1 16	16 29	20 42	20 45	4 6	7 55	6 23	
T 25	12 7	4 54	3 23	20 7	2 2	5 41	0 49	19 16	2 30	14 23	0 42	10 24	1 30	22 7	0 3	2 24	1 22	1 16	16 29	20 43	20 46	4 9	7 55	6 23	
F 26	12 28	0n16	4 4	20 33	2 7	5 18	0 53	19 3	2 28	14 20	0 42	10 22	1 30	22 7	0 3	2 25	1 22	1 16	16 29	20 45	20 47	4 12	7 56	6 22	
S 27	12 48	5 27	4 35	20 59	2 12	4 55	0 56	18 51	2 25	14 18	0 43	10 20	1 30	22 7	0 3	2 25	1 22	1 17	16 29	20 47	20 47	4 15	7 56	6 22	
S 28	13 8	10 27	4 54	21 23	2 17	4 31	1 0	18 38	2 23	14 15	0 43	10 19	1 30	22 6	0 3	2 25	1 22	1 17	16 29	20 49	20 48	4 18	7 57	6 21	
M29	13 28	15 6	5 0	21 46	2 21	4 8	1 4	18 25	2 20	14 13	0 43	10 17	1 30	22 6	0 3	2 26	1 22	1 17	16 29	20 52	20 49	4 21	7 57	6 21	
T 30	13 48	19 12	4 52	22 1	2 26	3 44	1 7	18 12	2 18	14 10	0 43	10 15	1 31	22 6	0 3	2 26	1 22	1 18	16 29	20 55	20 49	4 24	7 58	6 20	
W31	14s 8	22n31	4n31	22s29	2s29	3n20	1n11	17s59	2s15	14n 8	0n43	10n13	1n31	22n 6	0s 3	2s27	1s22	1s18	16s29	20s57	20s50	4n27	7s58	6n20	

# ASTRODIENST EPHEMERIS for the year 1860

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NOVEMBER 1860

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Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	2 42 1	8♈49°04	3♊56	0♈45	25♈29	17♈21	24♈22	7♈26	11♈13	26♈58	8♈30	25♈54	26♈40	0♈40	22♈40	T 1
F 2	2 45 57	9°49'11	16°31	2° 0	26°37	17°57	24°29	7°31	11♈11	26♈57	8♈29	25♈45	26°37	0°46	22°D40	F 2
S 3	2 49 54	10°49'19	29°17	3°12	27°47	18°34	24°36	7°35	11° 9	26°56	8°27	25°40	26°34	0°53	22°40	S 3
S 4	2 53 50	11°49'29	12♈15	4°23	28°56	19°10	24°43	7°40	11° 7	26°55	8°26	25°37	26°30	1° 0	22°41	S 4
M 5	2 57 47	12°49'42	25°27	5°32	0♈ 5	19°47	24°50	7°45	11° 5	26°53	8°25	25°D36	26°27	1° 6	22°41	M 5
T 6	3 1 43	13°49'56	8♈55	6°38	1°15	20°24	24°56	7°49	11° 2	26°52	8°24	25°R37	26°24	1°13	22°41	T 6
W 7	3 5 40	14°50'13	22°43	7°42	2°24	21° 1	25° 3	7°54	11° 0	26°51	8°23	25°36	26°21	1°20	22°41	W 7
T 8	3 9 36	15°50'31	6♈49	8°43	3°34	21°38	25° 9	7°58	10°58	26°51	8°22	25°35	26°18	1°27	22°42	T 8
F 9	3 13 33	16°50'52	21°15	9°41	4°44	22°15	25°15	8° 2	10°56	26°50	8°21	25°31	26°15	1°33	22°42	F 9
S 10	3 17 30	17°51'14	5♈57	10°34	5°54	22°53	25°21	8° 6	10°54	26°49	8°20	25°24	26°11	1°40	22°42	S 10
S 11	3 21 26	18°51'38	20°49	11°24	7° 5	23°31	25°27	8°10	10°51	26°48	8°18	25°15	26° 8	1°47	22°43	S 11
M12	3 25 23	19°52'04	5♈44	12° 9	8°15	24° 8	25°33	8°14	10°49	26°47	8°17	25° 5	26° 5	1°53	22°44	M12
T 13	3 29 19	20°52'32	20°32	12°49	9°26	24°46	25°38	8°18	10°47	26°46	8°16	24°54	26° 2	2° 0	22°44	T 13
W14	3 33 16	21°53'02	5♈ 5	13°23	10°37	25°24	25°43	8°22	10°44	26°45	8°15	24°45	25°59	2° 7	22°45	W14
T 15	3 37 12	22°53'33	19°15	13°50	11°47	26° 2	25°49	8°26	10°42	26°45	8°14	24°38	25°55	2°14	22°46	T 15
F 16	3 41 9	23°54'06	3♈ 0	14°11	12°58	26°41	25°54	8°29	10°40	26°44	8°13	24°33	25°52	2°20	22°47	F 16
S 17	3 45 5	24°54'40	16°17	14°23	14° 9	27°19	25°59	8°33	10°37	26°43	8°12	24°31	25°49	2°27	22°48	S 17
S 18	3 49 2	25°55'15	29° 9	14°R26	15°21	27°58	26° 3	8°36	10°35	26°42	8°11	24°D31	25°46	2°34	22°49	S 18
M19	3 52 59	26°55'51	11♈39	14°20	16°32	28°36	26° 8	8°40	10°32	26°42	8°10	24°32	25°43	2°40	22°50	M19
T 20	3 56 55	27°56'29	23°51	14° 3	17°43	29°15	26°12	8°43	10°30	26°41	8° 9	24°R33	25°40	2°47	22°51	T 20
W21	4 0 52	28°57'08	5♈51	13°37	18°55	29°54	26°16	8°46	10°27	26°41	8° 8	24°32	25°36	2°54	22°52	W21
T 22	4 4 48	29°57'47	17°44	12°59	20° 7	0♈33	26°20	8°49	10°25	26°40	8° 7	24°30	25°33	3° 1	22°53	T 22
F 23	4 8 45	0♈58'28	29°34	12°11	21°18	1°12	26°24	8°52	10°22	26°40	8° 6	24°26	25°30	3° 7	22°55	F 23
S 24	4 12 41	1°59'10	11°Y27	11°12	22°30	1°51	26°28	8°55	10°20	26°39	8° 5	24°20	25°27	3°14	22°56	S 24
S 25	4 16 38	2°59'53	23°26	10° 5	23°42	2°30	26°31	8°58	10°17	26°39	8° 4	24°11	25°24	3°21	22°57	S 25
M26	4 20 34	4° 0'38	5♈34	8°51	24°54	3° 9	26°34	9° 0	10°15	26°38	8° 3	24° 2	25°21	3°27	22°59	M26
T 27	4 24 31	5° 1'23	17°53	7°31	26° 6	3°49	26°38	9° 3	10°12	26°38	8° 2	23°52	25°17	3°34	23° 0	T 27
W28	4 28 28	6° 2'10	0♈23	6° 9	27°18	4°28	26°40	9° 5	10°10	26°37	8° 1	23°43	25°14	3°41	23° 2	W28
T 29	4 32 24	7° 2'58	13° 6	4°46	28°31	5° 8	26°43	9° 8	10° 7	26°37	8° 0	23°35	25°11	3°48	23° 4	T 29
F 30	4 36 21	8♈ 3'47	26♈ 1	3♈27	29♈43	5♈47	26♈46	9♈10	10♈ 5	26♈37	7♈59	23♈30	25♈ 8	3°Y54	23° 5	F 30

Day	☉	☾	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	
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ASTRODIENST EPHEMERIS for the year 1860  
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Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	4 40 17	9♂ 4'38	9♂ 7	2°R13	0♂56	6♂27	26♂48	9♂12	10°R 2	26°R37	7°R58	23°R27	25♂ 5	4♂ 1	23≈ 7	S 1
S 2	4 44 14	10° 5'29	22°25	1♂ 7	2° 8	7° 7	26°50	9°14	10♂ 0	26♂36	7♂57	23°D26	25° 1	4° 8	23° 9	S 2
M 3	4 48 10	11° 6'22	5♂53	0°10	3°21	7°47	26°52	9°16	9°57	26°36	7°56	23♂26	24°58	4°14	23°11	M 3
T 4	4 52 7	12° 7'16	19°32	29♂24	4°34	8°27	26°54	9°18	9°55	26°36	7°55	23°28	24°55	4°21	23°13	T 4
W 5	4 56 3	13° 8'12	3♂23	28°49	5°46	9° 7	26°56	9°20	9°52	26°36	7°54	23°29	24°52	4°28	23°15	W 5
T 6	5 0 0	14° 9'09	17°25	28°26	6°59	9°47	26°57	9°21	9°50	26°36	7°53	23°R29	24°49	4°35	23°17	T 6
F 7	5 3 57	15°10'07	1♂37	28°14	8°12	10°27	26°58	9°23	9°47	26°36	7°52	23°28	24°46	4°41	23°19	F 7
S 8	5 7 53	16°11'06	15°58	28°D12	9°25	11° 7	26°59	9°24	9°44	26°D36	7°51	23°25	24°42	4°48	23°21	S 8
S 9	5 11 50	17°12'06	0♂24	28°21	10°38	11°47	27° 0	9°25	9°42	26°36	7°51	23°21	24°39	4°55	23°23	S 9
M10	5 15 46	18°13'08	14°50	28°38	11°52	12°27	27° 1	9°27	9°39	26°36	7°50	23°15	24°36	5° 1	23°26	M10
T 11	5 19 43	19°14'10	29°11	29° 4	13° 5	13° 7	27° 1	9°28	9°37	26°36	7°49	23° 9	24°33	5° 8	23°28	T 11
W12	5 23 39	20°15'14	13♂21	29°38	14°18	13°48	27° 2	9°28	9°34	26°36	7°48	23° 4	24°30	5°15	23°30	W12
T 13	5 27 36	21°16'18	27°15	0♂19	15°31	14°28	27°R 2	9°29	9°32	26°36	7°47	23° 1	24°27	5°22	23°33	T 13
F 14	5 31 32	22°17'23	10♂39	1° 5	16°45	15° 9	27° 2	9°30	9°30	26°37	7°47	22°58	24°23	5°28	23°35	F 14
S 15	5 35 29	23°18'29	24° 2	1°57	17°58	15°49	27° 1	9°31	9°27	26°37	7°46	22°D58	24°20	5°35	23°38	S 15
S 16	5 39 26	24°19'35	6≈53	2°53	19°12	16°30	27° 1	9°31	9°25	26°37	7°45	22°58	24°17	5°42	23°40	S 16
M17	5 43 22	25°20'41	19°25	3°54	20°25	17°10	27° 0	9°32	9°22	26°37	7°44	23° 0	24°14	5°48	23°43	M17
T 18	5 47 19	26°21'48	1♂40	4°58	21°39	17°51	26°59	9°32	9°20	26°38	7°44	23° 2	24°11	5°55	23°46	T 18
W19	5 51 15	27°22'55	13°42	6° 5	22°53	18°32	26°58	9°32	9°17	26°38	7°43	23° 3	24° 7	6° 2	23°48	W19
T 20	5 55 12	28°24'02	25°37	7°15	24° 6	19°12	26°57	9°R32	9°15	26°38	7°42	23°R 4	24° 4	6° 9	23°51	T 20
F 21	5 59 8	29°25'09	7♂29	8°28	25°20	19°53	26°55	9°32	9°13	26°39	7°42	23° 4	24° 1	6°15	23°54	F 21
S 22	6 3 5	0♂26'16	19°22	9°42	26°34	20°34	26°53	9°32	9°10	26°39	7°41	23° 2	23°58	6°22	23°57	S 22
S 23	6 7 1	1°27'24	1♂23	10°59	27°48	21°15	26°51	9°31	9° 8	26°40	7°40	23° 0	23°55	6°29	24° 0	S 23
M24	6 10 58	2°28'32	13°33	12°17	29° 1	21°55	26°49	9°31	9° 6	26°40	7°40	22°57	23°52	6°35	24° 3	M24
T 25	6 14 55	3°29'40	25°58	13°36	0♂15	22°36	26°47	9°31	9° 4	26°41	7°39	22°54	23°48	6°42	24° 6	T 25
W26	6 18 51	4°30'48	8♂39	14°57	1°29	23°17	26°45	9°30	9° 1	26°42	7°39	22°51	23°45	6°49	24° 9	W26
T 27	6 22 48	5°31'56	21°36	16°19	2°43	23°58	26°42	9°29	8°59	26°42	7°38	22°48	23°42	6°56	24°12	T 27
F 28	6 26 44	6°33'04	4♂51	17°42	3°57	24°39	26°39	9°28	8°57	26°43	7°38	22°47	23°39	7° 2	24°15	F 28
S 29	6 30 41	7°34'13	18°22	19° 6	5°11	25°20	26°36	9°27	8°55	26°44	7°37	22°D46	23°36	7° 9	24°18	S 29
S 30	6 34 37	8°35'21	2♂ 6	20°31	6°25	26° 1	26°33	9°26	8°53	26°44	7°37	22°46	23°33	7°16	24°21	S 30
M31	6 38 34	9♂36'30	16♂ 2	21♂57	7♂39	26♂42	26♂29	9♂25	8♂51	26♂45	7♂36	22♂47	23♂29	7♂23	24≈25	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
S 1	21 s50	24n25	1n17	18s44	1n55	9s52	2n 4	10s14	1s10	13n23	0n51	9n38	1n38	21n56	0s 3	2s35
S 2	21 59	21 41	0 6	18 18	2 9	10 17	2 4	9 57	1 8	13 22	0 51	9 38	1 38	21 55	0 3	2 35
M 3	22 8	17 44	1 s 7	17 55	2 20	10 42	2 4	9 41	1 6	13 22	0 51	9 37	1 38	21 55	0 3	2 35
T 4	22 16	12 48	2 17	17 36	2 30	11 7	2 3	9 24	1 4	13 22	0 51	9 37	1 39	21 54	0 3	2 35
W 5	22 24	7 10	3 20	17 22	2 37	11 31	2 3	9 8	1 2	13 21	0 52	9 36	1 39	21 54	0 3	2 35
T 6	22 31	1 7	4 11	17 12	2 42	11 55	2 3	8 51	1 1	13 21	0 52	9 36	1 39	21 54	0 3	2 35
F 7	22 38	5 s 3	4 49	17 6	2 45	12 19	2 2	8 34	0 59	13 21	0 52	9 36	1 39	21 53	0 3	2 35
S 8	22 44	11 1	5 8	17 5	2 46	12 43	2 2	8 17	0 57	13 21	0 52	9 35	1 40	21 53	0 3	2 35
S 9	22 51	16 26	5 8	17 7	2 46	13 6	2 1	8 0	0 56	13 21	0 53	9 35	1 40	21 53	0 3	2 35
M10	22 56	20 54	4 49	17 12	2 44	13 29	2 1	7 43	0 54	13 21	0 53	9 35	1 40	21 52	0 3	2 35
T 11	23 1	24 5	4 12	17 21	2 41	13 52	2 0	7 26	0 52	13 21	0 53	9 35	1 40	21 52	0 3	2 35
W12	23 6	25 43	3 19	17 31	2 37	14 15	1 59	7 9	0 51	13 21	0 53	9 35	1 41	21 52	0 3	2 35
T 13	23 10	25 42	2 16	17 44	2 33	14 37	1 58	6 52	0 49	13 21	0 54	9 35	1 41	21 51	0 3	2 35
F 14	23 14	24 7	1 6	17 59	2 27	14 59	1 57	6 35	0 47	13 21	0 54	9 34	1 41	21 51	0 3	2 34
S 15	23 17	21 13	0n 6	18 15	2 21	15 20	1 56	6 18	0 46	13 22	0 54	9 34	1 41	21 50	0 3	2 34
S 16	23 20	17 21	1 16	18 33	2 15	15 42	1 55	6 1	0 44	13 22	0 54	9 35	1 42	21 50	0 3	2 34
M17	23 23	12 48	2 20	18 51	2 8	16 2	1 54	5 43	0 43	13 23	0 55	9 35	1 42	21 50	0 3	2 34
T 18	23 24	7 50	3 17	19 10	2 1	16 23	1 52	5 26	0 41	13 23	0 55	9 35	1 42	21 49	0 3	2 34
W19	23 26	2 40	4 3	19 29	1 53	16 43	1 51	5 9	0 40	13 24	0 55	9 35	1 42	21 49	0 3	2 34
T 20	23 27	2n32	4 39	19 48	1 46	17 3	1 49	4 52	0 38	13 25	0 55	9 35	1 43	21 49	0 3	2 33
F 21	23 27	7 36	5 3	20 7	1 38	17 22	1 48	4 34	0 37	13 25	0 56	9 35	1 43	21 48	0 3	2 33
S 22	23 27	12 25	5 14	20 27	1 30	17 41	1 46	4 17	0 35	13 26	0 56	9 36	1 43	21 48	0 3	2 33
S 23	23 27	16 49	5 11	20 45	1 22	17 59	1 45	3 59	0 34	13 27	0 56	9 36	1 43	21 48	0 3	2 33
M24	23 26	20 36	4 55	21 4	1 14	18 17	1 43	3 42	0 32	13 28	0 56	9 36	1 44	21 47	0 3	2 32
T 25	23 25	23 32	4 24	21 22	1 6	18 34	1 41	3 24	0 31	13 29	0 57	9 37	1 44	21 47	0 3	2 32
W26	23 23	25 23	3 40	21 39	0 57	18 51	1 39	3 7	0 29	13 30	0 57	9 37	1 44	21 47	0 3	2 32
T 27	23 21	25 55	2 44	21 56	0 49	19 8	1 37	2 49	0 28	13 31	0 57	9 38	1 44	21 46	0 3	2 32
F 28	23 18	24 59	1 37	22 12	0 41	19 24	1 35	2 32	0 26	13 32	0 57	9 38	1 45	21 46	0 3	2 31
S 29	23 15	22 36	0 24	22 28	0 33	19 39	1 33	2 14	0 25	13 34	0 58	9 39	1 45	21 46	0 3	2 31
S 30	23 11	18 52	0s51	22 42	0 25	19 54	1 31	1 57	0 24	13 35	0 58	9 40	1 45	21 45	0 3	2 31
M31	23 s 7	14n 3	2 s 5	22s55	0n18	20s 8	1n29	1s39	0s22	13n36	0n58	9n40	1n45	21n45	0s 3	2s30

Julian Day Number = 2400745.5, Delta T = 8.95 sec  
Ecliptic obliquity = 23°27'30, Nutation = 0°00'14, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 22°47'53, Lahiri = 21°54'54