



Astrodienst Ephemeris Tables for the year 1873

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 D5EPH

ASTRODIENST EPHEMERIS for the year 1873

geocentric

JANUARY 1873

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	6 42 51	10°34'23"	4°53'	18°24'	21°27'	19°49'	1°R 7	22°38'	4°R47	23°R31	19°R 2	2°R55	1°R20	15°R46	10°R31	W 1
T 2	6 46 47	11°43'44"	19°55'	19° 6	22°38'	20°19'	1°R 4	22°15'	4°R45	23°R31	19°R 1	2°R48	1°R17	15°R53	10°R31	T 2
F 3	6 50 44	12°44'55"	4°54'	19°54'	23°50'	20°49'	1° 1	22°22'	4°43'	23°D31	19° 1	2°43'	1°14	15°59'	10°32'	F 3
S 4	6 54 41	13°46'05"	19°15'	20°46'	25° 1	21°19'	0°58'	22°29'	4°40'	23°31'	19° 0	2°39'	1°10	16° 6	10°33'	S 4
S 5	6 58 37	14°47'15"	3°V23	21°41'	26°13'	21°49'	0°54'	22°36'	4°38'	23°31'	19° 0	2°36'	1° 7	16°13'	10°34'	S 5
M 6	7 2 34	15°48'25"	17° 8	22°40'	27°24'	22°18'	0°51'	22°43'	4°36'	23°31'	18°59'	2°D36	1° 4	16°19'	10°35'	M 6
T 7	7 6 30	16°49'34"	0°B31	23°43'	28°35'	22°47'	0°47'	22°50'	4°33'	23°31'	18°58'	2°36'	1° 1	16°26'	10°35'	T 7
W 8	7 10 27	17°50'43"	13°33'	24°48'	29°46'	23°17'	0°43'	22°57'	4°31'	23°31'	18°58'	2°38'	0°58'	16°33'	10°36'	W 8
T 9	7 14 23	18°51'51"	26°18'	25°56'	0°H57	23°46'	0°38'	23° 4	4°28'	23°32'	18°57'	2°R39	0°54'	16°40'	10°37'	T 9
F 10	7 18 20	19°52'59"	8°II50	27° 6	2° 8	24°14'	0°34'	23°11'	4°26'	23°32'	18°57'	2°39'	0°51'	16°46'	10°39'	F 10
S 11	7 22 16	20°54'06"	21°10'	28°18'	3°18'	24°43'	0°29'	23°19'	4°23'	23°32'	18°56'	2°37'	0°48'	16°53'	10°40'	S 11
S 12	7 26 13	21°55'13"	3°E21	29°32'	4°29'	25°12'	0°25'	23°26'	4°21'	23°32'	18°56'	2°33'	0°45'	17° 0	10°41'	S 12
M13	7 30 10	22°56'19"	15°26'	0°B47	5°39'	25°40'	0°20'	23°33'	4°18'	23°33'	18°56'	2°26'	0°42'	17° 7	10°42'	M13
T 14	7 34 6	23°57'25"	27°26'	2° 4	6°50'	26° 8	0°15'	23°40'	4°15'	23°33'	18°55'	2°17'	0°39'	17°13'	10°43'	T 14
W15	7 38 3	24°58'30"	9°D21	3°23'	8° 0	26°36'	0° 9	23°47'	4°13'	23°33'	18°55'	2° 7	0°35'	17°20'	10°45'	W15
T 16	7 41 59	25°59'35"	21°14'	4°42'	9°10'	27° 4	0° 4	23°54'	4°10'	23°34'	18°54'	1°55'	0°32'	17°27'	10°46'	T 16
F 17	7 45 56	27° 0'39"	3°R 6	6° 3	10°20'	27°31'	29°D58	24° 1	4° 8	23°34'	18°54'	1°45'	0°29'	17°33'	10°48'	F 17
S 18	7 49 52	28° 1'43"	14°59'	7°25'	11°29'	27°59'	29°53'	24° 8	4° 5	23°35'	18°54'	1°35'	0°26'	17°40'	10°49'	S 18
S 19	7 53 49	29° 2'46"	26°55'	8°48'	12°39'	28°26'	29°47'	24°16'	4° 3	23°35'	18°53'	1°28'	0°23'	17°47'	10°51'	S 19
M20	7 57 45	0° 3'49"	9°E 0	10°12'	13°48'	28°53'	29°41'	24°23'	4° 0	23°36'	18°53'	1°23'	0°19'	17°54'	10°52'	M20
T 21	8 1 42	1° 4'51"	21°16'	11°37'	14°58'	29°20'	29°35'	24°30'	3°57'	23°36'	18°53'	1°20'	0°16'	18° 0	10°54'	T 21
W22	8 5 39	2° 5'53"	3°R47	13° 3	16° 7	29°46'	29°29'	24°37'	3°55'	23°37'	18°53'	1°D20	0°13'	18° 7	10°56'	W22
T 23	8 9 35	3° 6'54"	16°40'	14°29'	17°16'	0°R12	29°22'	24°44'	3°52'	23°38'	18°53'	1°20'	0°10'	18°14'	10°57'	T 23
F 24	8 13 32	4° 7'55"	29°58'	15°57'	18°24'	0°39'	29°16'	24°51'	3°49'	23°38'	18°52'	1°R21	0° 7	18°20'	10°59'	F 24
S 25	8 17 28	5° 8'56"	13°E45	17°25'	19°33'	1° 4	29° 9	24°58'	3°47'	23°39'	18°52'	1°20'	0° 4	18°27'	11° 1	S 25
S 26	8 21 25	6° 9'56"	28° 0	18°54'	20°42'	1°30'	29° 2	25° 5	3°44'	23°40'	18°52'	1°18'	0° 0	18°34'	11° 3	S 26
M27	8 25 21	7°10'55"	12°B44	20°23'	21°50'	1°55'	28°56'	25°12'	3°42'	23°41'	18°52'	1°12'	29°B57	18°41'	11° 5	M27
T 28	8 29 18	8°11'53"	27°49'	21°54'	22°58'	2°20'	28°49'	25°19'	3°39'	23°41'	18°52'	1° 4	29°54'	18°47'	11° 7	T 28
W29	8 33 14	9°12'51"	13°E 7	23°25'	24° 6	2°45'	28°42'	25°26'	3°36'	23°42'	18°52'	0°54'	29°51'	18°54'	11° 9	W29
T 30	8 37 11	10°13'47"	28°27'	24°57'	25°14'	3°10'	28°34'	25°33'	3°34'	23°43'	18°52'	0°43'	29°48'	19° 1	11°11'	T 30
F 31	8 41 8	11°14'42"	13°E37	26°B29	26°H21	3°R34	28°D27	25°B40	3°D31	23°V44	18°B52	0°R33	29°B45	19°D 8	11°V13	F 31

Delta T = -0.13 sec

FEBRUARY 1873

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	8 45 4	12°15'36"	28°H27	28°B 2	27°H28	3°R58	28°R20	25°B47	3°R29	23°V45	18°D52	0°R25	29°B41	19°R14	11°V15	S 1
S 2	8 49 1	13°16'28"	12°V51	29°36'	28°35'	4°22'	28°D12	25°54'	3°D26	23°46'	18°B52	0°R19	29°38'	19°21'	11°18'	S 2
M 3	8 52 57	14°17'19"	26°46'	1°11'	29°42'	4°45'	28° 5	26° 1	3°23'	23°47'	18°52'	0°16'	29°35'	19°28'	11°20'	M 3
T 4	8 56 54	15°18'09"	10°B12	2°47'	0°V49	5° 9	27°57'	26° 8	3°21'	23°48'	18°52'	0°D14	29°32'	19°34'	11°22'	T 4
W 5	9 0 50	16°18'57"	23°13'	4°23'	1°55'	5°31'	27°50'	26°15'	3°18'	23°49'	18°52'	0°R14	29°29'	19°41'	11°25'	W 5
T 6	9 4 47	17°19'43"	5°II53	6° 0	3° 1	5°54'	27°42'	26°21'	3°16'	23°50'	18°52'	0°14'	29°25'	19°48'	11°27'	T 6
F 7	9 8 43	18°20'28"	18°16'	7°38'	4° 7	6°16'	27°34'	26°28'	3°13'	23°52'	18°52'	0°13'	29°22'	19°55'	11°29'	F 7
S 8	9 12 40	19°21'12"	0°E26	9°16'	5°13'	6°38'	27°27'	26°35'	3°11'	23°53'	18°52'	0°10'	29°19'	20° 1	11°32'	S 8
S 9	9 16 37	20°21'54"	12°28'	10°56'	6°18'	7° 0	27°19'	26°42'	3° 8	23°54'	18°52'	0° 3	29°16'	20° 8	11°34'	S 9
M10	9 20 33	21°22'34"	24°24'	12°36'	7°23'	7°21'	27°11'	26°48'	3° 6	23°55'	18°52'	29°B54	29°13'	20°15'	11°37'	M10
T 11	9 24 30	22°23'13"	6°D18	14°17'	8°28'	7°42'	27° 3	26°55'	3° 3	23°56'	18°53'	29°42'	29°10'	20°21'	11°40'	T 11
W12	9 28 26	23°23'50"	18°10'	15°59'	9°32'	8° 3	26°55'	27° 2	3° 1	23°58'	18°53'	29°27'	29° 6	20°28'	11°42'	W12
T 13	9 32 23	24°24'06"	0°R 3	17°41'	10°36'	8°23'	26°47'	27° 8	2°59'	23°59'	18°53'	29°12'	29° 3	20°35'	11°45'	T 13
F 14	9 36 19	25°25'01"	11°57'	19°25'	11°40'	8°43'	26°39'	27°15'	2°56'	24° 0	18°53'	28°58'	29° 0	20°42'	11°48'	F 14
S 15	9 40 16	26°25'34"	23°54'	21° 9	12°44'	9° 2	26°32'	27°22'	2°54'	24° 2	18°54'	28°45'	28°57'	20°48'	11°50'	S 15
S 16	9 44 12	27°26'05"	5°E56	22°55'	13°47'	9°22'	26°24'	27°28'	2°52'	24° 3	18°54'	28°34'	28°54'	20°55'	11°53'	S 16
M17	9 48 9	28°26'35"	18° 5	24°41'	14°50'	9°40'	26°16'	27°34'	2°49'	24° 5	18°54'	28°26'	28°51'	21° 2	11°56'	M17
T 18	9 52 6	29°27'04"	0°R23	26°28'	15°52'	9°59'	26° 8	27°41'	2°47'	24° 6	18°55'	28°21'	28°47'	21° 9	11°59'	T 18
W19	9 56 2	0°H27'32"	12°55'	28°16'	16°54'	10°17'	26° 0	27°47'	2°45'	24° 8	18°55'	28°19'	28°44'	21°15'	12° 2	W19
T 20	9 59 59	1°27'58"	25°44'	0°H 6	17°56'	10°34'	25°52'	27°54'	2°43'	24° 9	18°55'	28°19'	28°41'	21°22'	12° 5	T 20
F 21	10 3 55	2°28'23"	8°E55	1°55'	18°57'	10°52'	25°44'	28° 0	2°40'	24°11'	18°56'	28°19'	28°38'	21°29'	12° 8	F 21
S 22	10 7 52	3°28'46"	22°31'	3°46'	19°58'	11° 8	25°36'	28° 6	2°38'	24°12'	18°56'	28°18'	28°35'	21°35'	12°11'	S 22
S 23	10 11 48	4°29'08"	6°B34	5°38'	20°59'	11°24'	25°29'	28°12'	2°36'	24°14'	18°57'	28°15'	28°31'	21°42'	12°14'	S 23
M24	10 15 45	5°29'29"	21° 5	7°30'	21°59'	11°40'	25°21'	28°19'	2°34'	24°15'	18°57'	28° 9	28°28'	21°49'	12°17'	M24
T 25	10 19 41	6°29'49"	5°E59	9°24'	22°59'	11°56'	25°13'	28°25'	2°32'	24°17'	18°58'	28° 1	28°25'	21°56'	12°20'	T 25
W26	10 23 38	7°30'06"	21°11'	11°17'	23°58'	12°10'	25° 6	28°31'	2°30'	24°19'	18°58'	27°51'	28°22'	22° 2	12°23'	W26
T 27	10 27 35	8°30'22"	6°H30	13°12'	24°56'	12°25'	24°58'	28°37'	2°28'	24°20'	18°59'	27°39'	28°19'	22° 9	12°26'	T 27
F 28	10 31 31	9°H30'36"	21°H44	15°H 7	25°V55	12°R39	24°D51	28°B43	2°D26	24°V22	18°B59	27°B28	28°B16	22°D16	12°V29	F 28

Delta T = -0.18 sec

ASTRODIENST EPHEMERIS for the year 1873

geocentric

MARCH 1873

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	10 35 28	10°30'48	6°43'	17°2'	26°52'	12°52'	24°R43	28°349	2°R24	24°V24	19°8 0	27°R19	28°812	22°Ω22	12°V32	S 1
S 2	10 39 24	11°30'59	21°17'	18°58'	27°50'	13° 5	24°Ω36	28°55'	2°Ω22	24°26'	19° 0	27°812	28° 9	22°29'	12°35'	S 2
M 3	10 43 21	12°31'07	5°23'	20°53'	28°46'	13°17'	24°29'	29° 1	2°20'	24°27'	19° 1	27° 8	28° 6	22°36'	12°39'	M 3
T 4	10 47 17	13°31'13	18°59'	22°48'	29°43'	13°29'	24°21'	29° 6	2°19'	24°29'	19° 2	27° 6	28° 3	22°43'	12°42'	T 4
W 5	10 51 14	14°31'17	2°11'	24°43'	0°38'	13°40'	24°14'	29°12'	2°17'	24°31'	19° 2	27°D 6	28° 0	22°49'	12°45'	W 5
T 6	10 55 10	15°31'19	14°50'	26°37'	1°33'	13°51'	24° 7	29°18'	2°15'	24°33'	19° 3	27°R 6	27°57'	22°56'	12°49'	T 6
F 7	10 59 7	16°31'19	27°14'	28°30'	2°27'	14° 1	24° 0	29°23'	2°13'	24°35'	19° 4	27° 6	27°53'	23° 3	12°52'	F 7
S 8	11 3 4	17°31'16	9°23'	0°21'	3°21'	14°11'	23°54'	29°29'	2°12'	24°37'	19° 4	27° 4	27°50'	23°10'	12°55'	S 8
S 9	11 7 0	18°31'12	21°21'	2°11'	4°14'	14°19'	23°47'	29°34'	2°10'	24°38'	19° 5	26°59'	27°47'	23°16'	12°59'	S 9
M10	11 10 57	19°31'05	3°Ω14	3°58'	5° 6	14°28'	23°41'	29°40'	2° 9	24°40'	19° 6	26°51'	27°44'	23°23'	13° 2	M10
T 11	11 14 53	20°30'56	15° 5	5°42'	5°58'	14°36'	23°34'	29°45'	2° 7	24°42'	19° 7	26°41'	27°41'	23°30'	13° 5	T 11
W12	11 18 50	21°30'45	26°57'	7°23'	6°49'	14°43'	23°28'	29°50'	2° 6	24°44'	19° 7	26°30'	27°37'	23°36'	13° 9	W12
T 13	11 22 46	22°30'32	8°Ω52	9° 0	7°39'	14°49'	23°22'	29°56'	2° 4	24°46'	19° 8	26°17'	27°34'	23°43'	13°12'	T 13
F 14	11 26 43	23°30'16	20°52'	10°32'	8°28'	14°55'	23°16'	0°Ω 1	2° 3	24°48'	19° 9	26° 5	27°31'	23°50'	13°16'	F 14
S 15	11 30 39	24°29'59	2°Ω57	12° 0	9°16'	15° 0	23°10'	0° 6	2° 2	24°50'	19°10'	25°54'	27°28'	23°57'	13°19'	S 15
S 16	11 34 36	25°29'40	15° 9	13°23'	10° 4	15° 5	23° 4	0°11'	2° 0	24°52'	19°11'	25°45'	27°25'	24° 3	13°23'	S 16
M17	11 38 32	26°29'19	27°29'	14°40'	10°50'	15° 9	22°58'	0°16'	1°59'	24°54'	19°12'	25°39'	27°22'	24°10'	13°26'	M17
T 18	11 42 29	27°28'56	9°Ω59	15°51'	11°36'	15°12'	22°53'	0°21'	1°58'	24°56'	19°12'	25°35'	27°18'	24°17'	13°30'	T 18
W19	11 46 26	28°28'31	22°40'	16°55'	12°21'	15°14'	22°48'	0°26'	1°57'	24°58'	19°13'	25°D34	27°15'	24°23'	13°33'	W19
T 20	11 50 22	29°28'04	5°Ω36	17°52'	13° 4	15°16'	22°42'	0°31'	1°56'	25° 0	19°14'	25°34'	27°12'	24°30'	13°37'	T 20
F 21	11 54 19	0°27'36	18°48'	18°42'	13°47'	15°17'	22°37'	0°35'	1°55'	25° 2	19°15'	25°35'	27° 9	24°37'	13°40'	F 21
S 22	11 58 15	1°27'06	2°Ω20	19°25'	14°29'	15°R17	22°33'	0°40'	1°54'	25° 5	19°16'	25°R35	27° 6	24°44'	13°44'	S 22
S 23	12 2 12	2°26'34	16°14'	20° 1	15° 9	15°17'	22°28'	0°44'	1°53'	25° 7	19°17'	25°35'	27° 2	24°50'	13°48'	S 23
M24	12 6 8	3°26'01	0°Ω30	20°28'	15°49'	15°16'	22°23'	0°49'	1°52'	25° 9	19°18'	25°32'	26°59'	24°57'	13°51'	M24
T 25	12 10 5	4°25'26	15° 5	20°48'	16°27'	15°14'	22°19'	0°53'	1°51'	25°11'	19°19'	25°27'	26°56'	25° 4	13°55'	T 25
W26	12 14 1	5°24'48	29°57'	21° 1	17° 3	15°11'	22°15'	0°58'	1°51'	25°13'	19°20'	25°20'	26°53'	25°11'	13°58'	W26
T 27	12 17 58	6°24'09	14°Ω56	21°R 6	17°39'	15° 8	22°11'	1° 2	1°50'	25°15'	19°21'	25°12'	26°50'	25°17'	14° 2	T 27
F 28	12 21 55	7°23'28	29°55'	21° 3	18°13'	15° 4	22° 7	1° 6	1°49'	25°17'	19°22'	25° 5	26°47'	25°24'	14° 6	F 28
S 29	12 25 51	8°22'45	14°V44	20°53'	18°46'	14°59'	22° 3	1°10'	1°49'	25°20'	19°23'	24°58'	26°43'	25°31'	14° 9	S 29
S 30	12 29 48	9°22'00	29°16'	20°36'	19°17'	14°53'	22° 0	1°14'	1°48'	25°22'	19°24'	24°54'	26°40'	25°37'	14°13'	S 30
M31	12 33 44	10°V21'13	13°Ω23	20°V14	19°Ω47	14°M46	21°Ω56	1°Ω18	1°Ω47	25°V24	19°Ω25	24°Ω51	26°Ω37	25°Ω44	14°V17	M31

Delta T = -0.23 sec

APRIL 1873

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	12 37 41	11°V20'24	27°8 3	19°R45	20°815	14°R39	21°R53	1°Ω22	1°R47	25°V26	19°826	24°D51	26°834	25°Ω51	14°V20	T 1
W 2	12 41 37	12°19'32	10°Ω17	19°V11	20°42'	14°M31	21°Ω50	1°26'	1°Ω47	25°28'	19°28'	24°Ω52	26°31'	25°58'	14°24'	W 2
T 3	12 45 34	13°18'38	23° 6	18°33'	21° 7	14°22'	21°48'	1°30'	1°46'	25°31'	19°29'	24°53'	26°28'	26° 4	14°28'	T 3
F 4	12 49 30	14°17'42	5°Ω35	17°52'	21°30'	14°12'	21°45'	1°33'	1°46'	25°33'	19°30'	24°54'	26°24'	26°11'	14°31'	F 4
S 5	12 53 27	15°16'43	17°47'	17° 7	21°51'	14° 2	21°42'	1°37'	1°46'	25°35'	19°31'	24°R55	26°21'	26°18'	14°35'	S 5
S 6	12 57 24	16°15'43	29°47'	16°21'	22°11'	13°51'	21°40'	1°40'	1°46'	25°37'	19°32'	24°53'	26°18'	26°25'	14°38'	S 6
M 7	13 1 20	17°14'39	11°Ω41	15°34'	22°28'	13°39'	21°38'	1°44'	1°45'	25°40'	19°33'	24°51'	26°15'	26°31'	14°42'	M 7
T 8	13 5 17	18°13'34	23°33'	14°48'	22°44'	13°26'	21°36'	1°47'	1°45'	25°42'	19°34'	24°46'	26°12'	26°38'	14°46'	T 8
W 9	13 9 13	19°12'26	5°Ω26	14° 2	22°57'	13°13'	21°35'	1°50'	1°D45	25°44'	19°36'	24°41'	26° 8	26°45'	14°49'	W 9
T 10	13 13 10	20°11'16	17°24'	13°18'	23° 8	12°59'	21°33'	1°53'	1°45'	25°46'	19°37'	24°35'	26° 5	26°51'	14°53'	T 10
F 11	13 17 6	21°10'04	29°30'	12°36'	23°17'	12°45'	21°32'	1°56'	1°45'	25°49'	19°38'	24°28'	26° 2	26°58'	14°57'	F 11
S 12	13 21 3	22° 8'50	11°Ω44	11°58'	23°24'	12°29'	21°31'	1°59'	1°46'	25°51'	19°39'	24°23'	25°59'	27° 5	15° 0	S 12
S 13	13 24 59	23° 7'34	24° 9	11°23'	23°28'	12°13'	21°30'	2° 2	1°46'	25°53'	19°40'	24°19'	25°56'	27°12'	15° 4	S 13
M14	13 28 56	24° 6'15	6°M45	10°53'	23°R31	11°57'	21°29'	2° 5	1°46'	25°55'	19°42'	24°16'	25°53'	27°18'	15° 8	M14
T 15	13 32 53	25° 4'55	19°33'	10°27'	23°30'	11°39'	21°29'	2° 7	1°46'	25°58'	19°43'	24°D15	25°49'	27°25'	15°11'	T 15
W16	13 36 49	26° 3'33	2°Ω34	10° 6	23°28'	11°22'	21°28'	2°10'	1°47'	26° 0	19°44'	24°15'	25°46'	27°32'	15°15'	W16
T 17	13 40 46	27° 2'10	15°47'	9°49'	23°23'	11° 3	21°D28	2°12'	1°47'	26° 2	19°45'	24°16'	25°43'	27°38'	15°18'	T 17
F 18	13 44 42	28° 0'45	29°13'	9°38'	23°15'	10°44'	21°28'	2°15'	1°48'	26° 4	19°47'	24°17'	25°40'	27°45'	15°22'	F 18
S 19	13 48 39	28°59'18	12°Ω54	9°32'	23° 5	10°25'	21°28'	2°17'	1°48'	26° 7	19°48'	24°19'	25°37'	27°52'	15°25'	S 19
S 20	13 52 35	29°57'49	26°48'	9°D32	22°52'	10° 5	21°29'	2°19'	1°49'	26° 9	19°49'	24°R20	25°34'	27°59'	15°29'	S 20
M21	13 56 32	0°Ω56'19	10°Ω57	9°36'	22°38'	9°45'	21°29'	2°21'	1°49'	26°11'	19°51'	24°19'	25°30'	28° 5	15°33'	M21
T 22	14 0 28	1°54'47	25°17'	9°45'	22°20'	9°24'	21°30'	2°23'	1°50'	26°13'	19°52'	24°18'	25°27'	28°12'	15°36'	T 22
W23	14 4 25	2°53'14	9°Ω46	9°59'	22° 1	9° 3	21°31'	2°25'	1°51'	26°16'	19°53'	24°16'	25°24'	28°19'	15°40'	W23
T 24	14 8 22	3°51'38	24°19'	10°18'	21°39'	8°42'	21°32'	2°27'	1°51'	26°18'	19°54'	24°13'	25°21'	28°26'	15°43'	T 24
F 25	14 12 18	4°50'02	8°V52	10°41'	21°15'	8°20'	21°33'	2°29'	1°52'	26°20'	19°56'	24°10'	25°18'	28°32'	15°47'	F 25
S 26	14 16 15	5°48'23	23°17'	11° 8	20°49'	7°58'	21°35'	2°31'	1°53'	26°22'	19°57'	24° 8	25°14'	28°39'	15°50'	S 26
S 27	14 20 11	6°46'43	7°Ω29	11°40'	20°20'	7°36'	21°36'	2°32'	1°54'	26°25'	19°58'	24° 7	25°11'	28°46'	15°54'	S 27
M28	14 24 8	7°45'01	21°24'	12°16'	19°50'	7°14'	21°38'	2°34'	1°55'	26°27'	20° 0	24°D 6	25° 8	28°52'	15°57'	M28
T 29	14 28 4	8°43'17	4°Ω57	12°55'	19°19'	6°52'	21°40'	2°35'	1°56'	26°29'	20° 1	24° 6	25° 5	28°59'	16° 0	T 29
W30	14 32 1	9°41'32	18°Ω 9	13°V39	18°Ω46	6°M29	21°Ω43	2°Ω36	1°Ω57	26°V31	20°Ω 2	24°Ω 7	25°Ω 2	29°Ω 6	16°V 4	W30

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ASTRODIENST EPHEMERIS for the year 1873

geocentric

MAY 1873

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Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	14 35 57	10♈39'44	1♉0	14♊26	18°R11	6°R 7	21♌45	2♍37	1♎58	26♏34	20♐ 4	24♑ 8	24♒59	29♓13	16♈ 7	T 1
F 2	14 39 54	11°37'55	13°31	15°16	17♈35	5♉45	21°47	2°38	2° 0	26°36	20° 5	24° 9	24°55	29°19	16°11	F 2
S 3	14 43 51	12°36'03	25°46	16°10	16°59	5°23	21°50	2°39	2° 1	26°38	20° 6	24°10	24°52	29°26	16°14	S 3
S 4	14 47 47	13°34'10	7♊49	17° 6	16°22	5° 1	21°53	2°40	2° 2	26°40	20° 8	24°11	24°49	29°33	16°17	S 4
M 5	14 51 44	14°32'15	19°45	18° 6	15°44	4°39	21°56	2°41	2° 4	26°42	20° 9	24°R11	24°46	29°39	16°21	M 5
T 6	14 55 40	15°30'17	1♊38	19° 9	15° 6	4°17	21°59	2°42	2° 5	26°45	20°10	24°10	24°43	29°46	16°24	T 6
W 7	14 59 37	16°28'18	13°33	20°14	14°28	3°56	22° 3	2°42	2° 6	26°47	20°12	24°10	24°40	29°53	16°27	W 7
T 8	15 3 33	17°26'17	25°33	21°23	13°51	3°35	22° 6	2°43	2° 8	26°49	20°13	24° 9	24°36	29°59	16°31	T 8
F 9	15 7 30	18°24'14	7♊43	22°33	13°14	3°14	22°10	2°43	2° 9	26°51	20°15	24° 8	24°33	0♊6	16°34	F 9
S 10	15 11 26	19°22'09	20° 6	23°47	12°38	2°54	22°14	2°43	2°11	26°53	20°16	24° 7	24°30	0°13	16°37	S 10
S 11	15 15 23	20°20'03	2♊43	25° 3	12° 3	2°34	22°18	2°44	2°13	26°55	20°17	24° 7	24°27	0°20	16°40	S 11
M12	15 19 20	21°17'55	15°36	26°21	11°29	2°15	22°22	2°R44	2°14	26°57	20°19	24° 7	24°24	0°27	16°43	M12
T 13	15 23 16	22°15'45	28°45	27°42	10°57	1°56	22°27	2°44	2°16	26°59	20°20	24°D 7	24°20	0°33	16°46	T 13
W14	15 27 13	23°13'35	12♊9	29° 5	10°26	1°37	22°31	2°44	2°18	27° 2	20°21	24° 7	24°17	0°40	16°49	W14
T 15	15 31 9	24°11'23	25°47	0♊31	9°57	1°20	22°36	2°43	2°20	27° 4	20°23	24°R 7	24°14	0°47	16°53	T 15
F 16	15 35 6	25° 9'09	9♊38	1°59	9°30	1° 2	22°41	2°43	2°22	27° 6	20°24	24° 7	24°11	0°53	16°56	F 16
S 17	15 39 2	26° 6'55	23°38	3°29	9° 5	0°46	22°46	2°43	2°24	27° 8	20°25	24° 7	24° 8	1° 0	16°59	S 17
S 18	15 42 59	27° 4'39	7♊45	5° 1	8°42	0°30	22°51	2°42	2°26	27°10	20°27	24° 6	24° 5	1° 7	17° 2	S 18
M19	15 46 55	28° 2'22	21°57	6°36	8°21	0°15	22°57	2°42	2°28	27°12	20°28	24°D 6	24° 1	1°14	17° 5	M19
T 20	15 50 52	29° 0'04	6♊12	8°13	8° 3	0° 0	23° 2	2°41	2°30	27°14	20°29	24° 6	23°58	1°20	17° 7	T 20
W21	15 54 49	29°57'45	20°26	9°52	7°47	29♊46	23° 8	2°40	2°32	27°16	20°31	24° 7	23°55	1°27	17°10	W21
T 22	15 58 45	0♊55'25	4♊36	11°34	7°34	29°33	23°14	2°39	2°34	27°18	20°32	24° 7	23°52	1°34	17°13	T 22
F 23	16 2 42	1°53'04	18°42	13°17	7°23	29°21	23°20	2°38	2°36	27°20	20°33	24° 8	23°49	1°41	17°16	F 23
S 24	16 6 38	2°50'42	2♊38	15° 3	7°14	29° 9	23°26	2°37	2°38	27°22	20°35	24° 8	23°45	1°47	17°19	S 24
S 25	16 10 35	3°48'19	16°24	16°51	7° 8	28°58	23°32	2°36	2°41	27°24	20°36	24° 9	23°42	1°54	17°22	S 25
M26	16 14 31	4°45'55	29°56	18°41	7° 4	28°48	23°38	2°35	2°43	27°25	20°37	24°R 9	23°39	2° 1	17°24	M26
T 27	16 18 28	5°43'30	13♊13	20°34	7°D 3	28°39	23°45	2°33	2°45	27°27	20°39	24° 8	23°36	2° 7	17°27	T 27
W28	16 22 24	6°41'04	26°14	22°29	7° 4	28°31	23°51	2°32	2°48	27°29	20°40	24° 7	23°33	2°14	17°30	W28
T 29	16 26 21	7°38'37	8♊57	24°25	7° 7	28°23	23°58	2°30	2°50	27°31	20°41	24° 6	23°30	2°21	17°32	T 29
F 30	16 30 18	8°36'08	21°26	26°24	7°12	28°16	24° 5	2°29	2°53	27°33	20°43	24° 4	23°26	2°28	17°35	F 30
S 31	16 34 14	9♊33'38	3♊40	28♊25	7♋20	28♊10	24♌12	2♍27	2♎55	27♏35	20♐44	24♑ 1	23♒23	2♓34	17♈37	S 31

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JUNE 1873

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	16 38 11	10♊31'07	15♊44	0♊28	7♋30	28°R 5	24♌19	2°R25	2♎58	27♏36	20♐45	24°R 0	23♒20	2♓41	17♈40	S 1
M 2	16 42 4	11°28'34	27°40	2°32	7°41	28♊1	24°27	2♍23	3° 0	27°38	20°47	23♒58	23°17	2°48	17°42	M 2
T 3	16 46 4	12°26'01	9♊33	4°39	7°55	27°57	24°34	2°21	3° 3	27°40	20°48	23°D58	23°14	2°54	17°45	T 3
W 4	16 50 0	13°23'26	21°28	6°46	8°11	27°55	24°42	2°19	3° 5	27°42	20°49	23°58	23°11	3° 1	17°47	W 4
T 5	16 53 57	14°20'50	3♊28	8°55	8°29	27°53	24°49	2°17	3° 8	27°43	20°50	23°59	23° 7	3° 8	17°50	T 5
F 6	16 57 53	15°18'13	15°40	11° 6	8°48	27°52	24°57	2°15	3°11	27°45	20°52	24° 0	23° 4	3°15	17°52	F 6
S 7	17 1 50	16°15'34	28° 6	13°17	9°10	27°D52	25° 5	2°12	3°14	27°47	20°53	24° 2	23° 1	3°21	17°54	S 7
S 8	17 5 47	17°12'55	10♊51	15°28	9°33	27°52	25°13	2°10	3°16	27°48	20°54	24° 3	22°58	3°28	17°56	S 8
M 9	17 9 43	18°10'15	23°56	17°40	9°58	27°54	25°21	2° 8	3°19	27°50	20°55	24°R 3	22°55	3°35	17°59	M 9
T 10	17 13 40	19° 7'34	7♊22	19°52	10°24	27°56	25°30	2° 5	3°22	27°51	20°56	24° 3	22°51	3°42	18° 1	T 10
W11	17 17 36	20° 4'53	21° 9	22° 4	10°52	27°59	25°38	2° 2	3°25	27°53	20°58	24° 1	22°48	3°48	18° 3	W11
T 12	17 21 33	21° 2'10	5♊14	24°15	11°21	28° 2	25°46	2° 0	3°28	27°55	20°59	23°58	22°45	3°55	18° 5	T 12
F 13	17 25 29	21°59'28	19°32	26°26	11°52	28° 7	25°55	1°57	3°31	27°56	21° 0	23°54	22°42	4° 2	18° 7	F 13
S 14	17 29 26	22°56'44	3♊59	28°36	12°25	28°12	26° 4	1°54	3°34	27°58	21° 1	23°50	22°39	4° 8	18° 9	S 14
S 15	17 33 23	23°54'01	18°28	0♊44	12°58	28°18	26°13	1°51	3°37	27°59	21° 2	23°47	22°36	4°15	18°11	S 15
M16	17 37 19	24°51'16	2♊55	2°51	13°33	28°25	26°22	1°48	3°40	28° 0	21° 4	23°44	22°32	4°22	18°13	M16
T 17	17 41 16	25°48'32	17°15	4°57	14° 9	28°32	26°31	1°45	3°43	28° 2	21° 5	23°42	22°29	4°29	18°14	T 17
W18	17 45 12	26°45'47	1°Y24	7° 1	14°47	28°40	26°40	1°42	3°46	28° 3	21° 6	23°D42	22°26	4°35	18°16	W18
T 19	17 49 9	27°43'02	15°22	9° 3	15°25	28°49	26°49	1°38	3°49	28° 5	21° 7	23°43	22°23	4°42	18°18	T 19
F 20	17 53 5	28°40'17	29° 7	11° 3	16° 5	28°58	26°58	1°35	3°52	28° 6	21° 8	23°44	22°20	4°49	18°20	F 20
S 21	17 57 2	29°37'32	12♋40	13° 1	16°46	29° 9	27° 8	1°32	3°56	28° 7	21° 9	23°46	22°17	4°55	18°21	S 21
S 22	18 0 58	0♋34'47	26° 0	14°57	17°27	29°19	27°17	1°28	3°59	28° 9	21°10	23°R46	22°13	5° 2	18°23	S 22
M23	18 4 55	1°32'02	9♊9	16°51	18°10	29°31	27°27	1°25	4° 2	28°10	21°11	23°45	22°10	5° 9	18°24	M23
T 24	18 8 52	2°29'17	22° 4	18°43	18°53	29°43	27°37	1°21	4° 5	28°11	21°13	23°42	22° 7	5°16	18°26	T 24
W25	18 12 48	3°26'31	4♋48	20°33	19°38	29°56	27°47	1°18	4° 9	28°12	21°14	23°38	22° 4	5°22	18°27	W25
T 26	18 16 45	4°23'45	17°20	22°20	20°23	0♋9	27°57	1°14	4°12	28°13	21°15	23°31	22° 1	5°29	18°29	T 26
F 27	18 20 41	5°20'59	29°39	24° 6	21° 9	0°23	28° 7	1°10	4°15	28°14	21°16	23°24	21°58	5°36	18°30	F 27
S 28	18 24 38	6°18'12	11♊49	25°49	21°56	0°38	28°17	1° 7	4°19	28°16	21°17	23°16	21°54	5°43	18°31	S 28
S 29	18 28 34	7°15'26	23°49	27°30	22°44	0°53	28°27	1° 3	4°22	28°17	21°18	23° 9	21°51	5°49	18°33	S 29
M30	18 32 31	8♋12'38	5♊44	29♋8	23♋33	1♌ 9	28♌37	0♍59	4♎25	28♏18	21♐19	23♑ 3	21♒48	5♓56	18♈34	M30

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ASTRODIENST EPHEMERIS for the year 1873
geocentric

JULY 1873

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	18 36 27	9°51'	17°35'	0°45'	24°22'	1°25'	28°48'	0°55'	4°29'	28°19'	21°20'	22°59'	21°45'	6°3'	18°35'	T 1
W 2	18 40 24	10° 7'03"	29°28'	2°19'	25°12'	1°42'	28°58'	0°55'	4°32'	28°20'	21°21'	22°56'	21°42'	6° 9'	18°36'	W 2
T 3	18 44 21	11° 4'15"	11°27'	3°52'	26° 2'	2° 0'	29° 9'	0°47'	4°36'	28°21'	21°22'	22°56'	21°38'	6°16'	18°37'	T 3
F 4	18 48 17	12° 1'26"	23°37'	5°21'	26°53'	2°18'	29°19'	0°43'	4°39'	28°22'	21°22'	22°56'	21°35'	6°23'	18°38'	F 4
S 5	18 52 14	12°58'38"	6° 2'	6°49'	27°45'	2°36'	29°30'	0°39'	4°43'	28°22'	21°23'	22°57'	21°32'	6°30'	18°39'	S 5
S 6	18 56 10	13°55'49"	18°48'	8°14'	28°38'	2°55'	29°41'	0°35'	4°46'	28°23'	21°24'	22°58'	21°29'	6°36'	18°40'	S 6
M 7	19 0 7	14°53'01"	1°57'	9°38'	29°31'	3°15'	29°51'	0°30'	4°50'	28°24'	21°25'	22°58'	21°26'	6°43'	18°41'	M 7
T 8	19 4 3	15°50'12"	15°33'	10°58'	0°12'	3°35'	0°12'	0°26'	4°53'	28°25'	21°26'	22°56'	21°23'	6°50'	18°42'	T 8
W 9	19 8 0	16°47'23"	29°35'	12°17'	1°18'	3°55'	0°13'	0°22'	4°57'	28°26'	21°27'	22°52'	21°19'	6°56'	18°42'	W 9
T 10	19 11 56	17°44'35"	14°3'	13°32'	2°13'	4°16'	0°24'	0°18'	5° 0'	28°27'	21°28'	22°45'	21°16'	7° 3'	18°43'	T 10
F 11	19 15 53	18°41'46"	28°43'	14°46'	3° 8'	4°38'	0°35'	0°13'	5° 4'	28°27'	21°29'	22°37'	21°13'	7°10'	18°44'	F 11
S 12	19 19 50	19°38'58"	13°36'	15°57'	4° 4'	5° 0'	0°47'	0° 9'	5° 8'	28°28'	21°29'	22°29'	21°10'	7°17'	18°44'	S 12
S 13	19 23 46	20°36'10"	28°31'	17° 5'	5° 0'	5°22'	0°58'	0° 5'	5°11'	28°29'	21°30'	22°21'	21° 7'	7°23'	18°45'	S 13
M14	19 27 43	21°33'23"	13°18'	18°10'	5°56'	5°45'	1° 9'	0° 0'	5°15'	28°29'	21°31'	22°14'	21° 4'	7°30'	18°45'	M14
T 15	19 31 39	22°30'37"	27°51'	19°13'	6°53'	6° 8'	1°21'	29°56'	5°18'	28°30'	21°32'	22°10'	21° 0'	7°37'	18°46'	T 15
W16	19 35 36	23°27'51"	12°7'	20°13'	7°51'	6°32'	1°32'	29°52'	5°22'	28°30'	21°32'	22° 7'	20°57'	7°43'	18°46'	W16
T 17	19 39 32	24°25'05"	26° 2'	21°10'	8°48'	6°56'	1°44'	29°47'	5°26'	28°31'	21°33'	22°D 7'	20°54'	7°50'	18°46'	T 17
F 18	19 43 29	25°22'21"	9°38'	22° 3'	9°47'	7°21'	1°55'	29°43'	5°29'	28°31'	21°34'	22° 7'	20°51'	7°57'	18°47'	F 18
S 19	19 47 25	26°19'37"	22°57'	22°54'	10°45'	7°45'	2° 7'	29°38'	5°33'	28°32'	21°34'	22°R 8'	20°48'	8° 4'	18°47'	S 19
S 20	19 51 22	27°16'55"	5°59'	23°41'	11°44'	8°11'	2°18'	29°34'	5°37'	28°32'	21°35'	22° 7'	20°44'	8°10'	18°47'	S 20
M21	19 55 19	28°14'13"	18°48'	24°25'	12°44'	8°36'	2°30'	29°29'	5°40'	28°33'	21°36'	22° 4'	20°41'	8°17'	18°47'	M21
T 22	19 59 15	29°11'32"	1°25'	25° 5'	13°44'	9° 3'	2°42'	29°25'	5°44'	28°33'	21°36'	21°58'	20°38'	8°24'	18°47'	T 22
W23	20 3 12	0° 8'51"	13°52'	25°41'	14°44'	9°29'	2°54'	29°20'	5°48'	28°33'	21°37'	21°50'	20°35'	8°30'	18°47'	W23
T 24	20 7 8	1° 6'12"	26° 9'	26°13'	15°44'	9°56'	3° 6'	29°16'	5°51'	28°34'	21°38'	21°40'	20°32'	8°37'	18°47'	T 24
F 25	20 11 5	2° 3'33"	8°19'	26°41'	16°45'	10°23'	3°18'	29°12'	5°55'	28°34'	21°38'	21°27'	20°29'	8°44'	18°47'	F 25
S 26	20 15 1	3° 0'54"	20°21'	27° 5'	17°46'	10°51'	3°30'	29° 7'	5°59'	28°34'	21°39'	21°15'	20°25'	8°51'	18°47'	S 26
S 27	20 18 58	3°58'16"	2°17'	27°24'	18°47'	11°19'	3°42'	29° 3'	6° 3'	28°34'	21°39'	21° 2'	20°22'	8°57'	18°47'	S 27
M28	20 22 55	4°55'39"	14° 9'	27°38'	19°49'	11°47'	3°54'	28°58'	6° 6'	28°34'	21°40'	20°52'	20°19'	9° 4'	18°46'	M28
T 29	20 26 51	5°53'03"	25°59'	27°48'	20°51'	12°15'	4° 6'	28°54'	6°10'	28°35'	21°40'	20°43'	20°16'	9°11'	18°46'	T 29
W30	20 30 48	6°50'27"	7°50'	27°R53'	21°53'	12°44'	4°18'	28°49'	6°14'	28°35'	21°41'	20°37'	20°13'	9°17'	18°46'	W30
T 31	20 34 44	7°47'52"	19°47'	27°52'	22°55'	13°14'	4°30'	28°345'	6°17'	28°35'	21°41'	20°34'	20° 9'	9°24'	18°45'	T 31

Delta T = -0.41 sec

AUGUST 1873

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	20 38 41	8°45'17"	1°54'	27°R47'	23°58'	13°43'	4°43'	28°R41'	6°21'	28°R35'	21°42'	20°R33'	20° 6'	9°31'	18°R45'	F 1
S 2	20 42 37	9°42'43"	14°16'	27°53'	25° 1'	14°13'	4°55'	28°36'	6°25'	28°35'	21°42'	20°33'	20° 3'	9°38'	18°44'	S 2
S 3	20 46 34	10°40'10"	26°59'	27°20'	26° 4'	14°43'	5° 7'	28°32'	6°28'	28°35'	21°42'	20°33'	20° 0'	9°44'	18°44'	S 3
M 4	20 50 30	11°37'38"	10°6'	26°58'	27° 8'	15°14'	5°20'	28°28'	6°32'	28°35'	21°43'	20°31'	19°57'	9°51'	18°43'	M 4
T 5	20 54 27	12°35'06"	23°41'	26°32'	28°12'	15°44'	5°32'	28°24'	6°36'	28°34'	21°43'	20°28'	19°54'	9°58'	18°42'	T 5
W 6	20 58 23	13°32'35"	7°34'	26° 1'	29°16'	16°15'	5°45'	28°19'	6°40'	28°34'	21°43'	20°23'	19°50'	10° 5'	18°41'	W 6
T 7	21 2 20	14°30'06"	22°20'	25°25'	0°20'	16°47'	5°57'	28°15'	6°43'	28°34'	21°44'	20°15'	19°47'	10°11'	18°41'	T 7
F 8	21 6 17	15°27'37"	7°16'	24°46'	1°24'	17°18'	6°10'	28°11'	6°47'	28°34'	21°44'	20° 5'	19°44'	10°18'	18°40'	F 8
S 9	21 10 13	16°25'09"	22°26'	24° 3'	2°29'	17°50'	6°22'	28° 7'	6°51'	28°34'	21°44'	19°54'	19°41'	10°25'	18°39'	S 9
S 10	21 14 10	17°22'42"	7°40'	23°16'	3°34'	18°22'	6°35'	28° 3'	6°54'	28°33'	21°45'	19°43'	19°38'	10°31'	18°38'	S 10
M11	21 18 6	18°20'16"	22°47'	22°28'	4°39'	18°55'	6°48'	27°59'	6°58'	28°33'	21°45'	19°34'	19°35'	10°38'	18°37'	M11
T 12	21 22 3	19°17'52"	7°37'	21°39'	5°44'	19°27'	7° 0'	27°55'	7° 2'	28°33'	21°45'	19°28'	19°31'	10°45'	18°36'	T 12
W13	21 25 59	20°15'29"	22° 5'	20°49'	6°50'	20° 0'	7°13'	27°51'	7° 5'	28°32'	21°45'	19°24'	19°28'	10°52'	18°35'	W13
T 14	21 29 56	21°13'08"	6° 8'	19°59'	7°56'	20°34'	7°26'	27°47'	7° 9'	28°32'	21°45'	19°23'	19°25'	10°58'	18°34'	T 14
F 15	21 33 52	22°10'49"	19°45'	19°11'	9° 2'	21° 7'	7°38'	27°43'	7°12'	28°32'	21°46'	19°22'	19°22'	11° 5'	18°32'	F 15
S 16	21 37 49	23° 8'31"	2°59'	18°26'	10° 8'	21°41'	7°51'	27°39'	7°16'	28°31'	21°46'	19°22'	19°19'	11°12'	18°31'	S 16
S 17	21 41 46	24° 6'14"	15°53'	17°44'	11°14'	22°14'	8° 4'	27°35'	7°20'	28°31'	21°46'	19°21'	19°15'	11°18'	18°30'	S 17
M18	21 45 42	25° 4'00"	28°31'	17° 6'	12°21'	22°49'	8°17'	27°32'	7°23'	28°30'	21°46'	19°18'	19°12'	11°25'	18°28'	M18
T 19	21 49 39	26° 1'47"	10°55'	16°33'	13°27'	23°23'	8°30'	27°28'	7°27'	28°30'	21°46'	19°12'	19° 9'	11°32'	18°27'	T 19
W20	21 53 35	26°59'35"	23°10'	16° 7'	14°34'	23°58'	8°42'	27°25'	7°30'	28°29'	21°46'	19° 3'	19° 6'	11°38'	18°26'	W20
T 21	21 57 32	27°57'26"	5°16'	15°47'	15°41'	24°32'	8°55'	27°21'	7°34'	28°28'	21°46'	18°51'	19° 3'	11°45'	18°24'	T 21
F 22	22 1 28	28°55'17"	17°16'	15°34'	16°48'	25° 7'	9° 8'	27°18'	7°37'	28°28'	21°R46'	18°38'	19° 0'	11°52'	18°23'	F 22
S 23	22 5 25	29°53'10"	29°12'	15°D28'	17°56'	25°43'	9°21'	27°14'	7°41'	28°27'	21°46'	18°24'	18°56'	11°59'	18°21'	S 23
S 24	22 9 22	0°51'05"	11° 4'	15°30'	19° 3'	26°18'	9°34'	27°11'	7°44'	28°26'	21°46'	18°11'	18°53'	12° 5'	18°19'	S 24
M25	22 13 18	1°49'01"	22°55'	15°41'	20°11'	26°54'	9°47'	27° 8'	7°48'	28°26'	21°46'	17°59'	18°50'	12°12'	18°18'	M25
T 26	22 17 15	2°46'59"	4°45'	15°59'	21°19'	27°30'	10° 0'	27° 4'	7°51'	28°25'	21°46'	17°50'	18°47'	12°19'	18°16'	T 26
W27	22 21 11	3°44'57"	16°38'	16°25'	22°27'	28° 6'	10°13'	27° 1'	7°55'	28°24'	21°46'	17°43'	18°44'	12°25'	18°14'	W27
T 28	22 25 8	4°42'58"	28°36'	17° 0'	23°35'	28°42'	10°26'	26°58'	7°58'	28°23'	21°46'	17°39'	18°41'	12°32'	18°12'	T 28
F 29	22 29 4	5°41'00"	10°14'	17°42'	24°43'	29°19'	10°39'	26°55'	8° 2'	28°22'	21°45'	17°38'	18°37'	12°39'	18°10'	F 29
S 30	22 33 1	6°39'03"	23° 5'	18°32'	25°52'	29°55'	10°52'	26°52'	8° 5'	28°22'	21°45'	17°D37'	18°34'	12°46'	18° 9'	S 30
S 31	22 36 57	7°37'07"	5°44'	19°29'	27° 0'	0°32'	11° 5'	26°349'	8° 8'	28°21'	21°45'	17°R38'	18°31'	12°52'	18° 7'	S 31

Delta T = -0.46 sec

ASTRODIENST EPHEMERIS for the year 1873

geocentric

SEPTEMBER 1873

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	22 40 54	8 ^h 35'14"	18 ^h 46'	20 ^h 34'	28 ^h 9'	1 ^h 10'	11 ^h 18'	26 ^h 47'	8 ^h 12'	28 ^h 20'	21 ^h 45'	17 ^h 37'	18 ^h 28'	12 ^h 59'	18 ^h 5'	M 1
T 2	22 44 50	9 ^h 33'21"	2 ^h 16'	21 ^h 45'	29 ^h 18'	1 ^h 47'	11 ^h 31'	26 ^h 44'	8 ^h 15'	28 ^h 19'	21 ^h 45'	17 ^h 35'	18 ^h 25'	13 ^h 6'	18 ^h 3'	T 2
W 3	22 48 47	10 ^h 31'30"	16 ^h 14'	23 ^h 2'	0 ^h 27'	2 ^h 24'	11 ^h 44'	26 ^h 41'	8 ^h 18'	28 ^h 18'	21 ^h 44'	17 ^h 31'	18 ^h 21'	13 ^h 12'	18 ^h 1'	W 3
T 4	22 52 44	11 ^h 29'40"	0 ^h 42'	24 ^h 24'	1 ^h 36'	3 ^h 2'	11 ^h 57'	26 ^h 39'	8 ^h 21'	28 ^h 17'	21 ^h 44'	17 ^h 24'	18 ^h 18'	13 ^h 19'	17 ^h 58'	T 4
F 5	22 56 40	12 ^h 27'52"	15 ^h 35'	25 ^h 52'	2 ^h 45'	3 ^h 40'	12 ^h 10'	26 ^h 37'	8 ^h 25'	28 ^h 16'	21 ^h 44'	17 ^h 16'	18 ^h 15'	13 ^h 26'	17 ^h 56'	F 5
S 6	23 0 37	13 ^h 26'06"	0 ^h 47'	27 ^h 25'	3 ^h 55'	4 ^h 18'	12 ^h 23'	26 ^h 34'	8 ^h 28'	28 ^h 15'	21 ^h 44'	17 ^h 6'	18 ^h 12'	13 ^h 33'	17 ^h 54'	S 6
S 7	23 4 33	14 ^h 24'21"	16 ^h 7'	29 ^h 1'	5 ^h 4'	4 ^h 56'	12 ^h 36'	26 ^h 32'	8 ^h 31'	28 ^h 14'	21 ^h 43'	16 ^h 57'	18 ^h 9'	13 ^h 39'	17 ^h 52'	S 7
M 8	23 8 30	15 ^h 22'37"	1 ^h 23'	0 ^h 42'	6 ^h 14'	5 ^h 34'	12 ^h 49'	26 ^h 30'	8 ^h 34'	28 ^h 13'	21 ^h 43'	16 ^h 50'	18 ^h 6'	13 ^h 46'	17 ^h 50'	M 8
T 9	23 12 26	16 ^h 20'56"	16 ^h 26'	2 ^h 25'	7 ^h 24'	6 ^h 13'	13 ^h 2'	26 ^h 28'	8 ^h 37'	28 ^h 11'	21 ^h 42'	16 ^h 44'	18 ^h 2'	13 ^h 53'	17 ^h 47'	T 9
W10	23 16 23	17 ^h 19'17"	1 ^h 6'	4 ^h 11'	8 ^h 33'	6 ^h 51'	13 ^h 15'	26 ^h 26'	8 ^h 40'	28 ^h 10'	21 ^h 42'	16 ^h 41'	17 ^h 59'	13 ^h 59'	17 ^h 45'	W10
T 11	23 20 19	18 ^h 17'40"	15 ^h 20'	5 ^h 59'	9 ^h 43'	7 ^h 30'	13 ^h 28'	26 ^h 24'	8 ^h 44'	28 ^h 9'	21 ^h 42'	16 ^h 40'	17 ^h 56'	14 ^h 6'	17 ^h 43'	T 11
F 12	23 24 16	19 ^h 16'05"	29 ^h 5'	7 ^h 48'	10 ^h 54'	8 ^h 9'	13 ^h 41'	26 ^h 22'	8 ^h 47'	28 ^h 8'	21 ^h 41'	16 ^h 40'	17 ^h 53'	14 ^h 13'	17 ^h 40'	F 12
S 13	23 28 13	20 ^h 14'32"	12 ^h 24'	9 ^h 39'	12 ^h 4'	8 ^h 48'	13 ^h 54'	26 ^h 20'	8 ^h 50'	28 ^h 7'	21 ^h 41'	16 ^h 41'	17 ^h 50'	14 ^h 20'	17 ^h 38'	S 13
S 14	23 32 9	21 ^h 13'01"	25 ^h 19'	11 ^h 30'	13 ^h 14'	9 ^h 28'	14 ^h 7'	26 ^h 19'	8 ^h 53'	28 ^h 5'	21 ^h 40'	16 ^h 41'	17 ^h 47'	14 ^h 26'	17 ^h 36'	S 14
M15	23 36 6	22 ^h 11'33"	7 ^h 54'	13 ^h 23'	14 ^h 25'	10 ^h 7'	14 ^h 20'	26 ^h 17'	8 ^h 56'	28 ^h 4'	21 ^h 40'	16 ^h 40'	17 ^h 43'	14 ^h 33'	17 ^h 33'	M15
T 16	23 40 2	23 ^h 10'07"	20 ^h 13'	15 ^h 15'	15 ^h 35'	10 ^h 47'	14 ^h 33'	26 ^h 16'	8 ^h 58'	28 ^h 3'	21 ^h 39'	16 ^h 36'	17 ^h 40'	14 ^h 40'	17 ^h 31'	T 16
W17	23 43 59	24 ^h 8'43"	2 ^h 21'	17 ^h 8'	16 ^h 46'	11 ^h 26'	14 ^h 46'	26 ^h 14'	9 ^h 1'	28 ^h 2'	21 ^h 39'	16 ^h 31'	17 ^h 37'	14 ^h 46'	17 ^h 28'	W17
T 18	23 47 55	25 ^h 7'21"	14 ^h 21'	19 ^h 0'	17 ^h 57'	12 ^h 6'	14 ^h 59'	26 ^h 13'	9 ^h 4'	28 ^h 0'	21 ^h 38'	16 ^h 23'	17 ^h 34'	14 ^h 53'	17 ^h 26'	T 18
F 19	23 51 52	26 ^h 6'01"	26 ^h 15'	20 ^h 52'	19 ^h 8'	12 ^h 46'	15 ^h 11'	26 ^h 12'	9 ^h 7'	27 ^h 59'	21 ^h 38'	16 ^h 14'	17 ^h 31'	15 ^h 0'	17 ^h 23'	F 19
S 20	23 55 48	27 ^h 4'43"	8 ^h 7'	22 ^h 44'	20 ^h 19'	13 ^h 26'	15 ^h 24'	26 ^h 11'	9 ^h 10'	27 ^h 57'	21 ^h 37'	16 ^h 4'	17 ^h 27'	15 ^h 6'	17 ^h 21'	S 20
S 21	23 59 45	28 ^h 3'27"	19 ^h 58'	24 ^h 35'	21 ^h 30'	14 ^h 7'	15 ^h 37'	26 ^h 10'	9 ^h 12'	27 ^h 56'	21 ^h 37'	15 ^h 55'	17 ^h 24'	15 ^h 13'	17 ^h 18'	S 21
M22	0 3 42	29 ^h 2'13"	1 ^h 50'	26 ^h 26'	22 ^h 41'	14 ^h 47'	15 ^h 50'	26 ^h 9'	9 ^h 15'	27 ^h 55'	21 ^h 36'	15 ^h 46'	17 ^h 21'	15 ^h 20'	17 ^h 15'	M22
T 23	0 7 38	0 ^h 1'01"	13 ^h 44'	28 ^h 16'	23 ^h 53'	15 ^h 28'	16 ^h 3'	26 ^h 8'	9 ^h 18'	27 ^h 53'	21 ^h 35'	15 ^h 40'	17 ^h 18'	15 ^h 27'	17 ^h 13'	T 23
W24	0 11 35	0 ^h 59'51"	25 ^h 43'	0 ^h 5'	25 ^h 4'	16 ^h 8'	16 ^h 16'	26 ^h 7'	9 ^h 20'	27 ^h 52'	21 ^h 35'	15 ^h 36'	17 ^h 15'	15 ^h 33'	17 ^h 10'	W24
T 25	0 15 31	1 ^h 58'43"	7 ^h 49'	1 ^h 53'	26 ^h 16'	16 ^h 49'	16 ^h 28'	26 ^h 7'	9 ^h 23'	27 ^h 50'	21 ^h 34'	15 ^h 34'	17 ^h 12'	15 ^h 40'	17 ^h 7'	T 25
F 26	0 19 28	2 ^h 57'37"	20 ^h 3'	3 ^h 40'	27 ^h 27'	17 ^h 30'	16 ^h 41'	26 ^h 6'	9 ^h 26'	27 ^h 49'	21 ^h 33'	15 ^h 33'	17 ^h 8'	15 ^h 47'	17 ^h 5'	F 26
S 27	0 23 24	3 ^h 56'33"	2 ^h 30'	5 ^h 27'	28 ^h 39'	18 ^h 12'	16 ^h 54'	26 ^h 6'	9 ^h 28'	27 ^h 47'	21 ^h 33'	15 ^h 35'	17 ^h 5'	15 ^h 53'	17 ^h 2'	S 27
S 28	0 27 21	4 ^h 55'30"	15 ^h 12'	7 ^h 12'	29 ^h 51'	18 ^h 53'	17 ^h 7'	26 ^h 6'	9 ^h 31'	27 ^h 46'	21 ^h 32'	15 ^h 36'	17 ^h 2'	16 ^h 0'	16 ^h 59'	S 28
M29	0 31 17	5 ^h 54'30"	28 ^h 14'	8 ^h 57'	1 ^h 3'	19 ^h 34'	17 ^h 19'	26 ^h 5'	9 ^h 33'	27 ^h 44'	21 ^h 31'	15 ^h 37'	16 ^h 59'	16 ^h 7'	16 ^h 56'	M29
T 30	0 35 14	6 ^h 53'31"	11 ^h 38'	10 ^h 41'	2 ^h 15'	20 ^h 16'	17 ^h 32'	26 ^h 5'	9 ^h 35'	27 ^h 43'	21 ^h 30'	15 ^h 37'	16 ^h 56'	16 ^h 14'	16 ^h 54'	T 30

Delta T = -0.50 sec

OCTOBER 1873

00:00 UT

Day	Sid.t	☉	☾	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	0 39 11	7♂52'34	25♂27	12♂24	3♂27	20♂57	17♂45	26♂5	9♂38	27°R41	21°R30	15°R36	16♂52	16♂20	16°R51	W 1
T 2	0 43 7	8°51'38	9♂41	14°6	4°39	21°39	17°57	26°5	9°40	27°Y40	21♂29	15♂33	16°49	16°27	16°Y48	T 2
F 3	0 47 4	9°50'44	24°19	15°47	5°52	22°21	18°10	26°6	9°42	27°38	21°28	15°29	16°46	16°34	16°45	F 3
S 4	0 51 0	10°49'52	9♂16	17°28	7°4	23°3	18°22	26°6	9°45	27°36	21°27	15°24	16°43	16°40	16°43	S 4
S 5	0 54 57	11°49'02	24°24	19°8	8°16	23°45	18°35	26°6	9°47	27°35	21°27	15°19	16°40	16°47	16°40	S 5
M 6	0 58 53	12°48'14	9°Y33	20°46	9°29	24°27	18°47	26°7	9°49	27°33	21°26	15°15	16°37	16°54	16°37	M 6
T 7	1 2 50	13°47'27	24°34	22°25	10°41	25°9	18°59	26°7	9°51	27°32	21°25	15°12	16°33	17°0	16°34	T 7
W 8	1 6 46	14°46'43	9♂18	24°2	11°54	25°52	19°12	26°8	9°53	27°30	21°24	15°D10	16°30	17°7	16°31	W 8
T 9	1 10 43	15°46'01	23°39	25°38	13°7	26°34	19°24	26°9	9°55	27°28	21°23	15°11	16°27	17°14	16°29	T 9
F 10	1 14 40	16°45'22	7♂33	27°14	14°20	27°17	19°36	26°10	9°57	27°27	21°22	15°12	16°24	17°21	16°26	F 10
S 11	1 18 36	17°44'45	21°0	28°49	15°33	28°0	19°49	26°11	9°59	27°25	21°21	15°13	16°21	17°27	16°23	S 11
S 12	1 22 33	18°44'10	4♂1	0♂24	16°46	28°43	20°1	26°12	10°1	27°23	21°20	15°15	16°18	17°34	16°20	S 12
M13	1 26 29	19°43'37	16°40	1°58	17°59	29°25	20°13	26°13	10°3	27°22	21°19	15°R15	16°14	17°41	16°17	M13
T 14	1 30 26	20°43'07	29°0	3°31	19°12	0♂8	20°25	26°15	10°5	27°20	21°19	15°15	16°11	17°47	16°15	T 14
W15	1 34 22	21°42'39	11♂7	5°3	20°25	0°52	20°37	26°16	10°6	27°18	21°18	15°14	16°8	17°54	16°12	W15
T 16	1 38 19	22°42'13	23°4	6°35	21°38	1°35	20°49	26°17	10°8	27°17	21°17	15°11	16°5	18°1	16°9	T 16
F 17	1 42 15	23°41'49	4♂57	8°6	22°52	2°18	21°1	26°19	10°10	27°15	21°16	15°8	16°2	18°7	16°6	F 17
S 18	1 46 12	24°41'28	16°47	9°37	24°5	3°1	21°13	26°21	10°11	27°13	21°15	15°5	15°58	18°14	16°3	S 18
S 19	1 50 9	25°41'09	28°39	11°7	25°19	3°45	21°25	26°23	10°13	27°12	21°14	15°1	15°55	18°21	16°1	S 19
M20	1 54 5	26°40'51	10♂35	12°36	26°32	4°28	21°36	26°24	10°14	27°10	21°13	14°58	15°52	18°28	15°58	M20
T 21	1 58 2	27°40'36	22°37	14°5	27°46	5°12	21°48	26°26	10°16	27°8	21°12	14°56	15°49	18°34	15°55	T 21
W22	2 1 58	28°40'23	4♂46	15°32	28°59	5°56	22°0	26°29	10°17	27°7	21°11	14°55	15°46	18°41	15°52	W22
T 23	2 5 55	29°40'12	17°5	17°0	0♂13	6°40	22°11	26°31	10°18	27°5	21°10	14°D55	15°43	18°48	15°50	T 23
F 24	2 9 51	0♂40'03	29°35	18°26	1°27	7°24	22°23	26°33	10°20	27°3	21°9	14°55	15°39	18°54	15°47	F 24
S 25	2 13 48	1°39'56	12♂17	19°52	2°41	8°8	22°34	26°35	10°21	27°2	21°8	14°56	15°36	19°1	15°44	S 25
S 26	2 17 44	2°39'50	25°12	21°18	3°55	8°52	22°46	26°38	10°22	27°0	21°6	14°58	15°33	19°8	15°42	S 26
M27	2 21 41	3°39'47	8♂22	22°42	5°9	9°36	22°57	26°40	10°23	26°58	21°5	14°59	15°30	19°14	15°39	M27
T 28	2 25 37	4°39'44	21°49	24°6	6°23	10°20	23°8	26°43	10°24	26°57	21°4	14°59	15°27	19°21	15°36	T 28
W29	2 29 34	5°39'44	5♂34	25°29	7°37	11°5	23°19	26°46	10°25	26°55	21°3	15°R0	15°24	19°28	15°34	W29
T 30	2 33 31	6°39'45	19°37	26°51	8°51	11°49	23°30	26°49	10°26	26°53	21°2	14°59	15°20	19°35	15°31	T 30
F 31	2 37 27	7♂39'47	3♂57	28♂12	10♂5	12♂33	23♂41	26♂52	10♂27	26°Y52	21♂1	14♂59	15♂17	19♂41	15°Y29	F 31

ASTRODIENST EPHEMERIS for the year 1873

geocentric

NOVEMBER 1873

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	2 41 24	8♉39°51	18♊31	29♉31	11♉19	13♉18	23♉52	26♉55	10♉28	26°R50	21°R 0	14°R58	15♉14	19♉48	15°R26	S 1
S 2	2 45 20	9°39'57	3♉14	0♉50	12°33	14° 2	24° 3	26°58	10°29	26°Y48	20°Y59	14♉57	15°11	19°55	15°Y23	S 2
M 3	2 49 17	10°40'04	18° 1	2° 8	13°47	14°47	24°14	27° 1	10°29	26°47	20°58	14°57	15° 8	20° 1	15°21	M 3
T 4	2 53 13	11°40'13	2♉44	3°24	15° 2	15°32	24°25	27° 4	10°30	26°45	20°57	14°57	15° 4	20° 8	15°19	T 4
W 5	2 57 10	12°40'24	17°16	4°38	16°16	16°17	24°35	27° 8	10°31	26°44	20°56	14°D57	15° 1	20°15	15°16	W 5
T 6	3 1 6	13°40'37	1♉31	5°51	17°30	17° 1	24°46	27°11	10°31	26°42	20°54	14°57	14°58	20°21	15°14	T 6
F 7	3 5 3	14°40'51	15°26	7° 2	18°45	17°46	24°56	27°15	10°32	26°40	20°53	14°R57	14°55	20°28	15°11	F 7
S 8	3 9 0	15°41'08	28°56	8°11	19°59	18°31	25° 7	27°18	10°32	26°39	20°52	14°57	14°52	20°35	15° 9	S 8
S 9	3 12 56	16°41'26	12♉2	9°18	21°14	19°16	25°17	27°22	10°33	26°37	20°51	14°57	14°49	20°42	15° 7	S 9
M10	3 16 53	17°41'46	24°46	10°22	22°29	20° 1	25°27	27°26	10°33	26°36	20°50	14°56	14°45	20°48	15° 4	M10
T 11	3 20 49	18°42'09	7♉11	11°23	23°43	20°47	25°37	27°30	10°33	26°34	20°49	14°56	14°42	20°55	15° 2	T 11
W12	3 24 46	19°42'33	19°20	12°20	24°58	21°32	25°47	27°34	10°33	26°33	20°48	14°D56	14°39	21° 2	15° 0	W12
T 13	3 28 42	20°42'59	1♉19	13°14	26°12	22°17	25°57	27°38	10°34	26°31	20°47	14°56	14°36	21° 8	14°58	T 13
F 14	3 32 39	21°43'26	13°11	14° 4	27°27	23° 2	26° 7	27°42	10°34	26°30	20°46	14°56	14°33	21°15	14°56	F 14
S 15	3 36 36	22°43'56	25° 1	14°48	28°42	23°48	26°16	27°46	10°34	26°28	20°44	14°57	14°30	21°22	14°54	S 15
S 16	3 40 32	23°44'27	6♉54	15°28	29°57	24°33	26°26	27°50	10°R34	26°27	20°43	14°58	14°26	21°28	14°52	S 16
M17	3 44 29	24°45'01	18°54	16° 1	1♉11	25°18	26°36	27°55	10°34	26°25	20°42	14°59	14°23	21°35	14°50	M17
T 18	3 48 25	25°45'35	1♉ 4	16°27	2°26	26° 4	26°45	27°59	10°34	26°24	20°41	15° 0	14°20	21°42	14°48	T 18
W19	3 52 22	26°46'12	13°26	16°46	3°41	26°49	26°54	28° 4	10°34	26°22	20°40	15°R 0	14°17	21°49	14°46	W19
T 20	3 56 18	27°46'50	26° 1	16°57	4°56	27°35	27° 3	28° 8	10°33	26°21	20°39	15° 0	14°14	21°55	14°44	T 20
F 21	4 0 15	28°47'30	8♉51	16°R59	6°11	28°21	27°12	28°13	10°33	26°20	20°38	14°59	14°10	22° 2	14°42	F 21
S 22	4 4 11	29°48'11	21°55	16°50	7°26	29° 6	27°21	28°18	10°33	26°18	20°37	14°57	14° 7	22° 9	14°40	S 22
S 23	4 8 8	0♉48°53	5♉14	16°32	8°41	29°52	27°30	28°23	10°32	26°17	20°35	14°55	14° 4	22°15	14°38	S 23
M24	4 12 5	1°49'36	18°45	16° 3	9°56	0♉38	27°39	28°27	10°32	26°16	20°34	14°53	14° 1	22°22	14°37	M24
T 25	4 16 1	2°50'21	2♉28	15°23	11°11	1°24	27°47	28°32	10°32	26°14	20°33	14°51	13°58	22°29	14°35	T 25
W26	4 19 58	3°51'07	16°21	14°32	12°26	2°10	27°56	28°37	10°31	26°13	20°32	14°49	13°55	22°35	14°33	W26
T 27	4 23 54	4°51'53	0♉23	13°31	13°41	2°55	28° 4	28°43	10°30	26°12	20°31	14°D48	13°51	22°42	14°32	T 27
F 28	4 27 51	5°52'40	14°32	12°22	14°56	3°41	28°12	28°48	10°30	26°11	20°30	14°48	13°48	22°49	14°30	F 28
S 29	4 31 47	6°53'29	28°46	11° 6	16°11	4°27	28°20	28°53	10°29	26° 9	20°29	14°49	13°45	22°55	14°29	S 29
S 30	4 35 44	7♉54°18	13♉ 3	9♉45	17♉26	5♉13	28♉28	28♉58	10♉28	26°Y 8	20°Y28	14♉51	13♉42	23♉ 2	14°Y27	S 30

Delta T = -0.59 sec

DECEMBER 1873

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	4 39 40	8♉55°08	27♉21	8°R22	18♉41	5♉59	28♉36	29♉ 4	10°R28	26°R 7	20°R27	14♉52	13♉39	23♉ 9	14°R26	M 1
T 2	4 43 37	9°55'59	11♉35	7♉ 0	19°57	6°45	28°44	29° 9	10°R27	26°Y 6	20°Y26	14°R53	13°36	23°16	14°Y25	T 2
W 3	4 47 34	10°56'51	25°43	5°42	21°12	7°31	28°52	29°15	10°26	26° 5	20°25	14°52	13°32	23°22	14°24	W 3
T 4	4 51 30	11°57'44	9♉39	4°30	22°27	8°17	28°59	29°20	10°25	26° 4	20°24	14°51	13°29	23°29	14°22	T 4
F 5	4 55 27	12°58'38	23°20	3°26	23°42	9° 3	29° 6	29°26	10°24	26° 3	20°23	14°47	13°26	23°36	14°21	F 5
S 6	4 59 23	13°59'33	6♉44	2°31	24°57	9°49	29°13	29°31	10°23	26° 2	20°22	14°43	13°23	23°42	14°20	S 6
S 7	5 3 20	15° 0'29	19°48	1°48	26°12	10°36	29°20	29°37	10°22	26° 1	20°21	14°38	13°20	23°49	14°19	S 7
M 8	5 7 16	16° 1'26	2♉33	1°15	27°28	11°22	29°27	29°43	10°21	26° 0	20°20	14°33	13°16	23°56	14°18	M 8
T 9	5 11 13	17° 2'25	14°59	0°55	28°43	12° 8	29°34	29°49	10°19	25°59	20°19	14°28	13°13	24° 2	14°17	T 9
W10	5 15 9	18° 3'24	27°10	0°D45	29°58	12°54	29°41	29°55	10°18	25°58	20°18	14°24	13°10	24° 9	14°16	W10
T 11	5 19 6	19° 4'24	9♉10	0°45	1♉13	13°40	29°47	0♉ 1	10°17	25°57	20°17	14°22	13° 7	24°16	14°15	T 11
F 12	5 23 3	20° 5'26	21° 2	0°55	2°29	14°27	29°53	0° 7	10°15	25°56	20°16	14°D21	13° 4	24°22	14°15	F 12
S 13	5 26 59	21° 6'28	2♉52	1°15	3°44	15°13	29°59	0°13	10°14	25°56	20°15	14°22	13° 1	24°29	14°14	S 13
S 14	5 30 56	22° 7'32	14°45	1°42	4°59	15°59	0♉ 6	0°19	10°13	25°55	20°14	14°24	12°57	24°36	14°13	S 14
M15	5 34 52	23° 8'36	26°47	2°17	6°15	16°45	0°11	0°25	10°11	25°54	20°13	14°25	12°54	24°43	14°12	M15
T 16	5 38 49	24° 9'41	9♉ 0	2°58	7°30	17°32	0°17	0°31	10°10	25°53	20°12	14°R27	12°51	24°49	14°12	T 16
W17	5 42 45	25°10'47	21°30	3°45	8°45	18°18	0°23	0°37	10° 8	25°53	20°11	14°27	12°48	24°56	14°11	W17
T 18	5 46 42	26°11'54	4♉19	4°38	10° 1	19° 4	0°28	0°44	10° 6	25°52	20°10	14°25	12°45	25° 3	14°11	T 18
F 19	5 50 38	27°13'02	17°28	5°34	11°16	19°50	0°33	0°50	10° 5	25°51	20° 9	14°21	12°42	25° 9	14°11	F 19
S 20	5 54 35	28°14'10	0♉57	6°35	12°31	20°37	0°38	0°56	10° 3	25°51	20° 8	14°15	12°38	25°16	14°10	S 20
S 21	5 58 32	29°15'18	14°43	7°39	13°47	21°23	0°43	1° 3	10° 1	25°50	20° 8	14° 7	12°35	25°23	14°10	S 21
M22	6 2 28	0♉16°27	28°43	8°46	15° 2	22°10	0°48	1° 9	9°59	25°50	20° 7	13°59	12°32	25°29	14°10	M22
T 23	6 6 25	1°17'37	12♉53	9°56	16°18	22°56	0°52	1°16	9°58	25°49	20° 6	13°51	12°29	25°36	14°10	T 23
W24	6 10 21	2°18'46	27° 7	11° 9	17°33	23°42	0°57	1°22	9°56	25°49	20° 5	13°45	12°26	25°43	14°10	W24
T 25	6 14 18	3°19'55	11♉22	12°23	18°48	24°29	1° 1	1°29	9°54	25°48	20° 4	13°41	12°22	25°49	14°D 9	T 25
F 26	6 18 14	4°21'04	25°34	13°39	20° 4	25°15	1° 5	1°35	9°52	25°48	20° 3	13°39	12°19	25°56	14° 9	F 26
S 27	6 22 11	5°22'13	9♉41	14°57	21°19	26° 1	1° 9	1°42	9°50	25°48	20° 3	13°D38	12°16	26° 3	14°10	S 27
S 28	6 26 8	6°23'22	23°42	16°16	22°34	26°48	1°12	1°49	9°48	25°47	20° 2	13°39	12°13	26° 9	14°10	S 28
M29	6 30 4	7°24'31	7♉37	17°37	23°50	27°34	1°16	1°55	9°46	25°47	20° 1	13°R40	12°10	26°16	14°10	M29
T 30	6 34 1	8°25'40	21°24	18°59	25° 5	28°20	1°19	2° 2	9°44	25°47	20° 1	13°40	12° 7	26°23	14°10	T 30
W31	6 37 57	9♉26°48	5♉ 3	20♉21	26♉21	29♉ 7	1♉22	2♉ 9	9♉41	25°Y46	20°Y 0	13♉38	12♉ 3	26♉30	14°Y10	W31

Delta T = -0.63 sec