



Astrodienst Ephemeris Tables for the year 1898

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 1898
geocentric

JANUARY 1898

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	6 42 40	10 ³⁹ 07	24 ^Υ 8	22 ^R 40	29 [♂] 38	29 [♂] 6	9 [♂] 26	7 [♂] 31	1 [♂] 42	20 ^R 37	13 ^R 14	26 ^R 58	27 [♂] 49	13 ^{II} 11	25 [♂] 18	S 1
S 2	6 46 36	11°40'16	6 [♂] 14	21 [♂] 54	0 [♂] 53	29°51	9°30	7°37	1°45	20 ^{II} 35	13 ^{II} 13	26 [♂] 56	27°46	13°17	25°24	S 2
M 3	6 50 33	12°41'25	18°10	20°58	2° 8	0 [♂] 36	9°34	7°44	1°48	20°34	13°12	26°54	27°43	13°24	25°30	M 3
T 4	6 54 29	13°42'33	0 ^{II} 1	19°52	3°24	1°21	9°38	7°50	1°51	20°32	13°11	26°52	27°39	13°31	25°37	T 4
W 5	6 58 26	14°43'42	11°51	18°39	4°39	2° 6	9°41	7°56	1°54	20°31	13°10	26°50	27°36	13°38	25°43	W 5
T 6	7 2 22	15°44'50	23°42	17°21	5°55	2°51	9°45	8° 2	1°57	20°29	13° 9	26°48	27°33	13°44	25°49	T 6
F 7	7 6 19	16°45'58	5 [♂] 36	16° 1	7°10	3°36	9°48	8° 8	2° 0	20°28	13° 8	26°47	27°30	13°51	25°55	F 7
S 8	7 10 16	17°47'05	17°36	14°41	8°26	4°21	9°51	8°14	2° 2	20°26	13° 8	26°47	27°27	13°58	26° 1	S 8
S 9	7 14 12	18°48'13	29°43	13°24	9°41	5° 6	9°54	8°20	2° 5	20°25	13° 7	26°D46	27°24	14° 4	26° 7	S 9
M10	7 18 9	19°49'20	12 [♂] 0	12°11	10°56	5°52	9°57	8°26	2° 8	20°23	13° 6	26°47	27°20	14°11	26°13	M10
T 11	7 22 5	20°50'26	24°27	11° 5	12°12	6°37	10° 0	8°32	2°11	20°22	13° 5	26°47	27°17	14°18	26°19	T 11
W12	7 26 2	21°51'33	7 [♂] 6	10° 7	13°27	7°22	10° 2	8°38	2°14	20°20	13° 4	26°48	27°14	14°24	26°25	W12
T 13	7 29 58	22°52'39	20° 0	9°19	14°43	8° 7	10° 5	8°44	2°16	20°19	13° 3	26°48	27°11	14°31	26°31	T 13
F 14	7 33 55	23°53'45	3 [♂] 9	8°39	15°58	8°53	10° 7	8°49	2°19	20°18	13° 2	26°49	27° 8	14°38	26°36	F 14
S 15	7 37 51	24°54'51	16°36	8°10	17°13	9°38	10° 9	8°55	2°22	20°16	13° 1	26°49	27° 5	14°44	26°42	S 15
S 16	7 41 48	25°55'57	0 [♂] 21	7°50	18°29	10°24	10°10	9° 1	2°24	20°15	13° 1	26°R49	27° 1	14°51	26°47	S 16
M17	7 45 45	26°57'03	14°25	7°39	19°44	11° 9	10°12	9° 6	2°27	20°14	13° 0	26°D49	26°58	14°58	26°53	M17
T 18	7 49 41	27°58'08	28°48	7°D37	21° 0	11°55	10°13	9°12	2°29	20°12	12°59	26°49	26°55	15° 4	26°58	T 18
W19	7 53 38	28°59'13	13 [♂] 25	7°43	22°15	12°40	10°14	9°17	2°32	20°11	12°58	26°49	26°52	15°11	27° 3	W19
T 20	7 57 34	0 [♂] 0'18	28°12	7°56	23°31	13°26	10°15	9°23	2°34	20°10	12°58	26°49	26°49	15°18	27° 9	T 20
F 21	8 1 31	1° 1'22	13 [♂] 2	8°17	24°46	14°11	10°16	9°28	2°36	20° 9	12°57	26°50	26°45	15°24	27°14	F 21
S 22	8 5 27	2° 2'25	27°49	8°44	26° 1	14°57	10°17	9°33	2°39	20° 7	12°56	26°R50	26°42	15°31	27°19	S 22
S 23	8 9 24	3° 3'28	12 [♂] 25	9°16	27°17	15°43	10°17	9°38	2°41	20° 6	12°55	26°50	26°39	15°38	27°24	S 23
M24	8 13 21	4° 4'30	26°43	9°54	28°32	16°28	10°17	9°44	2°43	20° 5	12°55	26°49	26°36	15°44	27°28	M24
T 25	8 17 17	5° 5'30	10 [♂] 39	10°36	29°47	17°14	10°R17	9°49	2°46	20° 4	12°54	26°48	26°33	15°51	27°33	T 25
W26	8 21 14	6° 6'30	24°10	11°23	1 [♂] 3	18° 0	10°17	9°54	2°48	20° 3	12°53	26°47	26°30	15°58	27°38	W26
T 27	8 25 10	7° 7'29	7 [♂] 17	12°14	2°18	18°46	10°17	9°58	2°50	20° 2	12°53	26°46	26°26	16° 5	27°42	T 27
F 28	8 29 7	8° 8'26	20° 0	13° 8	3°34	19°32	10°16	10° 3	2°52	20° 1	12°52	26°45	26°23	16°11	27°47	F 28
S 29	8 33 3	9° 9'22	2 [♂] 24	14° 6	4°49	20°18	10°15	10° 8	2°54	20° 0	12°52	26°44	26°20	16°18	27°51	S 29
S 30	8 37 0	10°10'17	14°32	15° 6	6° 4	21° 3	10°14	10°13	2°56	19°59	12°51	26°D44	26°17	16°25	27°55	S 30
M31	8 40 56	11 [♂] 11'11	26 [♂] 28	16 [♂] 9	7 [♂] 20	21 [♂] 49	10 [♂] 13	10 [♂] 17	2 [♂] 58	19 ^{II} 58	12 ^{II} 50	26 [♂] 44	26 [♂] 14	16 ^{II} 31	28 [♂] 0	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
S 1	23s 2	14n15	5n16	20s22	1n11	23s25	0n 2	24s 3	0s36	2s32	1n19	19s53	1n43	20s20	0n11	21n44
S 2	22 56	18 30	5 12	20 11	1 31	23 28	0s 1	24 4	0 37	2 33	1 19	19 54	1 43	20 21	0 11	21 44
M 3	22 51	21 58	4 55	20 0	1 50	23 29	0 3	24 5	0 38	2 34	1 19	19 55	1 43	20 22	0 11	21 44
T 4	22 45	24 29	4 55	20 52	2 8	23 30	0 6	24 5	0 38	2 36	1 20	19 56	1 43	20 22	0 11	21 44
W 5	22 38	25 55	3 44	19 45	2 25	23 30	0 8	24 5	0 39	2 37	1 20	19 57	1 43	20 23	0 11	21 43
T 6	22 31	26 11	2 53	19 40	2 40	23 30	0 10	24 5	0 39	2 38	1 20	19 57	1 44	20 23	0 11	21 43
F 7	22 24	25 15	1 55	19 37	2 54	23 28	0 13	24 4	0 40	2 39	1 20	19 58	1 44	20 24	0 11	21 43
S 8	22 16	23 8	0 51	19 35	3 5	23 26	0 15	24 3	0 40	2 40	1 21	19 59	1 44	20 25	0 11	21 43
S 9	22 8	19 57	0s16	19 35	3 13	23 24	0 18	24 2	0 41	2 41	1 21	20 0	1 44	20 25	0 11	21 43
M10	21 59	15 52	1 24	19 36	3 19	23 20	0 20	24 1	0 41	2 42	1 21	20 1	1 44	20 26	0 11	21 43
T 11	21 50	11 3	2 28	19 38	3 22	23 16	0 22	23 59	0 42	2 43	1 22	20 2	1 44	20 26	0 11	21 43
W12	21 41	5 43	3 26	19 41	3 23	23 11	0 25	23 57	0 43	2 43	1 22	20 3	1 44	20 27	0 11	21 43
T 13	21 31	0 4	4 15	19 46	3 22	23 5	0 27	23 55	0 43	2 44	1 22	20 4	1 44	20 27	0 11	21 43
F 14	21 20	5s42	4 51	19 52	3 19	22 59	0 29	23 53	0 44	2 45	1 22	20 4	1 44	20 28	0 11	21 43
S 15	21 10	11 20	5 13	19 58	3 14	22 52	0 31	23 50	0 44	2 45	1 23	20 5	1 44	20 28	0 11	21 43
S 16	20 58	16 33	5 17	20 5	3 8	22 44	0 34	23 47	0 45	2 46	1 23	20 6	1 44	20 29	0 11	21 43
M17	20 47	20 59	5 3	20 13	3 1	22 36	0 36	23 44	0 45	2 46	1 23	20 7	1 44	20 29	0 11	21 43
T 18	20 35	24 17	4 30	20 21	2 53	22 26	0 38	23 41	0 46	2 46	1 23	20 7	1 44	20 30	0 11	21 43
W19	20 22	26 2	3 39	20 30	2 44	22 17	0 40	23 37	0 46	2 46	1 24	20 8	1 44	20 30	0 11	21 43
T 20	20 10	25 59	2 33	20 38	2 35	22 6	0 42	23 33	0 47	2 47	1 24	20 9	1 44	20 31	0 11	21 42
F 21	19 57	24 4	1 16	20 47	2 25	21 55	0 44	23 29	0 47	2 47	1 24	20 10	1 45	20 31	0 11	21 42
S 22	19 43	20 31	0n 6	20 55	2 15	21 43	0 46	23 24	0 48	2 47	1 25	20 10	1 45	20 32	0 11	21 42
S 23	19 29	15 43	1 26	21 3	2 5	21 30	0 48	23 20	0 48	2 47	1 25	20 11	1 45	20 32	0 11	21 42
M24	19 15	10 8	2 39	21 11	1 55	21 17	0 50	23 15	0 49	2 46	1 25	20 12	1 45	20 33	0 11	21 42
T 25	19 0	4 11	3 40	21 18	1 44	21 3	0 52	23 9	0 49	2 46	1 25	20 12	1 45	20 33	0 11	21 42
W26	18 45	1n47	4 27	21 25	1 34	20 49	0 54	23 4	0 50	2 46	1 26	20 13	1 45	20 34	0 11	21 42
T 27	18 30	7 28	4 59	21 31	1 23	20 34	0 56	22 58	0 50	2 45	1 26	20 14	1 45	20 34	0 11	21 42
F 28	18 15	12 41	5 15	21 36	1 13	20 18	0 58	22 52	0 51	2 45	1 26	20 14	1 45	20 34	0 11	21 42
S 29	17 59	17 14	5 15	21 40	1 3	20 2	0 59	22 46	0 51	2 44	1 26	20 15	1 45	20 35	0 11	21 42
S 30	17 42	21 0	5 2	21 44	0 52	19 45	1 1	22 39	0 52	2 44	1 27	20 15	1 45	20 35	0 11	21 42
M31	17s26	23n50	4n35	21s46	0n42	19s28	1s 3	22s33	0s52	2s43	1n27	20s16	1n45	20s35	0n11	21n42

Julian Day Number = 2414290.5, Delta T = -3.87 sec
Ecliptic obliquity = 23°27'13, Nutation = 0°00'15, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 23°18'57, Lahiri = 22°25'57

ASTRODIENST EPHEMERIS for the year 1898
geocentric

FEBRUARY 1898

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	8 44 53	12°12'03	8°11'19	17°15'15	8°35'35	22°35'35	10°R12	10°12'22	3°12'00	19°R57	12°R50	26°34'46	26°31'11	16°11'38	28°11'04	T 1
W 2	8 48 50	13°12'54	20°08'08	18°23'18	9°50'50	23°21'10	10°12'10	10°26'10	3°12'02	19°11'56	12°11'49	26°47'26	26°07'07	16°45'28	28°08'08	W 2
T 3	8 52 46	14°13'44	20°00'00	19°32'19	11°05'05	24°07'10	10°09'10	10°31'10	3°12'03	19°11'55	12°11'49	26°49'26	26°04'04	16°51'28	28°12'08	T 3
F 4	8 56 43	15°14'32	13°05'58	20°44'12	20°44'12	24°54'10	10°07'10	10°35'10	3°12'05	19°11'54	12°11'49	26°50'26	26°01'01	16°58'28	28°15'08	F 4
S 5	9 00 39	16°15'19	26°06'06	21°58'13	13°36'36	25°40'10	10°05'10	10°39'10	3°12'07	19°11'54	12°11'48	26°R50	25°58'17	17°05'28	28°19'08	S 5
S 6	9 04 36	17°16'05	8°12'26	23°13'14	14°51'51	26°26'10	10°02'10	10°43'10	3°12'08	19°11'53	12°11'48	26°50'26	25°55'17	17°11'28	28°23'08	S 6
M 7	9 08 32	18°16'49	21°00'00	24°29'16	16°06'06	27°12'10	10°00'10	10°48'10	3°12'10	19°11'52	12°11'47	26°48'26	25°51'17	17°18'28	28°26'08	M 7
T 8	9 12 29	19°17'32	3°11'47	25°48'17	17°22'22	27°58'10	9°57'10	10°51'10	3°12'11	19°11'51	12°11'47	26°46'26	25°48'17	17°25'28	28°30'08	T 8
W 9	9 16 25	20°18'14	16°49'27	18°37'18	18°37'18	28°44'10	9°55'10	10°55'10	3°12'13	19°11'51	12°11'46	26°42'26	25°45'17	17°31'28	28°33'08	W 9
T 10	9 20 22	21°18'54	0°11'04	18°28'28	19°52'52	29°31'10	9°52'10	10°59'10	3°12'14	19°11'50	12°11'46	26°38'26	25°42'17	17°38'28	28°36'08	T 10
F 11	9 24 18	22°19'34	13°32'29	19°50'21	21°07'07	0°11'17	9°48'10	11°03'10	3°12'16	19°11'50	12°11'46	26°34'26	25°39'17	17°45'28	28°39'08	F 11
S 12	9 28 15	23°20'12	27°12'12	18°13'13	22°23'23	1°03'03	9°45'10	11°07'10	3°12'17	19°11'49	12°11'46	26°31'26	25°36'17	17°51'28	28°42'08	S 12
S 13	9 32 12	24°20'49	11°11'02	2°37'02	23°38'38	1°49'49	9°42'10	11°10'10	3°12'18	19°11'48	12°11'45	26°29'26	25°32'17	17°58'28	28°45'08	S 13
M14	9 36 8	25°21'25	25°02'02	4°03'03	24°53'53	2°36'36	9°38'10	11°14'10	3°12'20	19°11'48	12°11'45	26°D29	25°29'18	18°05'28	28°48'08	M14
T 15	9 40 5	26°22'00	9°11'11	5°29'29	26°08'08	3°22'22	9°34'10	11°17'10	3°12'21	19°11'47	12°11'45	26°29'26	25°26'18	18°11'28	28°51'08	T 15
W16	9 44 1	27°22'34	23°27'27	6°57'57	27°23'23	4°09'09	9°30'10	11°20'10	3°12'22	19°11'47	12°11'45	26°30'26	25°23'18	18°18'28	28°53'08	W16
T 17	9 47 58	28°23'06	7°34'47	8°26'26	28°38'38	4°55'55	9°26'10	11°24'10	3°12'23	19°11'47	12°11'44	26°32'26	25°20'18	18°25'28	28°56'08	T 17
F 18	9 51 54	29°23'37	22°10'10	9°55'55	29°54'54	5°41'41	9°21'10	11°27'10	3°12'24	19°11'46	12°11'44	26°R33	25°17'18	18°31'28	28°58'08	F 18
S 19	9 55 51	0°12'47	6°11'26	11°26'26	1°11'11	6°28'28	9°17'10	11°30'10	3°12'25	19°11'46	12°11'44	26°33'26	25°13'18	18°38'28	29°01'08	S 19
S 20	9 59 48	1°24'35	20°43'43	12°58'58	2°24'24	7°14'14	9°12'10	11°33'10	3°12'26	19°11'45	12°11'44	26°31'26	25°10'18	18°45'28	29°03'08	S 20
M21	10 3 44	2°25'02	4°11'45	14°30'30	3°39'39	8°01'01	9°07'10	11°36'10	3°12'27	19°11'45	12°11'44	26°27'26	25°07'18	18°51'28	29°05'08	M21
T 22	10 7 41	3°25'27	18°31'16	16°04'04	4°54'54	8°47'47	9°02'10	11°38'10	3°12'28	19°11'45	12°11'44	26°21'26	25°04'18	18°58'28	29°07'08	T 22
W23	10 11 37	4°25'50	1°11'57	17°38'38	6°09'09	9°34'34	8°57'57	11°41'41	3°12'28	19°11'45	12°11'44	26°15'26	25°01'19	19°05'28	29°09'08	W23
T 24	10 15 34	5°26'11	15°03'15	19°14'14	7°24'24	10°21'21	8°52'52	11°44'44	3°12'29	19°11'45	12°11'44	26°08'26	24°57'19	19°11'28	29°10'08	T 24
F 25	10 19 30	6°26'31	27°49'27	20°51'51	8°39'39	11°07'07	8°46'46	11°46'46	3°12'30	19°11'44	12°11'44	26°02'26	24°54'19	19°18'28	29°12'08	F 25
S 26	10 23 27	7°26'48	10°15'15	22°28'28	9°54'54	11°54'54	8°40'40	11°49'49	3°12'30	19°11'44	12°11'44	25°56'26	24°51'19	19°25'28	29°14'08	S 26
S 27	10 27 23	8°27'04	22°24'24	24°07'07	11°09'09	12°40'40	8°35'35	11°51'51	3°12'31	19°11'44	12°11'44	25°53'26	24°48'19	19°31'28	29°15'08	S 27
M28	10 31 20	9°12'17	4°11'23	25°46'46	12°11'24	13°27'27	8°29'29	11°53'53	3°12'31	19°11'44	12°11'44	25°D51	24°45'19	19°11'38	29°16'08	M28

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	17s 9	25n37	3n57	21s48	0n33	19s10	1s 4	22s26	0s53	2s42	1n27	20s17	1n46	20s36	0n11	21n42	1s23	12n16	10s10	20s49	20s56	26n 3	17s 7	2n41			
W 2	16 52	26 14	3 9	21 49	0 23	18 51	1 6	22 18	0 53	2 41	1 27	20 17	1 46	20 36	0 11	21 42	1 23	12 16	10 10	20 49	20 56	26 3	17 7	2 42			
T 3	16 34	25 39	2 13	21 48	0 14	18 32	1 7	22 11	0 54	2 41	1 28	20 18	1 46	20 37	0 11	21 42	1 22	12 16	10 9	20 48	20 57	26 3	17 8	2 43			
F 4	16 16	23 53	1 11	21 47	0 5	18 13	1 9	22 3	0 54	2 40	1 28	20 18	1 46	20 37	0 11	21 42	1 22	12 16	10 9	20 48	20 57	26 3	17 8	2 43			
S 5	15 58	21 0	0 4	21 44	0s 4	17 52	1 10	21 55	0 55	2 39	1 28	20 19	1 46	20 37	0 11	21 42	1 22	12 17	10 9	20 48	20 58	26 3	17 8	2 44			
S 6	15 40	17 8	1s 4	21 40	0 13	17 32	1 12	21 47	0 55	2 37	1 28	20 19	1 46	20 38	0 11	21 42	1 22	12 17	10 9	20 48	20 59	26 3	17 9	2 44			
M 7	15 22	12 28	2 9	21 35	0 21	17 11	1 13	21 39	0 56	2 36	1 29	20 20	1 46	20 38	0 11	21 42	1 22	12 17	10 8	20 49	20 59	26 3	17 9	2 45			
T 8	15 3	7 11	3 10	21 29	0 29	16 49	1 14	21 30	0 56	2 35	1 29	20 20	1 46	20 38	0 11	21 42	1 22	12 17	10 8	20 49	21 0	26 3	17 9	2 45			
W 9	14 44	1 30	4 1	21 21	0 37	16 27	1 15	21 21	0 57	2 34	1 29	20 20	1 46	20 38	0 11	21 42	1 22	12 17	10 8	20 50	21 0	26 3	17 9	2 46			
T 10	14 24	4s19	4 41	21 13	0 45	16 4	1 16	21 12	0 57	2 32	1 29	20 21	1 46	20 39	0 11	21 42	1 22	12 18	10 8	20 50	21 1	26 3	17 9	2 46			
F 11	14 5	10 2	5 6	21 3	0 52	15 41	1 18	21 2	0 58	2 31	1 30	20 21	1 47	20 39	0 11	21 42	1 22	12 18	10 7	20 51	21 2	26 2	17 9	2 47			
S 12	13 45	15 21	5 14	20 52	0 59	15 18	1 19	20 53	0 58	2 29	1 30	20 22	1 47	20 39	0 11	21 42	1 22	12 18	10 7	20 52	21 2	26 2	17 10	2 47			
S 13	13 25	19 57	5 4	20 39	1 6	14 54	1 20	20 43	0 58	2 28	1 30	20 22	1 47	20 39	0 11	21 42	1 22	12 18	10 7	20 52	21 3	26 2	17 10	2 48			
M14	13 5	23 30	4 36	20 25	1 12	14 30	1 20	20 33	0 59	2 26	1 30	20 22	1 47	20 40	0 11	21 42	1 22	12 18	10 7	20 52	21 3	26 2	17 10	2 49			
T 15	12 44	25 39	3 51	20 10	1 18	14 5	1 21	20 22	0 59	2 24	1 31	20 23	1 47	20 40	0 11	21 42	1 22	12 19	10 6	20 52	21 4	26 2	17 10	2 49			
W16	12 23	26 9	2 51	19 54	1 24	13 40	1 22	20 12	1 0	2 22	1 31	20 23	1 47	20 40	0 11	21 42	1 22	12 19	10 6	20 52	21 4	26 2	17 10	2 50			
T 17	12 3	24 54	1 41	19 37	1 30	13 15	1 23	20 1	1 0	2 20	1 31	20 23	1 47	20 40	0 11	21 42	1 22	12 19	10 6	20 52	21 5	26 2	17 10	2 50			
F 18	11 41	22 1	0 24	19 18	1 35	12 49	1 23	19 50	1 1	2 19	1 31	20 24	1 47	20 41	0 11	21 42	1 22	12 19	10 6	20 51	21 6	26 2	17 10	2 51			
S 19	11 20	17 47	0n54	18 57	1 40	12 23	1 24	19 39	1 1	2 17	1 32	20 24	1 48	20 41	0 11	21 42	1 22	12 20	10 5	20 51	21 6	26 2	17 10	2 51			
S 20	10 59	12 34	2 8	18 36	1 44	11 56	1 24	19 28	1 1	2 15	1 32	20 24	1 48	20 41	0 11	21 42	1 22	12 20	10 5	20 52	21 7	26 2	17 9	2 52			
M21	10 37	6 47	3 13	18 13	1 48	11 30	1 25	19 16	1 2	2 12	1 32	20 25	1 48	20 41	0 11	21 42	1 22	12 20	10 5	20 53	21 7	26 1	17 9	2 53			
T 22	10 15	0 47	4 6	17 49	1 52	11 3	1 25	19 4	1 2	2 10	1 32	20 25	1 48	20 41	0 11	21 42	1 22	12 20	10 5	20 54	21 8	26 1	17 9	2 53			
W23	9 53	5n 6	4 43	17 23	1 56	10 35	1 26	18 52	1 3	2 8	1 32	20 25	1 48	20 41	0 11	21 42	1 21	12 21	10 4	20 55	21 9	26 1	17 9	2 54			
T 24	9 31	10 37	5 4	16 57	1 59	10 8	1 26	18 40	1 3	2 6	1 33	20 25	1 48	20 41	0 11	21 42	1 21	12 21	10 4	20 56	21 9	26 1	17 9	2 54			
F 25	9 9	15 31	5 10	16 28	2 2	9 40	1 26	18 28	1 3	2 3	1 33	20 25	1 48	20 42	0 11	21 42	1 21	12 21	10 4	20 57	21 10	26 1	17 9	2 55			
S 26	8 47	19 39	5 1	15 59	2 4	9 11	1 26	18 15	1 4	2 1	1 33	20 26	1 48	20 42	0 11	21 42	1 21	12 21	10 4	20 58	21 10	26 1	17 8	2 56			
S 27	8 24	22 51	4 38	15 28	2 6	8 43	1 26	18 2	1 4	1 59	1 33	20 26	1 49	20 42	0 11	21 42	1 21	12 22	10 3	20 59	21 11	26 0	17 8	2 56			
M28	8s 2	25n 1	4n 3	14s56	2s 7	8s14	1s26	17s49	1s 4	1s56	1n33	20s26	1n49	20s42	0n11	21n42	1s21	12n22	10s 3	20s59	21s11	26n 0	17s 8	2n57			

ASTRODIENST EPHEMERIS for the year 1898
geocentric

MARCH 1898

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	10 35 16	10 ^h 27'29"	16 ^h 11'14"	27 ^h 22'37"	13 ^h 39'39"	14 ^h 14'14"	8°R23	11 ^h 57'55"	3 ^h 32'32"	19°D44	12 ^h 11'44"	25 ^h 35'52"	24 ^h 38'42"	19 ^h 11'45"	29 ^h 18'18"	T 1
W 2	10 39 13	11°27'39"	28° 3'	29° 9'	14°54'	15° 0'	8 ^h 17'	11°57'	3°32'	19 ^h 11'44"	12°44'	25°53'	24°38'	19°51'	29°19'	W 2
T 3	10 43 10	12°27'46"	9 ^h 55'	0 ^h 51'	16° 9'	15°47'	8°10'	11°59'	3°32'	19°44'	12°44'	25°54'	24°35'	19°58'	29°20'	T 3
F 4	10 47 6	13°27'51"	21°56'	2°35'	17°24'	16°34'	8° 4'	12° 1'	3°33'	19°44'	12°44'	25°R55'	24°32'	20° 5'	29°21'	F 4
S 5	10 51 3	14°27'55"	4 ^h 10'	4°20'	18°39'	17°20'	7°58'	12° 3'	3°33'	19°45'	12°44'	25°55'	24°29'	20°11'	29°21'	S 5
S 6	10 54 59	15°27'56"	16°40'	6° 6'	19°54'	18° 7'	7°51'	12° 4'	3°33'	19°45'	12°44'	25°53'	24°26'	20°18'	29°22'	S 6
M 7	10 58 56	16°27'55"	29°28'	7°53'	21° 9'	18°54'	7°44'	12° 6'	3°33'	19°45'	12°45'	25°48'	24°23'	20°25'	29°23'	M 7
T 8	11 2 52	17°27'52"	12 ^h 35'	9°41'	22°23'	19°41'	7°37'	12° 7'	3°R33'	19°45'	12°45'	25°41'	24°19'	20°31'	29°23'	T 8
W 9	11 6 49	18°27'47"	26° 1'	11°31'	23°38'	20°27'	7°31'	12° 8'	3°33'	19°45'	12°45'	25°33'	24°16'	20°38'	29°23'	W 9
T 10	11 10 45	19°27'40"	9 ^h 44'	13°21'	24°53'	21°14'	7°24'	12°10'	3°33'	19°46'	12°45'	25°24'	24°13'	20°45'	29°24'	T 10
F 11	11 14 42	20°27'32"	23°39'	15°13'	26° 8'	22° 1'	7°17'	12°11'	3°33'	19°46'	12°46'	25°15'	24°10'	20°51'	29°24'	F 11
S 12	11 18 39	21°27'21"	7 ^h 14'	17° 6'	27°22'	22°48'	7° 9'	12°12'	3°33'	19°46'	12°46'	25° 7'	24° 7'	20°58'	29°R24'	S 12
S 13	11 22 35	22°27'09"	21°51'	18°59'	28°37'	23°34'	7° 2'	12°13'	3°33'	19°47'	12°46'	25° 1'	24° 3'	21° 5'	29°24'	S 13
M14	11 26 32	23°26'56"	6 ^h 1'	20°54'	29°52'	24°21'	6°55'	12°14'	3°32'	19°47'	12°47'	24°57'	24° 0'	21°11'	29°23'	M14
T 15	11 30 28	24°26'41"	20°11'	22°50'	1°Y 7'	25° 8'	6°47'	12°14'	3°32'	19°48'	12°47'	24°D56'	23°57'	21°18'	29°23'	T 15
W16	11 34 25	25°26'24"	4 ^h 31'	24°47'	2°21'	25°55'	6°40'	12°15'	3°32'	19°48'	12°48'	24°56'	23°54'	21°25'	29°23'	W16
T 17	11 38 21	26°26'05"	18°20'	26°45'	3°36'	26°41'	6°33'	12°15'	3°31'	19°49'	12°48'	24°R57'	23°51'	21°31'	29°22'	T 17
F 18	11 42 18	27°25'45"	2 ^h 19'	28°44'	4°51'	27°28'	6°25'	12°16'	3°31'	19°49'	12°48'	24°56'	23°48'	21°38'	29°22'	F 18
S 19	11 46 14	28°25'23"	16°12'	0°Y44'	6° 5'	28°15'	6°17'	12°16'	3°30'	19°50'	12°49'	24°55'	23°44'	21°45'	29°21'	S 19
S 20	11 50 11	29°24'59"	29°58'	2°44'	7°20'	29° 2'	6°10'	12°16'	3°30'	19°51'	12°49'	24°50'	23°41'	21°51'	29°20'	S 20
M21	11 54 8	0°Y24'33"	13 ^h 35'	4°45'	8°34'	29°49'	6° 2'	12°17'	3°29'	19°51'	12°50'	24°43'	23°38'	21°58'	29°19'	M21
T 22	11 58 4	1°24'05"	27° 0'	6°46'	9°49'	0 ^h 36'	5°54'	12°R17'	3°28'	19°52'	12°50'	24°33'	23°35'	22° 5'	29°18'	T 22
W23	12 2 1	2°23'35"	10°Y11'	8°48'	11° 4'	1°22'	5°47'	12°16'	3°28'	19°53'	12°51'	24°21'	23°32'	22°11'	29°17'	W23
T 24	12 5 57	3°23'03"	23° 6'	10°49'	12°18'	2° 9'	5°39'	12°16'	3°27'	19°53'	12°51'	24° 9'	23°28'	22°18'	29°16'	T 24
F 25	12 9 54	4°22'29"	5 ^h 44'	12°50'	13°33'	2°56'	5°31'	12°16'	3°26'	19°54'	12°52'	23°57'	23°25'	22°25'	29°14'	F 25
S 26	12 13 50	5°21'53"	18° 6'	14°50'	14°47'	3°43'	5°23'	12°16'	3°25'	19°55'	12°53'	23°47'	23°22'	22°31'	29°13'	S 26
S 27	12 17 47	6°21'14"	0 ^h 15'	16°49'	16° 2'	4°30'	5°16'	12°15'	3°24'	19°56'	12°53'	23°39'	23°19'	22°38'	29°11'	S 27
M28	12 21 43	7°20'34"	12°12'	18°47'	17°16'	5°16'	5° 8'	12°15'	3°23'	19°57'	12°54'	23°34'	23°16'	22°45'	29°10'	M28
T 29	12 25 40	8°19'51"	24° 3'	20°44'	18°30'	6° 3'	5° 0'	12°14'	3°22'	19°58'	12°55'	23°31'	23°13'	22°51'	29° 8'	T 29
W30	12 29 37	9°19'06"	5 ^h 51'	22°38'	19°45'	6°50'	4°52'	12°13'	3°21'	19°59'	12°55'	23°D30'	23° 9'	22°58'	29° 6'	W30
T 31	12 33 33	10°Y18'18"	17 ^h 54'	24°Y29'	20°Y59'	7 ^h 37'	4 ^h 45'	12 ^h 12'	3 ^h 20'	20 ^h 11'	12 ^h 11'	23°R30'	23 ^h 6'	23 ^h 11'	29°11'	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	7s39	26n 2	3n18	14s23	2s 9	7s46	1s26	17s36	1 s 5	1s54	1n34	20s26	1n49	20s42	0n11	21n42	1s21	12n22	10s 3	20s59	21s12	26n 0	17s 7	2n57							
W 2	7 16	25 51	2 25	13 48	2 9	7 16	1 26	17 23	1 5	1 51	1 34	20 26	1 49	20 42	0 11	21 43	1 21	12 22	10 2	20 59	21 13	26 0	17 7	2 58							
T 3	6 53	24 30	1 26	13 12	2 10	6 47	1 26	17 9	1 5	1 48	1 34	20 26	1 49	20 42	0 11	21 43	1 21	12 23	10 2	20 59	21 13	26 0	17 7	2 59							
F 4	6 30	22 1	0 22	12 34	2 10	6 18	1 26	16 56	1 6	1 46	1 34	20 26	1 49	20 42	0 11	21 43	1 21	12 23	10 2	20 59	21 14	25 59	17 6	2 59							
S 5	6 7	18 31	0s44	11 56	2 9	5 48	1 25	16 42	1 6	1 43	1 34	20 27	1 49	20 42	0 11	21 43	1 21	12 23	10 2	20 59	21 14	25 59	17 6	3 0							
S 6	5 44	14 7	1 50	11 16	2 8	5 18	1 25	16 28	1 6	1 40	1 34	20 27	1 49	20 42	0 11	21 43	1 21	12 24	10 1	20 59	21 15	25 59	17 5	3 0							
M 7	5 21	9 0	2 51	10 35	2 7	4 49	1 25	16 14	1 7	1 38	1 34	20 27	1 50	20 42	0 11	21 43	1 21	12 24	10 1	21 0	21 15	25 59	17 5	3 1							
T 8	4 57	3 23	3 44	9 52	2 5	4 19	1 24	15 59	1 7	1 35	1 35	20 27	1 50	20 42	0 11	21 43	1 21	12 24	10 1	21 1	21 16	25 59	17 5	3 2							
W 9	4 34	2s29	4 26	9 8	2 2	3 48	1 24	15 45	1 7	1 32	1 35	20 27	1 50	20 42	0 11	21 43	1 21	12 24	10 1	21 3	21 16	25 58	17 4	3 2							
T 10	4 10	8 22	4 54	8 23	1 59	3 18	1 23	15 30	1 8	1 29	1 35	20 27	1 50	20 42	0 11	21 43	1 21	12 25	10 0	21 4	21 17	25 58	17 3	3 3							
F 11	3 47	13 54	5 5	7 37	1 56	2 48	1 22	15 15	1 8	1 26	1 35	20 27	1 50	20 42	0 11	21 43	1 21	12 25	10 0	21 6	21 18	25 58	17 3	3 3							
S 12	3 23	18 47	4 58	6 49	1 52	2 17	1 22	15 0	1 8	1 23	1 35	20 27	1 50	20 42	0 11	21 43	1 21	12 25	10 0	21 7	21 18	25 57	17 2	3 4							
S 13	3 0	22 38	4 33	6 0	1 48	1 47	1 21	14 45	1 9	1 20	1 35	20 27	1 50	20 42	0 11	21 43	1 20	12 26	10 0	21 9	21 19	25 57	17 2	3 4							
M14	2 36	25 7	3 51	5 11	1 43	1 16	1 20	14 30	1 9	1 17	1 35	20 27	1 50	20 42	0 11	21 43	1 20	12 26	9 59	21 9	21 19	25 57	17 1	3 5							
T 15	2 12	26 0	2 55	4 20	1 37	0 46	1 19	14 14	1 9	1 14	1 35	20 27	1 51	20 42	0 11	21 44	1 20	12 26	9 59	21 9	21 20	25 57	17 0	3 6							
W16	1 49	25 11	1 48	3 28	1 31	0 15	1 18	13 59	1 9	1 11	1 35	20 27	1 51	20 42	0 11	21 44	1 20	12 26	9 59	21 9	21 20	25 56	17 0	3 6							
T 17	1 25	22 47	0 35	2 35	1 24	0n15	1 17	13 43	1 10	1 8	1 36	20 27	1 51	20 42	0 11	21 44	1 20	12 27	9 59	21 9	21 21	25 56	16 59	3 7							
F 18	1 1	19 1	0n39	1 41	1 17	0 46	1 16	13 27	1 10	1 5	1 36	20 27	1 51	20 42	0 11	21 44	1 20	12 27	9 58	21 9	21 21	25 56	16 58	3 7							
S 19	0 38	14 14	1 51	0 46	1 9	1 17	1 15	13 11	1 10	1 2	1 36	20 27	1 51	20 42	0 11	21 44	1 20	12 27	9 58	21 10	21 22	25 55	16 58	3 8							
S 20	0 14	8 45	2 55	0n 9	1 1	1 47	1 13	12 55	1 10	0 59	1 36	20 26	1 51	20 42	0 11	21 44	1 20	12 28	9 58	21 10	21 23	25 55	16 57	3 9							
M21	0n10	2 56	3 49	1 5	0 52	2 18	1 12	12 39	1 11	0 56	1 36	20 26	1 51	20 41	0 11	21 44	1 20	12 28	9 58	21 12	21 23	25 55	16 56	3 9							
T 22	0 33	2n55	4 28	2 2	0 43	2 48	1 11	12 22	1 11	0 53	1 36	20 26	1 51	20 41	0 11	21 44	1 20	12 28	9 57	21 13	21 24	25 54	16 55	3 10							
W23	0 57	8 31	4 53	2 59	0 33	3 19	1 9	12 6	1 11	0 50	1 36	20 26	1 52	20 41	0 11	21 44	1 20	12 29	9 57	21 16	21 24	25 54	16 55	3 10							
T 24	1 21	13 39	5 2	3 56	0 23	3 49	1 8	11 49	1 11	0 47	1 36	20 26	1 52	20 41	0 11	21 44	1 20	12 29	9 57	21 18	21 25	25 54	16 54	3 11							
F 25	1 44	18 5	4 56	4 53	0 12	4 20	1 6	11 33	1 11	0 44	1 36	20 26	1 52	20 41	0 11	21 45	1 20	12 29	9 57	21 20	21 25	25 53	16 53	3 12							
S 26	2 8	21 39	4 36	5 50	0 1	4 50	1 5	11 16	1 12	0 40	1 36	20 26	1 52	20 41	0 11	21 45	1 20	12 29	9 56	21 21	21 26	25 53	16 52	3 12							
S 27	2 31	24 11	4 3	6 46	0n10	5 20	1 3	10 59	1 12	0 37	1 36	20 25	1 52	20 41	0 11	21 45	1 20	12 30	9 56	21 23	21 26	25 53	16 51	3 13							
M28	2 55	25 35	3 21	7 42	0 21	5 50	1 2	10 42	1 12	0 34	1 36	20 25	1 52	20 40	0 11	21 45	1 20	12 30	9 56	21 24	21 27	25 52	16 50	3 13							
T 29	3 18	25 49	2 30	8 36	0 33	6 20	1 0	10 25	1 12	0 31	1 36	20 25	1 52	20 40	0 11	21 45	1 20	12 30	9 56	21 24	21 27	25 52	16 49	3 14							
W30	3 42	24 52	1 32	9 30	0 45	6 50	0 58	10 8	1 12	0 28	1 36	20 25	1 52	20 40	0 11	21 45	1 20	12 31	9 56	21 24	21 28	25 51	16 48	3 14							
T 31	4n 5	22n47	0n31	10n22	0n57	7n20	0s56	9s50	1s13	0s25	1n36	20s25	1n53	20s40	0n11	21n45	1s20	12n31	9s55	21s24	21s28	25n51	16s47	3n15							

ASTRODIENST EPHEMERIS for the year 1898

geocentric

APRIL 1898

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	12 37 30	11°17'28	29°44	26°18	22°13	8°24	4°R37	12°R11	3°R19	20°II 1	12°II57	23°R30	23°3 3	23°II11	29°R 2	F 1
S 2	12 41 26	12°16'36	11°159	28° 3	23°28	9°10	4°29	12°110	3°17	20° 2	12°57	23°29	23° 0	23°18	29°11 0	S 2
S 3	12 45 23	13°15'42	24°33	29°45	24°42	9°57	4°22	12° 9	3°16	20° 3	12°58	23°26	22°57	23°25	28°58	S 3
M 4	12 49 19	14°14'45	7°29	18°23	25°56	10°44	4°14	12° 8	3°15	20° 4	12°59	23°20	22°54	23°31	28°55	M 4
T 5	12 53 16	15°13'46	20°50	2°56	27°10	11°31	4° 7	12° 6	3°14	20° 5	13° 0	23°11	22°50	23°38	28°53	T 5
W 6	12 57 12	16°12'45	4°35	4°25	28°25	12°17	3°59	12° 5	3°12	20° 6	13° 1	23° 1	22°47	23°45	28°50	W 6
T 7	13 1 9	17°11'41	18°40	5°49	29°39	13° 4	3°52	12° 3	3°11	20° 7	13° 1	22°49	22°44	23°51	28°48	T 7
F 8	13 5 5	18°10'36	3°11 2	7° 7	0°53	13°51	3°45	12° 2	3° 9	20° 9	13° 2	22°37	22°41	23°58	28°45	F 8
S 9	13 9 2	19° 9'29	17°33	8°21	2° 7	14°37	3°37	12° 0	3° 8	20°10	13° 3	22°26	22°38	24° 5	28°42	S 9
S 10	13 12 59	20° 8'20	2°8 8	9°28	3°21	15°24	3°30	11°58	3° 6	20°11	13° 4	22°18	22°34	24°11	28°40	S 10
M 11	13 16 55	21° 7'10	16°38	10°30	4°35	16°11	3°23	11°56	3° 5	20°13	13° 5	22°13	22°31	24°18	28°37	M 11
T 12	13 20 52	22° 5'57	1°3 1	11°27	5°49	16°57	3°16	11°54	3° 3	20°14	13° 6	22°10	22°28	24°25	28°34	T 12
W 13	13 24 48	23° 4'43	15°12	12°17	7° 3	17°44	3° 9	11°52	3° 1	20°15	13° 7	22° 9	22°25	24°31	28°31	W 13
T 14	13 28 45	24° 3'27	29°12	13° 1	8°17	18°31	3° 2	11°50	2°59	20°17	13° 8	22° 9	22°22	24°38	28°28	T 14
F 15	13 32 41	25° 2'10	12°59	13°39	9°31	19°17	2°55	11°48	2°58	20°18	13° 9	22° 9	22°19	24°45	28°24	F 15
S 16	13 36 38	26° 0'51	26°34	14°11	10°45	20° 4	2°49	11°45	2°56	20°19	13°10	22° 6	22°15	24°51	28°21	S 16
S 17	13 40 35	26°59'30	9°59	14°37	11°59	20°50	2°42	11°43	2°54	20°21	13°11	22° 1	22°12	24°58	28°18	S 17
M 18	13 44 31	27°58'07	23°12	14°56	13°13	21°37	2°36	11°40	2°52	20°22	13°12	21°53	22° 9	25° 5	28°14	M 18
T 19	13 48 28	28°56'43	6°14	15°10	14°27	22°23	2°29	11°38	2°50	20°24	13°13	21°42	22° 6	25°11	28°11	T 19
W 20	13 52 24	29°55'16	19° 4	15°17	15°41	23°10	2°23	11°35	2°48	20°26	13°14	21°30	22° 3	25°18	28° 7	W 20
T 21	13 56 21	0°53'48	1°42	15°R18	16°54	23°56	2°17	11°32	2°46	20°27	13°15	21°16	22° 0	25°25	28° 4	T 21
F 22	14 0 17	1°52'18	14° 7	15°14	18° 8	24°43	2°11	11°30	2°44	20°29	13°16	21° 3	21°56	25°31	28° 0	F 22
S 23	14 4 14	2°50'47	26°20	15° 5	19°22	25°29	2° 5	11°27	2°42	20°30	13°17	20°52	21°53	25°38	27°56	S 23
S 24	14 8 10	3°49'13	8°II23	14°50	20°36	26°16	2° 0	11°24	2°40	20°32	13°18	20°43	21°50	25°45	27°52	S 24
M 25	14 12 7	4°47'37	20°17	14°30	21°49	27° 2	1°54	11°21	2°38	20°34	13°19	20°36	21°47	25°51	27°49	M 25
T 26	14 16 3	5°45'59	2°5 5	14° 6	23° 3	27°48	1°49	11°17	2°36	20°35	13°20	20°33	21°44	25°58	27°45	T 26
W 27	14 20 0	6°44'20	13°53	13°38	24°17	28°35	1°43	11°14	2°34	20°37	13°21	20°31	21°40	26° 5	27°41	W 27
T 28	14 23 57	7°42'38	25°44	13° 7	25°30	29°21	1°38	11°11	2°32	20°39	13°23	20°D31	21°37	26°11	27°37	T 28
F 29	14 27 53	8°40'54	7°II43	12°33	26°44	0°V 7	1°33	11° 8	2°30	20°40	13°24	20°R32	21°34	26°18	27°33	F 29
S 30	14 31 50	9°39'08	19°II57	11°57	27°58	0°V54	1°28	11° 4	2°27	20°II42	13°II25	20°331	21°331	26°II25	27°II29	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	4n28	19n41	0s33	11n13	1n 8	7n49	0s54	9s33	1s13	0s22	1n36	20s24	1n53	20s40	0n11	21n45	1s20	12n31	9s55	21s24	21s29	25n51	16s46	3n15	
S 2	4 51	15 40	1 36	12 2	1 20	8 18	0 53	9 16	1 13	0 19	1 36	20 24	1 53	20 39	0 11	21 45	1 19	12 32	9 55	21 25	21 30	25 50	16 45	3 16	
S 3	5 14	10 53	2 37	12 49	1 31	8 47	0 51	8 58	1 13	0 16	1 36	20 24	1 53	20 39	0 11	21 46	1 19	12 32	9 55	21 25	21 30	25 50	16 44	3 17	
M 4	5 37	5 30	3 30	13 34	1 42	9 16	0 49	8 40	1 13	0 13	1 36	20 24	1 53	20 39	0 10	21 46	1 19	12 32	9 54	21 26	21 31	25 49	16 43	3 17	
T 5	6 0	0s16	4 15	14 16	1 53	9 45	0 47	8 23	1 13	0 10	1 36	20 23	1 53	20 39	0 10	21 46	1 19	12 33	9 54	21 28	21 31	25 49	16 42	3 18	
W 6	6 23	6 11	4 45	14 56	2 3	10 13	0 45	8 5	1 13	0 7	1 36	20 23	1 53	20 38	0 10	21 46	1 19	12 33	9 54	21 29	21 32	25 48	16 41	3 18	
T 7	6 45	11 56	5 0	15 33	2 12	10 42	0 42	7 47	1 13	0 4	1 36	20 23	1 53	20 38	0 10	21 46	1 19	12 33	9 54	21 31	21 32	25 48	16 40	3 19	
F 8	7 8	17 9	4 56	16 7	2 21	11 9	0 40	7 29	1 14	0 2	1 36	20 22	1 53	20 38	0 10	21 46	1 19	12 34	9 54	21 33	21 33	25 47	16 39	3 19	
S 9	7 30	21 26	4 32	16 39	2 29	11 37	0 38	7 11	1 14	0n 1	1 35	20 22	1 54	20 37	0 10	21 46	1 19	12 34	9 53	21 35	21 33	25 47	16 38	3 20	
S 10	7 53	24 23	3 52	17 8	2 37	12 5	0 36	6 53	1 14	0 4	1 35	20 22	1 54	20 37	0 10	21 47	1 19	12 34	9 53	21 36	21 34	25 46	16 37	3 20	
M11	8 15	25 42	2 56	17 34	2 43	12 32	0 34	6 35	1 14	0 7	1 35	20 21	1 54	20 37	0 10	21 47	1 19	12 34	9 53	21 37	21 34	25 46	16 36	3 21	
T 12	8 37	25 16	1 49	17 56	2 48	12 59	0 31	6 17	1 14	0 9	1 35	20 21	1 54	20 37	0 10	21 47	1 19	12 35	9 53	21 38	21 35	25 46	16 35	3 21	
W13	8 59	23 12	0 37	18 16	2 53	13 25	0 29	5 59	1 14	0 12	1 35	20 21	1 54	20 36	0 10	21 47	1 19	12 35	9 52	21 38	21 35	25 45	16 33	3 22	
T 14	9 20	19 43	0n37	18 33	2 56	13 51	0 27	5 41	1 14	0 15	1 35	20 20	1 54	20 36	0 10	21 47	1 19	12 35	9 52	21 38	21 36	25 45	16 32	3 22	
F 15	9 42	15 12	1 48	18 47	2 58	14 17	0 24	5 23	1 14	0 17	1 35	20 20	1 54	20 36	0 10	21 47	1 19	12 36	9 52	21 38	21 36	25 44	16 31	3 23	
S 16	10 3	9 59	2 51	18 57	2 59	14 43	0 22	5 4	1 14	0 20	1 35	20 19	1 54	20 35	0 10	21 47	1 19	12 36	9 52	21 38	21 37	25 43	16 30	3 23	
S 17	10 24	4 22	3 44	19 5	2 59	15 8	0 20	4 46	1 14	0 22	1 35	20 19	1 54	20 35	0 10	21 48	1 19	12 36	9 52	21 39	21 37	25 43	16 29	3 24	
M18	10 45	1n20	4 24	19 9	2 58	15 33	0 17	4 28	1 14	0 25	1 35	20 19	1 54	20 34	0 10	21 48	1 19	12 37	9 51	21 40	21 38	25 42	16 27	3 24	
T 19	11 6	6 54	4 50	19 10	2 55	15 57	0 15	4 9	1 14	0 27	1 34	20 18	1 55	20 34	0 10	21 48	1 19	12 37	9 51	21 42	21 38	25 42	16 26	3 25	
W20	11 27	12 5	5 0	19 9	2 51	16 21	0 12	3 51	1 14	0 30	1 34	20 18	1 55	20 34	0 10	21 48	1 19	12 37	9 51	21 44	21 39	25 41	16 25	3 25	
T 21	11 48	16 41	4 55	19 4	2 45	16 44	0 10	3 32	1 14	0 32	1 34	20 17	1 55	20 33	0 10	21 48	1 19	12 38	9 51	21 46	21 39	25 41	16 24	3 26	
F 22	12 8	20 29	4 37	18 56	2 38	17 8	0 7	3 14	1 14	0 34	1 34	20 17	1 55	20 33	0 10	21 48	1 19	12 38	9 51	21 48	21 40	25 40	16 22	3 26	
S 23	12 28	23 19	4 6	18 45	2 30	17 30	0 5	2 56	1 14	0 36	1 34	20 16	1 55	20 33	0 10	21 48	1 19	12 38	9 51	21 50	21 40	25 40	16 21	3 27	
S 24	12 48	25 4	3 24	18 32	2 20	17 53	0 2	2 37	1 14	0 38	1 34	20 16	1 55	20 32	0 10	21 49	1 18	12 38	9 50	21 51	21 41	25 39	16 20	3 27	
M25	13 8	25 39	2 33	18 16	2 10	18 14	0n 0	2 19	1 14	0 40	1 34	20 15	1 55	20 32	0 10	21 49	1 18	12 39	9 50	21 52	21 41	25 39	16 19	3 28	
T 26	13 27	25 2	1 36	17 57	1 58	18 36	0 3	2 0	1 14	0 42	1 33	20 15	1 55	20 31	0 10	21 49	1 18	12 39	9 50	21 53	21 42	25 38	16 17	3 28	
W27	13 46	23 19	0 35	17 36	1 44	18 56	0 5	1 42	1 14	0 44	1 33	20 14	1 55	20 31	0 10	21 49	1 18	12 39	9 50	21 53	21 42	25 37	16 16	3 29	
T 28	14 5	20 33	0s28	17 13	1 30	19 17	0 8	1 23	1 14	0 46	1 33	20 14	1 55	20 31	0 10	21 49	1 18	12 40	9 50	21 53	21 43	25 37	16 15	3 29	
F 29	14 24	16 53	1 30	16 48	1 15	19 37	0 11	1 5	1 14	0 48	1 33	20 13	1 55	20 30	0 10	21 49	1 18	12 40	9 50	21 53	21 43	25 36	16 13	3 29	
S 30	14n43	12n28	2s30	16n22	0n59	19n56	0n13	0s46	1s14	0n50	1n33	20s13	1n55	20s30	0n10	21n50	1s18	12n40	9s49	21s53	21s44	25n36	16s12	3n30	

ASTRODIENST EPHEMERIS for the year 1898

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MAY 1898

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Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	14 35 46	10♂37'20	2♂30	11°R19	29♂11	1°V40	1°R24	11°R 1	2°R25	20♂44	13♂26	20°R29	21♂28	26♂31	27°R24	S 1
M 2	14 39 43	11°35'29	15°27	10♂41	0♂25	2°26	1♂19	10♂57	2♂23	20°46	13°27	20♂25	21°25	26°38	27♂20	M 2
T 3	14 43 39	12°33'37	28°52	10° 3	1°38	3°12	1°15	10°54	2°21	20°48	13°29	20°18	21°21	26°45	27°16	T 3
W 4	14 47 36	13°31'43	12♂44	9°25	2°52	3°58	1°10	10°50	2°18	20°50	13°30	20° 9	21°18	26°51	27°12	W 4
T 5	14 51 32	14°29'48	27° 2	8°49	4° 5	4°44	1° 6	10°46	2°16	20°51	13°31	19°59	21°15	26°58	27° 8	T 5
F 6	14 55 29	15°27'50	11♂41	8°14	5°18	5°30	1° 2	10°43	2°14	20°53	13°32	19°50	21°12	27° 5	27° 3	F 6
S 7	14 59 26	16°25'51	26°33	7°42	6°32	6°16	0°59	10°39	2°11	20°55	13°33	19°41	21° 9	27°11	26°59	S 7
S 8	15 3 22	17°23'50	11♂31	7°13	7°45	7° 2	0°55	10°35	2° 9	20°57	13°35	19°34	21° 6	27°18	26°55	S 8
M 9	15 7 19	18°21'48	26°25	6°47	8°58	7°48	0°52	10°31	2° 7	20°59	13°36	19°30	21° 2	27°25	26°50	M 9
T 10	15 11 15	19°19'45	11♂7	6°25	10°11	8°34	0°49	10°27	2° 4	21° 1	13°37	19°28	20°59	27°31	26°46	T 10
W11	15 15 12	20°17'40	25°34	6° 7	11°25	9°20	0°45	10°23	2° 2	21° 3	13°39	19°D27	20°56	27°38	26°42	W11
T 12	15 19 8	21°15'34	9♂41	5°54	12°38	10° 6	0°43	10°19	1°59	21° 5	13°40	19°28	20°53	27°45	26°37	T 12
F 13	15 23 5	22°13'27	23°30	5°44	13°51	10°52	0°40	10°15	1°57	21° 7	13°41	19°R29	20°50	27°51	26°33	F 13
S 14	15 27 1	23°11'18	6♂59	5°39	15° 4	11°38	0°37	10°11	1°54	21° 9	13°42	19°28	20°46	27°58	26°28	S 14
S 15	15 30 58	24° 9'08	20°12	5°D39	16°17	12°23	0°35	10° 7	1°52	21°11	13°44	19°25	20°43	28° 4	26°24	S 15
M16	15 34 55	25° 6'57	3°V10	5°44	17°30	13° 9	0°33	10° 2	1°50	21°13	13°45	19°19	20°40	28°11	26°19	M16
T 17	15 38 51	26° 4'45	15°54	5°52	18°43	13°55	0°31	9°58	1°47	21°15	13°46	19°12	20°37	28°18	26°15	T 17
W18	15 42 48	27° 2'32	28°26	6° 6	19°56	14°40	0°29	9°54	1°45	21°17	13°48	19° 3	20°34	28°24	26°11	W18
T 19	15 46 44	28° 0'17	10♂47	6°24	21° 9	15°26	0°27	9°50	1°42	21°19	13°49	18°54	20°31	28°31	26° 6	T 19
F 20	15 50 41	28°58'02	22°58	6°46	22°22	16°11	0°26	9°45	1°40	21°21	13°50	18°45	20°27	28°38	26° 2	F 20
S 21	15 54 37	29°55'45	5♂0	7°13	23°35	16°57	0°25	9°41	1°37	21°23	13°52	18°37	20°24	28°44	25°57	S 21
S 22	15 58 34	0♂53'26	16°55	7°44	24°48	17°42	0°23	9°37	1°35	21°26	13°53	18°30	20°21	28°51	25°53	S 22
M23	16 2 30	1°51'07	28°45	8°18	26° 1	18°28	0°23	9°32	1°32	21°28	13°54	18°26	20°18	28°58	25°48	M23
T 24	16 6 27	2°48'46	10♂32	8°57	27°14	19°13	0°22	9°28	1°30	21°30	13°56	18°24	20°15	29° 4	25°44	T 24
W25	16 10 24	3°46'23	22°19	9°40	28°27	19°58	0°21	9°23	1°27	21°32	13°57	18°D24	20°11	29°11	25°40	W25
T 26	16 14 20	4°43'59	4♂10	10°26	29°40	20°43	0°21	9°19	1°25	21°34	13°58	18°25	20° 8	29°18	25°35	T 26
F 27	16 18 17	5°41'34	16°10	11°16	0♂52	21°29	0°21	9°15	1°22	21°36	14° 0	18°26	20° 5	29°24	25°31	F 27
S 28	16 22 13	6°39'07	28°23	12°10	2° 5	22°14	0°D21	9°10	1°20	21°38	14° 1	18°27	20° 2	29°31	25°27	S 28
S 29	16 26 10	7°36'39	10♂55	13° 6	3°18	22°59	0°21	9° 6	1°17	21°41	14° 3	18°R28	19°59	29°38	25°22	S 29
M30	16 30 6	8°34'10	23°49	14° 7	4°30	23°44	0°21	9° 1	1°15	21°43	14° 4	18°26	19°56	29°44	25°18	M30
T 31	16 34 3	9♂31'39	7♂9	15♂10	5♂43	24°V29	0♂22	8♂57	1♂12	21♂45	14♂5	18♂24	19♂52	29♂51	25♂14	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	15n 1	7n25	3s24	15n55	0n43	20n15	0n16	0s28	1s13	0n52	1n32	20s12	1n55	20s29	0n10	21n50	1s18	12n41	9s49	21s53	21s44	25n35	16s11	3n30			
M 2	15 19	1 54	4 9	15 27	0 26	20 33	0 18	0 9	1 13	0 53	1 32	20 12	1 55	20 29	0 10	21 50	1 18	12 41	9 49	21 54	21 45	25 34	16 9	3 31			
T 3	15 37	3s52	4 43	14 58	0 9	20 51	0 21	0n 9	1 13	0 55	1 32	20 11	1 55	20 28	0 10	21 50	1 18	12 41	9 49	21 55	21 45	25 34	16 8	3 31			
W 4	15 55	9 39	5 1	14 30	0s 9	21 8	0 23	0 28	1 13	0 56	1 32	20 11	1 55	20 28	0 10	21 50	1 18	12 41	9 49	21 56	21 46	25 33	16 7	3 31			
T 5	16 12	15 6	5 1	14 2	0 26	21 24	0 26	0 46	1 13	0 58	1 32	20 10	1 55	20 27	0 10	21 50	1 18	12 42	9 49	21 58	21 46	25 32	16 5	3 32			
F 6	16 29	19 49	4 42	13 35	0 43	21 40	0 29	1 4	1 13	0 59	1 31	20 10	1 55	20 27	0 10	21 51	1 18	12 42	9 48	21 59	21 47	25 32	16 4	3 32			
S 7	16 46	23 20	4 3	13 8	1 0	21 55	0 31	1 23	1 13	1 0	1 31	20 9	1 55	20 27	0 10	21 51	1 18	12 42	9 48	22 1	21 47	25 31	16 3	3 32			
S 8	17 2	25 17	3 8	12 44	1 16	22 10	0 34	1 41	1 13	1 2	1 31	20 8	1 56	20 26	0 10	21 51	1 18	12 42	9 48	22 2	21 48	25 30	16 2	3 33			
M 9	17 18	25 24	2 0	12 20	1 32	22 24	0 36	1 59	1 12	1 3	1 31	20 8	1 56	20 26	0 10	21 51	1 18	12 43	9 48	22 2	21 48	25 30	16 0	3 33			
T 10	17 34	23 44	0 44	11 59	1 47	22 38	0 39	2 18	1 12	1 4	1 31	20 7	1 56	20 25	0 10	21 51	1 18	12 43	9 48	22 2	21 49	25 29	15 59	3 34			
W11	17 50	20 30	0n33	11 40	2 1	22 51	0 41	2 36	1 12	1 5	1 30	20 7	1 56	20 25	0 10	21 51	1 18	12 43	9 48	22 2	21 49	25 28	15 58	3 34			
T 12	18 5	16 8	1 46	11 23	2 14	23 3	0 44	2 54	1 12	1 6	1 30	20 6	1 56	20 24	0 10	21 52	1 18	12 44	9 48	22 2	21 50	25 28	15 56	3 34			
F 13	18 20	10 59	2 52	11 8	2 26	23 14	0 46	3 12	1 12	1 7	1 30	20 6	1 56	20 24	0 10	21 52	1 18	12 44	9 48	22 2	21 50	25 27	15 55	3 34			
S 14	18 35	5 27	3 46	10 56	2 38	23 25	0 49	3 30	1 11	1 7	1 30	20 5	1 56	20 23	0 10	21 52	1 18	12 44	9 47	22 2	21 51	25 26	15 54	3 35			
S 15	18 49	0n13	4 28	10 46	2 48	23 36	0 51	3 48	1 11	1 8	1 29	20 4	1 56	20 23	0 10	21 52	1 18	12 44	9 47	22 3	21 51	25 25	15 52	3 35			
M16	19 3	5 45	4 54	10 39	2 57	23 45	0 53	4 6	1 11	1 9	1 29	20 4	1 56	20 22	0 10	21 52	1 18	12 45	9 47	22 4	21 52	25 25	15 51	3 35			
T 17	19 17	10 57	5 6	10 34	3 5	23 54	0 56	4 24	1 11	1 9	1 29	20 3	1 56	20 22	0 10	21 52	1 18	12 45	9 47	22 5	21 52	25 24	15 50	3 36			
W18	19 31	15 37	5 2	10 32	3 13	24 2	0 58	4 42	1 11	1 10	1 29	20 3	1 56	20 21	0 10	21 52	1 18	12 45	9 47	22 6	21 53	25 23	15 48	3 36			
T 19	19 44	19 34	4 44	10 32	3 19	24 10	1 0	5 0	1 10	1 10	1 28	20 2	1 56	20 21	0 10	21 53	1 18	12 45	9 47	22 7	21 53	25 23	15 47	3 36			
F 20	19 56	22 37	4 14	10 34	3 24	24 17	1 3	5 18	1 10	1 11	1 28	20 1	1 56	20 20	0 10	21 53	1 18	12 46	9 47	22 8	21 54	25 22	15 46	3 36			
S 21	20 9	24 37	3 32	10 39	3 28	24 23	1 5	5 35	1 10	1 11	1 28	20 1	1 56	20 20	0 10	21 53	1 18	12 46	9 47	22 10	21 54	25 21	15 45	3 37			
S 22	20 21	25 29	2 42	10 45	3 32	24 28	1 7	5 53	1 9	1 11	1 28	20 0	1 55	20 19	0 10	21 53	1 18	12 46	9 47	22 10	21 55	25 20	15 43	3 37			
M23	20 33	25 11	1 44	10 54	3 34	24 33	1 9	6 10	1 9	1 11	1 28	19 59	1 55	20 19	0 10	21 53	1 18	12 46	9 47	22 11	21 55	25 20	15 42	3 37			
T 24	20 44	23 44	0 42	11 5	3 36	24 37	1 11	6 28	1 9	1 11	1 27	19 59	1 55	20 18	0 10	21 53	1 18	12 47	9 47	22 11	21 56	25 19	15 41	3 37			
W25	20 55	21 15	0s21	11 18	3 36	24 40	1 13	6 45	1 9	1 11	1 27	19 58	1 55	20 18	0 10	21 54	1 18	12 47	9 46	22 11	21 56	25 18	15 40	3 38			
T 26	21 6	17 51	1 25	11 32	3 36	24 43	1 15	7 2	1 8	1 11	1 27	19 58	1 55	20 17	0 10	21 54	1 18	12 47	9 46	22 11	21 57	25 17	15 38	3 38			
F 27	21 16	13 41	2 25	11 48	3 35	24 44	1 17	7 20	1 8	1 11	1 27	19 57	1 55	20 17	0 10	21 54	1 17	12 47	9 46	22 11	21 57	25 16	15 37	3 38			
S 28	21 26	8 55	3 20	12 6	3 34	24 45	1 19	7 37	1 8	1 11	1 26	19 56	1 55	20 16	0 10	21 54	1 17	12 47	9 46	22 11	21 57	25 16	15 36	3 38			
S 29	21 36	3 40	4 7	12 25	3 31	24 46	1 21	7 54	1 7	1 11	1 26	19 56	1 55	20 16	0 10	21 54	1 17	12 48	9 46	22 11	21 58	25 15	15 35	3 38			
M30	21 45	1s52	4 43	12 46	3 28	24 46	1 23	8 11	7 7	1 10	1 26	19 55	1 55	20 15	0 10	21 54	1 17	12 48	9 46	22 11	21 58	25 14	15 34	3 39			
T 31	21n54	7s31	5s 5	13n 8	3s24	24n45	1n25	8n28	1s 7	1n10	1n26	19s55	1n55	20s15	0n10	21n55	1s17	12n48	9s46	22s11	21s59	25n13	15s32	3n39			

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JUNE 1898

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Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	16 37 59	10 ^{II} 29'07	20 ^{II} 58	16 ^{III} 17	6 ^{III} 55	25 ^{VI} 14	0 ^{II} 22	8°R52	1°R10	21 ^{II} 47	14 ^{II} 7	18°R19	19 ^{III} 49	29 ^{II} 58	25°R10	W 1
T 2	16 41 56	11°26'33	5 ^{III} 16	17°26	8° 8	25°59	0°23	8° ^{II} 48	1° ^{II} 7	21°49	14° 8	18° ^{III} 14	19°46	0° ^{III} 4	25° ^{III} 6	T 2
F 3	16 45 53	12°23'59	19°58	18°39	9°20	26°43	0°24	8°44	1° 5	21°52	14°10	18° 9	19°43	0°11	25° 2	F 3
S 4	16 49 49	13°21'24	4 ^{II} 58	19°55	10°33	27°28	0°26	8°39	1° 3	21°54	14°11	18° 4	19°40	0°18	24°58	S 4
S 5	16 53 46	14°18'47	20° 8	21°13	11°45	28°13	0°27	8°35	1° 0	21°56	14°12	18° 1	19°37	0°24	24°54	S 5
M 6	16 57 42	15°16'10	5 ^{III} 18	22°35	12°58	28°58	0°29	8°30	0°58	21°58	14°14	17°59	19°33	0°31	24°50	M 6
T 7	17 1 39	16°13'32	20°18	24° 0	14°10	29°42	0°30	8°26	0°55	22° 1	14°15	17°D58	19°30	0°38	24°46	T 7
W 8	17 5 35	17°10'54	5 ^{III} 22	25°27	15°22	0 ^{II} 27	0°32	8°21	0°53	22° 3	14°16	17°59	19°27	0°44	24°42	W 8
T 9	17 9 32	18° 8'15	19°24	26°57	16°34	1°11	0°35	8°17	0°51	22° 5	14°18	18° 0	19°24	0°51	24°38	T 9
F 10	17 13 29	19° 5'35	3 ^{II} 21	28°30	17°47	1°56	0°37	8°13	0°48	22° 7	14°19	18° 2	19°21	0°58	24°34	F 10
S 11	17 17 25	20° 2'55	16°55	0 ^{II} 6	18°59	2°40	0°39	8° 8	0°46	22° 9	14°21	18°R 2	19°17	1° 4	24°30	S 11
S 12	17 21 22	21° 0'14	0 ^{VI} 7	1°45	20°11	3°24	0°42	8° 4	0°44	22°12	14°22	18° 2	19°14	1°11	24°27	S 12
M13	17 25 18	21°57'33	12°58	3°26	21°23	4° 9	0°45	8° 0	0°41	22°14	14°23	18° 1	19°11	1°17	24°23	M13
T 14	17 29 15	22°54'52	25°32	5°10	22°35	4°53	0°48	7°56	0°39	22°16	14°25	17°58	19° 8	1°24	24°20	T 14
W15	17 33 11	23°52'10	7 ^{III} 52	6°57	23°47	5°37	0°51	7°52	0°37	22°18	14°26	17°55	19° 5	1°31	24°16	W15
T 16	17 37 8	24°49'28	20° 1	8°46	24°59	6°21	0°54	7°47	0°35	22°21	14°27	17°51	19° 2	1°37	24°13	T 16
F 17	17 41 4	25°46'45	2 ^{II} 1	10°39	26°11	7° 5	0°58	7°43	0°33	22°23	14°29	17°47	18°58	1°44	24° 9	F 17
S 18	17 45 1	26°44'03	13°55	12°33	27°23	7°49	1° 1	7°39	0°30	22°25	14°30	17°44	18°55	1°51	24° 6	S 18
S 19	17 48 58	27°41'19	25°44	14°30	28°35	8°33	1° 5	7°35	0°28	22°27	14°32	17°42	18°52	1°57	24° 3	S 19
M20	17 52 54	28°38'36	7 ^{III} 32	16°29	29°46	9°17	1° 9	7°31	0°26	22°30	14°33	17°41	18°49	2° 4	24° 0	M20
T 21	17 56 51	29°35'52	19°19	18°31	0 ^{II} 58	10° 1	1°13	7°27	0°24	22°32	14°34	17°D40	18°46	2°11	23°57	T 21
W22	18 0 47	0 ^{III} 33'07	1 ^{II} 9	20°34	2°10	10°44	1°17	7°23	0°22	22°34	14°36	17°41	18°43	2°17	23°54	W22
T 23	18 4 44	1°30'22	13° 5	22°40	3°22	11°28	1°22	7°19	0°20	22°36	14°37	17°42	18°39	2°24	23°51	T 23
F 24	18 8 40	2°27'36	25° 9	24°47	4°33	12°11	1°26	7°16	0°18	22°38	14°38	17°43	18°36	2°31	23°48	F 24
S 25	18 12 37	3°24'50	7 ^{III} 25	26°55	5°45	12°55	1°31	7°12	0°16	22°41	14°40	17°44	18°33	2°37	23°45	S 25
S 26	18 16 33	4°22'03	19°58	29° 4	6°56	13°38	1°36	7° 8	0°14	22°43	14°41	17°45	18°30	2°44	23°43	S 26
M27	18 20 30	5°19'16	2 ^{II} 50	1 ^{II} 14	8° 8	14°22	1°41	7° 4	0°12	22°45	14°42	17°R46	18°27	2°51	23°40	M27
T 28	18 24 27	6°16'28	16° 6	3°25	9°19	15° 5	1°46	7° 1	0°10	22°47	14°44	17°46	18°23	2°57	23°38	T 28
W29	18 28 23	7°13'40	29°48	5°36	10°31	15°48	1°52	6°57	0° 9	22°49	14°45	17°45	18°20	3° 4	23°35	W29
T 30	18 32 20	8° ^{III} 10'51	13 ^{III} 55	7 ^{III} 34	11 ^{II} 42	16 ^{III} 31	1 ^{II} 57	6° ^{II} 54	0° ^{II} 7	22 ^{II} 52	14 ^{II} 46	17 ^{III} 34	18 ^{III} 17	3° ^{III} 11	23 ^{III} 33	T 30

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒		♓		♈	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	22n 2	12s59	5s11	13n32	3s19	24n43	1n27	8n44	1s 6	1n 9	1n25	19s54	1n55	20s14	0n10	21n55	1s17	12n48	9s46	22s12	21s59	25n12	15s31	3n39	
T 2	22 10	17 57	4 58	13 56	3 14	24 40	1 28	9 1	1 6	1 9	1 25	19 53	1 55	20 14	0 10	21 55	1 17	12 49	9 46	22 13	22 0	25 11	15 30	3 39	
F 3	22 18	21 59	4 25	14 22	3 8	24 37	1 30	9 18	1 6	1 8	1 25	19 53	1 55	20 13	0 10	21 55	1 17	12 49	9 46	22 13	22 0	25 11	15 29	3 39	
S 4	22 25	24 38	3 33	14 48	3 2	24 33	1 31	9 34	1 5	1 7	1 25	19 52	1 55	20 13	0 10	21 55	1 17	12 49	9 46	22 14	22 1	25 10	15 28	3 39	
S 5	22 32	25 31	2 26	15 16	2 55	24 29	1 33	9 50	1 5	1 7	1 24	19 51	1 55	20 12	0 10	21 55	1 17	12 49	9 46	22 14	22 1	25 9	15 27	3 40	
M 6	22 38	24 30	1 9	15 44	2 48	24 23	1 34	10 6	1 4	1 6	1 24	19 51	1 55	20 12	0 10	21 55	1 17	12 49	9 46	22 15	22 2	25 8	15 26	3 40	
T 7	22 44	21 42	0n13	16 12	2 39	24 17	1 36	10 23	1 4	1 5	1 24	19 50	1 55	20 11	0 10	21 56	1 17	12 49	9 46	22 15	22 2	25 7	15 25	3 40	
W 8	22 50	17 32	1 32	16 41	2 31	24 10	1 37	10 39	1 4	1 4	1 24	19 50	1 54	20 11	0 10	21 56	1 17	12 50	9 46	22 15	22 3	25 6	15 24	3 40	
T 9	22 55	12 25	2 44	17 11	2 22	24 3	1 38	10 54	1 3	1 3	1 23	19 49	1 54	20 11	0 10	21 56	1 17	12 50	9 46	22 14	22 3	25 5	15 23	3 40	
F 10	23 0	6 48	3 44	17 41	2 13	23 55	1 40	11 10	1 3	1 2	1 23	19 49	1 54	20 10	0 10	21 56	1 17	12 50	9 46	22 14	22 3	25 5	15 22	3 40	
S 11	23 5	1 2	4 29	18 11	2 3	23 46	1 41	11 26	1 2	1 0	1 23	19 48	1 54	20 10	0 10	21 56	1 17	12 50	9 46	22 14	22 4	25 4	15 21	3 40	
S 12	23 9	4n37	4 59	18 41	1 53	23 37	1 42	11 41	1 2	0 59	1 23	19 47	1 54	20 9	0 10	21 56	1 17	12 50	9 46	22 14	22 4	25 3	15 20	3 40	
M13	23 13	9 55	5 13	19 11	1 42	23 27	1 43	11 57	1 1	0 58	1 22	19 47	1 54	20 9	0 10	21 56	1 17	12 51	9 46	22 14	22 5	25 2	15 19	3 40	
T 14	23 16	14 42	5 11	19 40	1 31	23 16	1 44	12 12	1 1	0 56	1 22	19 46	1 54	20 8	0 10	21 57	1 17	12 51	9 46	22 15	22 5	25 1	15 18	3 40	
W15	23 19	18 48	4 55	20 10	1 20	23 4	1 45	12 27	1 0	0 55	1 22	19 46	1 54	20 8	0 10	21 57	1 17	12 51	9 46	22 15	22 6	25 0	15 17	3 41	
T 16	23 21	22 2	4 26	20 38	1 9	22 52	1 45	12 42	1 0	0 53	1 22	19 45	1 54	20 7	0 10	21 57	1 17	12 51	9 46	22 16	22 6	24 59	15 16	3 41	
F 17	23 23	24 16	3 46	21 6	0 58	22 40	1 46	12 57	0 59	0 52	1 21	19 45	1 53	20 7	0 10	21 57	1 17	12 51	9 46	22 16	22 7	24 58	15 15	3 41	
S 18	23 25	25 23	2 56	21 33	0 47	22 26	1 47	13 12	0 59	0 50	1 21	19 44	1 53	20 6	0 10	21 57	1 17	12 51	9 46	22 17	22 7	24 57	15 14	3 41	
S 19	23 26	25 21	1 58	21 58	0 35	22 12	1 47	13 26	0 58	0 48	1 21	19 44	1 53	20 6	0 10	21 57	1 17	12 51	9 46	22 17	22 7	24 56	15 14	3 41	
M20	23 27	24 10	0 56	22 22	0 24	21 58	1 48	13 41	0 58	0 46	1 21	19 43	1 53	20 6	0 10	21 57	1 17	12 52	9 46	22 17	22 8	24 55	15 13	3 41	
T 21	23 27	21 55	0s 9	22 45	0 12	21 43	1 48	13 55	0 57	0 45	1 20	19 43	1 53	20 5	0 10	21 57	1 17	12 52	9 46	22 17	22 8	24 54	15 12	3 41	
W22	23 27	18 43	1 14	23 6	0 1	21 27	1 48	14 9	0 57	0 43	1 20	19 42	1 53	20 5	0 10	21 58	1 17	12 52	9 46	22 17	22 9	24 53	15 11	3 41	
T 23	23 27	14 44	2 16	23 25	0n10	21 11	1 49	14 23	0 56	0 41	1 20	19 42	1 53	20 4	0 10	21 58	1 17	12 52	9 46	22 17	22 9	24 53	15 11	3 41	
F 24	23 26	10 7	3 13	23 41	0 20	20 54	1 49	14 37	0 56	0 39	1 20	19 41	1 52	20 4	0 10	21 58	1 17	12 52	9 46	22 17	22 10	24 52	15 10	3 41	
S 25	23 25	5 3	4 2	23 56	0 31	20 36	1 49	14 51	0 55	0 37	1 19	19 41	1 52	20 4	0 10	21 58	1 17	12 52	9 46	22 17	22 10	24 51	15 9	3 41	
S 26	23 23	0s20	4 41	24 8	0 41	20 18	1 49	15 4	0 55	0 34	1 19	19 40	1 52	20 3	0 10	21 58	1 17	12 52	9 46	22 16	22 11	24 50	15 9	3 41	
M27	23 21	5 49	5 7	24 17	0 50	20 0	1 49	15 18	0 54	0 32	1 19	19 40	1 52	20 3	0 10	21 58	1 17	12 52	9 46	22 16	22 11	24 49	15 8	3 41	
T 28	23 18	11 13	5 17	24 23	0 59	19 41	1 49	15 31	0 53	0 30	1 19	19 39	1 52	20 2	0 10	21 58	1 17	12 53	9 46	22 16	22 11	24 48	15 7	3 41	
W29	23 15	16 14	5 10	24 27	1 7	19 21	1 48	15 44	0 53	0 28	1 18	19 39	1 52	20 2	0 10	21 58	1 17	12 53	9 46	22 17	22 12	24 47	15 7	3 41	
T 30	23n12	20s33	4s45	24n28	1n15	19n 1	1n48	15n57	0s52	0n25	1n18	19s38	1n52	20s 2	0n10	21n59	1s17	12n53	9s46	22s17	22s12	24n46	15s 6	3n41	

ASTRODIENST EPHEMERIS for the year 1898
geocentric

JULY 1898

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	18 36 16	9 ⁵⁵ 8'02	28 ¹¹ 28	9 ⁵⁵ 57	12 ⁰ 53	17 ⁸ 14	2 ² 3	6 ⁰ R50	0 ⁰ R 5	22 ¹¹ 54	14 ¹¹ 47	17 ⁰ R43	18 ³ 14	3 ⁵⁵ 17	23 ⁰ R31	F 1
S 2	18 40 13	10 ⁰ 5'13	13 ¹⁷ 21	12 ⁰ 7	14 ⁰ 4	17 ⁵ 57	2 ⁰ 9	6 ¹⁷ 47	0 ¹⁷ 3	22 ⁵ 56	14 ⁴ 49	17 ³ 42	18 ¹¹	3 ²⁴	23 ¹¹ 28	S 2
S 3	18 44 9	11 ⁰ 2'24	28 ⁰ 27	14 ⁰ 16	15 ⁰ 15	18 ⁰ 40	2 ⁰ 15	6 ⁰ 44	0 ⁰ 2	22 ⁵ 58	14 ⁰ 50	17 ⁰ 42	18 ⁰ 8	3 ³⁰	23 ⁰ 26	S 3
M 4	18 48 6	11 ⁰ 59'35	13 ³ 39	16 ⁰ 25	16 ⁰ 26	19 ⁰ 23	2 ⁰ 21	6 ⁰ 41	29 ¹¹ 59	23 ⁰ 0	14 ⁰ 51	17 ⁰ D41	18 ⁰ 4	3 ³⁷	23 ⁰ 24	M 4
T 5	18 52 2	12 ⁰ 56'46	28 ⁰ 47	18 ⁰ 32	17 ⁰ 37	20 ⁰ 6	2 ⁰ 27	6 ⁰ 37	29 ⁵ 58	23 ⁰ 2	14 ⁰ 52	17 ⁰ 41	18 ⁰ 1	3 ⁴⁴	23 ⁰ 23	T 5
W 6	18 55 59	13 ⁰ 53'56	13 ³ 41	20 ⁰ 37	18 ⁰ 48	20 ⁰ 48	2 ⁰ 33	6 ⁰ 34	29 ⁵ 57	23 ⁰ 5	14 ⁰ 54	17 ⁰ 42	17 ⁰ 58	3 ⁵⁰	23 ⁰ 21	W 6
T 7	18 59 56	14 ⁰ 51'07	28 ⁰ 15	22 ⁰ 42	19 ⁰ 59	21 ⁰ 31	2 ⁰ 40	6 ⁰ 31	29 ⁵ 55	23 ⁰ 7	14 ⁰ 55	17 ⁰ 42	17 ⁰ 55	3 ⁵⁷	23 ⁰ 19	T 7
F 8	19 3 52	15 ⁰ 48'19	12 ¹ 24	24 ⁰ 44	21 ⁰ 10	22 ⁰ 14	2 ⁰ 46	6 ⁰ 28	29 ⁵ 54	23 ⁰ 9	14 ⁰ 56	17 ⁰ 42	17 ⁰ 52	4 ⁰ 4	23 ⁰ 17	F 8
S 9	19 7 49	16 ⁰ 45'30	26 ⁰ 6	26 ⁰ 45	22 ⁰ 21	22 ⁰ 56	2 ⁰ 53	6 ⁰ 25	29 ⁵ 52	23 ⁰ 11	14 ⁰ 57	17 ⁰ 42	17 ⁰ 49	4 ¹⁰	23 ⁰ 16	S 9
S 10	19 11 45	17 ⁰ 42'43	9 ¹⁷ 22	28 ⁰ 44	23 ⁰ 32	23 ⁰ 38	3 ⁰ 0	6 ⁰ 23	29 ⁵ 51	23 ⁰ 13	14 ⁰ 59	17 ⁰ R42	17 ⁰ 45	4 ¹⁷	23 ⁰ 14	S 10
M 11	19 15 42	18 ⁰ 39'55	22 ⁰ 15	0 ⁰ 42	24 ⁰ 42	24 ⁰ 21	3 ⁰ 7	6 ⁰ 20	29 ⁵ 50	23 ⁰ 15	15 ⁰ 0	17 ⁰ D42	17 ⁰ 42	4 ²⁴	23 ⁰ 13	M 11
T 12	19 19 38	19 ⁰ 37'08	4 ⁸ 46	2 ⁰ 38	25 ⁰ 53	25 ⁰ 3	3 ⁰ 14	6 ⁰ 17	29 ⁴ 48	23 ⁰ 17	15 ⁰ 1	17 ⁰ 42	17 ⁰ 39	4 ³⁰	23 ⁰ 12	T 12
W 13	19 23 35	20 ⁰ 34'22	17 ⁰ 2	4 ⁰ 31	27 ⁰ 3	25 ⁰ 45	3 ⁰ 22	6 ⁰ 15	29 ⁴ 47	23 ⁰ 19	15 ⁰ 2	17 ⁰ 43	17 ⁰ 36	4 ³⁷	23 ⁰ 11	W 13
T 14	19 27 31	21 ⁰ 31'37	29 ⁰ 4	6 ⁰ 23	28 ⁰ 14	26 ⁰ 27	3 ⁰ 29	6 ⁰ 12	29 ⁴ 46	23 ⁰ 21	15 ⁰ 3	17 ⁰ 43	17 ⁰ 33	4 ⁴⁴	23 ⁰ 10	T 14
F 15	19 31 28	22 ⁰ 28'52	10 ¹¹ 58	8 ⁰ 14	29 ⁰ 24	27 ⁰ 9	3 ⁰ 37	6 ⁰ 10	29 ⁴ 44	23 ⁰ 23	15 ⁰ 4	17 ⁰ 43	17 ⁰ 29	4 ⁵⁰	23 ⁰ 9	F 15
S 16	19 35 25	23 ⁰ 26'07	22 ⁰ 47	10 ⁰ 2	0 ¹¹ 34	27 ⁰ 51	3 ⁰ 44	6 ⁰ 8	29 ⁴ 43	23 ⁰ 25	15 ⁰ 6	17 ⁰ 44	17 ⁰ 26	4 ⁵⁷	23 ⁰ 8	S 16
S 17	19 39 21	24 ⁰ 23'24	4 ⁵ 34	11 ⁰ 48	1 ⁰ 45	28 ⁰ 33	3 ⁰ 52	6 ⁰ 5	29 ⁴ 42	23 ⁰ 27	15 ⁰ 7	17 ⁰ 44	17 ⁰ 23	5 ⁰ 4	23 ⁰ 7	S 17
M 18	19 43 18	25 ⁰ 20'40	16 ⁰ 22	13 ⁰ 33	2 ⁰ 55	29 ⁰ 15	4 ⁰ 0	6 ⁰ 3	29 ⁴ 41	23 ⁰ 29	15 ⁰ 8	17 ⁰ R45	17 ⁰ 20	5 ¹⁰	23 ⁰ 7	M 18
T 19	19 47 14	26 ⁰ 17'57	28 ⁰ 13	15 ⁰ 16	4 ⁰ 5	29 ⁰ 56	4 ⁰ 8	6 ⁰ 1	29 ⁴ 40	23 ⁰ 31	15 ⁰ 9	17 ⁰ 44	17 ⁰ 17	5 ¹⁷	23 ⁰ 6	T 19
W 20	19 51 11	27 ⁰ 15'15	10 ⁰ 10	16 ⁰ 56	5 ⁰ 15	0 ¹¹ 38	4 ⁰ 16	5 ⁰ 59	29 ³ 39	23 ⁰ 33	15 ⁰ 10	17 ⁰ 44	17 ⁰ 14	5 ²⁴	23 ⁰ 6	W 20
T 21	19 55 7	28 ⁰ 12'33	22 ⁰ 15	18 ⁰ 36	6 ⁰ 25	1 ⁰ 19	4 ⁰ 24	5 ⁰ 57	29 ³ 38	23 ⁰ 35	15 ⁰ 11	17 ⁰ 43	17 ⁰ 10	5 ³⁰	23 ⁰ 5	T 21
F 22	19 59 4	29 ⁰ 9'52	4 ¹¹ 30	20 ⁰ 13	7 ⁰ 35	2 ⁰ 1	4 ⁰ 33	5 ⁰ 56	29 ³ 37	23 ⁰ 37	15 ⁰ 12	17 ⁰ 41	17 ⁰ 7	5 ³⁷	23 ⁰ 5	F 22
S 23	20 3 1	0 ⁰ 17'11	16 ⁰ 57	21 ⁰ 48	8 ⁰ 45	2 ⁰ 42	4 ⁰ 41	5 ⁰ 54	29 ³ 37	23 ⁰ 39	15 ⁰ 13	17 ⁰ 40	17 ⁰ 4	5 ⁴³	23 ⁰ 5	S 23
S 24	20 6 57	1 ⁰ 4'30	29 ⁰ 38	23 ⁰ 22	9 ⁰ 54	3 ⁰ 23	4 ⁰ 50	5 ⁰ 52	29 ³ 36	23 ⁰ 41	15 ⁰ 14	17 ⁰ 38	17 ⁰ 1	5 ⁵⁰	23 ⁰ D 5	S 24
M 25	20 10 54	2 ⁰ 1'50	12 ⁰ 35	24 ⁰ 53	11 ⁰ 4	4 ⁰ 4	4 ⁰ 58	5 ⁰ 51	29 ³ 35	23 ⁰ 42	15 ⁰ 15	17 ⁰ 37	16 ⁰ 58	5 ⁵⁷	23 ⁰ 5	M 25
T 26	20 14 50	2 ⁰ 59'10	25 ⁰ 50	26 ⁰ 23	12 ⁰ 14	4 ⁰ 45	5 ⁰ 7	5 ⁰ 49	29 ³ 34	23 ⁰ 44	15 ⁰ 16	17 ⁰ 36	16 ⁰ 55	6 ⁰ 3	23 ⁰ 5	T 26
W 27	20 18 47	3 ⁰ 56'31	9 ¹¹ 26	27 ⁰ 51	13 ⁰ 23	5 ⁰ 26	5 ⁰ 16	5 ⁰ 48	29 ³ 34	23 ⁰ 46	15 ⁰ 17	17 ⁰ D36	16 ⁰ 51	6 ¹⁰	23 ⁰ 5	W 27
T 28	20 22 43	4 ⁰ 53'52	23 ⁰ 22	29 ⁰ 17	14 ⁰ 32	6 ⁰ 7	5 ⁰ 25	5 ⁰ 47	29 ³ 33	23 ⁰ 48	15 ⁰ 18	17 ⁰ 37	16 ⁰ 48	6 ¹⁷	23 ⁰ 6	T 28
F 29	20 26 40	5 ⁰ 51'14	7 ¹⁷ 39	0 ¹¹ 41	15 ⁰ 42	6 ⁰ 48	5 ⁰ 34	5 ⁰ 46	29 ³ 33	23 ⁰ 50	15 ⁰ 19	17 ⁰ 38	16 ⁰ 45	6 ²³	23 ⁰ 6	F 29
S 30	20 30 36	6 ⁰ 48'36	22 ⁰ 15	2 ⁰ 3	16 ⁰ 51	7 ⁰ 28	5 ⁰ 44	5 ⁰ 44	29 ³ 32	23 ⁰ 51	15 ⁰ 20	17 ⁰ 39	16 ⁰ 42	6 ³⁰	23 ⁰ 7	S 30
S 31	20 34 33	7 ⁰ 45'59	7 ³ 6	3 ¹¹ 23	18 ⁰ 0	8 ⁰ 11	5 ⁰ 53	5 ⁰ 43	29 ¹¹ 32	23 ⁰ 53	15 ⁰ 21	17 ⁰ 340	16 ⁰ 39	6 ³⁷	23 ¹¹ 7	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
F 1	23n 8	23s44	4s 1	24n26	1n22	18n40	1n47	16n10	0s52	0n23	1n18	19s38	1n51	20s 1	0n10	21n59	1s17	12n53	9s46	22s17	22s13	24n45	15s 6	3n41					
S 2	23 4	25 23	2 59	24 22	1 28	18 19	1 47	16 22	0 51	0 20	1 18	19 38	1 51	20 1	0 10	21 59	1 17	12 53	9 46	22 17	22 13	24 44	15 5	3 41					
S 3	23 0	25 12	1 45	24 14	1 33	17 58	1 46	16 35	0 50	0 18	1 18	19 37	1 51	20 1	0 10	21 59	1 17	12 53	9 46	22 17	22 14	24 42	15 5	3 41					
M 4	22 55	23 7	0 22	24 4	1 38	17 36	1 46	16 47	0 50	0 15	1 17	19 37	1 51	20 0	0 10	21 59	1 17	12 53	9 46	22 17	22 14	24 41	15 4	3 41					
T 5	22 49	19 25	1n 1	23 51	1 42	17 13	1 45	16 59	0 49	0 12	1 17	19 37	1 51	20 0	0 10	21 59	1 17	12 53	9 46	22 17	22 14	24 40	15 4	3 41					
W 6	22 44	14 30	2 20	23 36	1 45	16 51	1 44	17 11	0 49	0 10	1 17	19 36	1 50	20 0	0 10	21 59	1 17	12 53	9 46	22 17	22 15	24 39	15 4	3 40					
T 7	22 38	8 51	3 27	23 19	1 48	16 27	1 43	17 23	0 48	0 7	1 17	19 36	1 50	19 59	0 10	21 59	1 17	12 53	9 46	22 17	22 15	24 38	15 3	3 40					
F 8	22 31	2 55	4 20	22 59	1 50	16 4	1 42	17 35	0 47	0 4	1 16	19 36	1 50	19 59	0 10	21 59	1 17	12 53	9 46	22 17	22 16	24 37	15 3	3 40					
S 9	22 24	2n58	4 56	22 38	1 51	15 40	1 41	17 46	0 47	0 1	1 16	19 35	1 50	19 59	0 10	21 59	1 17	12 53	9 46	22 17	22 16	24 36	15 3	3 40					
S 10	22 17	8 32	5 14	22 14	1 51	15 15	1 40	17 57	0 46	0s 2	1 16	19 35	1 50	19 58	0 10	22 0	1 17	12 53	9 46	22 17	22 16	24 35	15 2	3 40					
M11	22 9	13 34	5 17	21 49	1 51	14 50	1 38	18 8	0 45	0 5	1 16	19 35	1 50	19 58	0 10	22 0	1 17	12 54	9 46	22 17	22 17	24 34	15 2	3 40					
T 12	22 1	17 53	5 4	21 22	1 49	14 25	1 37	18 19	0 45	0 8	1 16	19 35	1 49	19 58	0 10	22 0	1 17	12 54	9 47	22 17	22 17	24 33	15 2	3 40					
W13	21 53	21 21	4 37	20 53	1 48	14 0	1 35	18 30	0 44	0 11	1 15	19 34	1 49	19 58	0 9	22 0	1 17	12 54	9 47	22 17	22 18	24 32	15 2	3 40					
T 14	21 44	23 51	3 59	20 23	1 46	13 34	1 34	18 40	0 43	0 14	1 15	19 34	1 49	19 57	0 9	22 0	1 17	12 54	9 47	22 17	22 18	24 31	15 2	3 40					
F 15	21 35	25 15	3 10	19 52	1 43	13 8	1 32	18 51	0 42	0 17	1 15	19 34	1 49	19 57	0 9	22 0	1 17	12 54	9 47	22 17	22 19	24 30	15 1	3 40					
S 16	21 25	25 29	2 14	19 20	1 39	12 41	1 30	19 1	0 42	0 21	1 15	19 34	1 49	19 57	0 9	22 0	1 17	12 54	9 47	22 17	22 19	24 29	15 1	3 40					
S 17	21 15	24 35	1 13	18 47	1 35	12 14	1 28	19 11	0 41	0 24	1 15	19 33	1 48	19 57	0 9	22 0	1 17	12 54	9 47	22 17	22 19	24 27	15 1	3 40					
M18	21 5	22 35	0 8	18 13	1 31	11 47	1 27	19 21	0 40	0 27	1 14	19 33	1 48	19 57	0 9	22 0	1 17	12 54	9 47	22 17	22 20	24 26	15 1	3 39					
T 19	20 54	19 35	0s58	17 38	1 26	11 20	1 24	19 30	0 40	0 30	1 14	19 33	1 48	19 56	0 9	22 0	1 17	12 54	9 47	22 17	22 20	24 25	15 1	3 39					
W20	20 43	15 45	2 1	17 3	1 20	10 52	1 22	19 40	0 39	0 34	1 14	19 33	1 48	19 56	0 9	22 0	1 17	12 54	9 47	22 17	22 21	24 24	15 1	3 39					
T 21	20 32	11 16	3 0	16 27	1 15	10 24	1 20	19 49	0 38	0 37	1 14	19 33	1 48	19 56	0 9	22 1	1 17	12 54	9 47	22 17	22 21	24 23	15 1	3 39					
F 22	20 20	6 16	3 51	15 50	1 8	9 56	1 18	19 58	0 37	0 41	1 14	19 33	1 47	19 56	0 9	22 1	1 17	12 54	9 47	22 17	22 21	24 22	15 1	3 39					
S 23	20 8	0 58	4 32	15 13	1 1	9 28	1 15	20 7	0 37	0 44	1 13	19 33	1 47	19 56	0 9	22 1	1 17	12 54	9 48	22 17	22 22	24 21	15 1	3 39					
S 24	19 56	4s27	5 1	14 36	0 54	8 59	1 13	20 16	0 36	0 48	1 13	19 33	1 47	19 55	0 9	22 1	1 17	12 54	9 48	22 17	22 22	24 19	15 1	3 39					
M25	19 43	9 48	5 15	13 58	0 47	8 30	1 10	20 24	0 35	0 52	1 13	19 33	1 47	19 55	0 9	22 1	1 18	12 54	9 48	22 18	22 23	24 18	15 1	3 39					
T 26	19 30	14 51	5 13	13 20	0 39	8 1	1 8	20 32	0 34	0 55	1 13	19 33	1 46	19 55	0 9	22 1	1 18	12 54	9 48	22 18	22 23	24 17	15 2	3 39					
W27	19 17	19 17	4 54	12 43	0 31	7 32	1 5	20 40	0 33	0 59	1 13	19 33	1 46	19 55	0 9	22 1	1 18	12 54	9 48	22 18	22 23	24 16	15 2	3 38					
T 28	19 3	22 46	4 17	12 5	0 22	7 3	1 2	20 48	0 33	1 3	1 13	19 33	1 46	19 55	0 9	22 1	1 18	12 54	9 48	22 18	22 24	24 15	15 2	3 38					
F 29	18 49	24 57	3 24	11 27	0 13	6 33	0 59	20 56	0 32	1 6	1 12	19 33	1 46	19 55	0 9	22 1	1 18	12 54	9 48	22 17	22 24	24 14	15 2	3 38					
S 30	18 35	25 29	2 16	10 49	0 4	6 4	0 56	21 4	0 31	1 10	1 12	19 33	1 46	19 55	0 9	22 1	1 18	12 54	9 48	22 17	22 25	24 12	15 3	3 38					
S 31	18n20	24s14	0s58	10n11	0s 5	5n34	0n53	21n11	0s30	1s14	1n12	19s33	1n45	19s55	0n 9	22n 1	1s18	12n54	9s48	22s17	22s25	24n11	15s 3	3n38					

ASTRODIENST EPHEMERIS for the year 1898

geocentric

AUGUST 1898

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	20 38 30	8♌43'23	22♌5	4♍41	19♍9	8♎49	6♏2	5°R43	29°R31	23♐55	15♐22	17°R40	16♑35	6♒43	23♒8	M 1
T 2	20 42 26	9°40'47	7♍4	5°57	20°18	9°30	6°12	5♌42	29♌31	23°57	15°23	17♌39	16°32	6°50	23°9	T 2
W 3	20 46 23	10°38'12	21°56	7°11	21°26	10°10	6°21	5°41	29°31	23°58	15°24	17°37	16°29	6°57	23°10	W 3
T 4	20 50 19	11°35'39	6♋32	8°23	22°35	10°50	6°31	5°41	29°31	24°0	15°24	17°34	16°26	7°3	23°11	T 4
F 5	20 54 16	12°33'06	20°46	9°32	23°44	11°30	6°41	5°40	29°30	24°2	15°25	17°31	16°23	7°10	23°12	F 5
S 6	20 58 12	13°30'35	4♍35	10°39	24°52	12°10	6°51	5°40	29°30	24°3	15°26	17°27	16°20	7°17	23°14	S 6
S 7	21 2 9	14°28'04	17°56	11°44	26°1	12°50	7°1	5°39	29°30	24°5	15°27	17°24	16°16	7°23	23°15	S 7
M 8	21 6 5	15°25'36	0♌53	12°46	27°9	13°30	7°11	5°39	29°D30	24°6	15°28	17°22	16°13	7°30	23°16	M 8
T 9	21 10 2	16°23'08	13°26	13°45	28°17	14°10	7°21	5°39	29°30	24°8	15°28	17°D21	16°10	7°36	23°18	T 9
W10	21 13 59	17°20'42	25°41	14°42	29°25	14°49	7°31	5°D39	29°30	24°9	15°29	17°22	16°7	7°43	23°20	W10
T 11	21 17 55	18°18'18	7♎42	15°35	0♌33	15°29	7°42	5°39	29°30	24°11	15°30	17°23	16°4	7°50	23°21	T 11
F 12	21 21 52	19°15'55	19°34	16°26	1°41	16°8	7°52	5°39	29°31	24°12	15°31	17°25	16°1	7°56	23°23	F 12
S 13	21 25 48	20°13'33	1♌21	17°13	2°48	16°47	8°3	5°40	29°31	24°14	15°31	17°26	15°57	8°3	23°25	S 13
S 14	21 29 45	21°11'13	13°9	17°57	3°56	17°26	8°13	5°40	29°31	24°15	15°32	17°R27	15°54	8°10	23°27	S 14
M15	21 33 41	22°8'55	25°0	18°38	5°3	18°5	8°24	5°40	29°31	24°16	15°33	17°27	15°51	8°16	23°29	M15
T 16	21 37 38	23°6'37	6♌58	19°14	6°11	18°44	8°35	5°41	29°32	24°18	15°33	17°25	15°48	8°23	23°32	T 16
W17	21 41 34	24°4'21	19°6	19°47	7°18	19°23	8°45	5°42	29°32	24°19	15°34	17°22	15°45	8°30	23°34	W17
T 18	21 45 31	25°2'07	1♍25	20°15	8°25	20°2	8°56	5°42	29°33	24°20	15°35	17°17	15°41	8°36	23°37	T 18
F 19	21 49 28	25°59'53	13°56	20°39	9°32	20°40	9°7	5°43	29°33	24°22	15°35	17°10	15°38	8°43	23°39	F 19
S 20	21 53 24	26°57'41	26°40	20°58	10°38	21°19	9°18	5°44	29°34	24°23	15°36	17°4	15°35	8°50	23°42	S 20
S 21	21 57 21	27°55'30	9♌37	21°12	11°45	21°57	9°29	5°45	29°35	24°24	15°36	16°57	15°32	8°56	23°45	S 21
M22	22 1 17	28°53'21	22°47	21°21	12°51	22°35	9°41	5°46	29°35	24°25	15°37	16°51	15°29	9°3	23°47	M22
T 23	22 5 14	29°51'13	6♎11	21°R24	13°58	23°13	9°52	5°48	29°36	24°27	15°37	16°47	15°26	9°10	23°50	T 23
W24	22 9 10	0♍49'06	19°48	21°22	15°4	23°51	10°3	5°49	29°37	24°28	15°38	16°45	15°22	9°16	23°53	W24
T 25	22 13 7	1°47'00	3♌39	21°14	16°10	24°29	10°15	5°51	29°38	24°29	15°38	16°D44	15°19	9°23	23°56	T 25
F 26	22 17 3	2°44'56	17°45	21°0	17°16	25°7	10°26	5°52	29°39	24°30	15°39	16°45	15°16	9°29	24°0	F 26
S 27	22 21 0	3°42'52	2♌2	20°40	18°21	25°44	10°37	5°54	29°40	24°31	15°39	16°46	15°13	9°36	24°3	S 27
S 28	22 24 57	4°40'51	16°31	20°14	19°27	26°22	10°49	5°55	29°41	24°32	15°39	16°R47	15°10	9°43	24°6	S 28
M29	22 28 53	5°38'50	1♌8	19°42	20°32	26°59	11°1	5°57	29°42	24°33	15°40	16°46	15°7	9°49	24°10	M29
T 30	22 32 50	6°36'51	15°47	19°4	21°37	27°36	11°12	5°59	29°43	24°34	15°40	16°43	15°3	9°56	24°13	T 30
W31	22 36 46	7♍34'53	0♋22	18♍21	22♌42	28♎13	11♌24	6♌1	29♌44	24♐35	15♐40	16♑38	15♑0	10♒3	24♒17	W31

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	18n 5	21s14	0n24	9n34	0s15	5n 4	0n50	21n18	0s29	1s18	1n12	19s33	1n45	19s55	0n 9	22n 1	1s18	12n54	9s49	22s17	22s25	24n10	15s 3	3n38			
T 2	17 50	16 49	1 45	8 57	0 24	4 34	0 47	21 25	0 28	1 22	1 12	19 33	1 45	19 55	0 9	22 1	1 18	12 54	9 49	22 17	22 26	24 9	15 3	3 38			
W 3	17 35	11 24	2 58	8 21	0 35	4 4	0 43	21 32	0 28	1 26	1 12	19 33	1 45	19 55	0 9	22 1	1 18	12 54	9 49	22 18	22 26	24 8	15 4	3 38			
T 4	17 19	5 26	3 58	7 44	0 45	3 33	0 40	21 38	0 27	1 30	1 11	19 33	1 44	19 55	0 9	22 1	1 18	12 54	9 49	22 18	22 27	24 6	15 4	3 37			
F 5	17 3	0n39	4 41	7 9	0 55	3 3	0 36	21 45	0 26	1 34	1 11	19 33	1 44	19 55	0 9	22 1	1 18	12 53	9 49	22 18	22 27	24 5	15 5	3 37			
S 6	16 47	6 30	5 6	6 34	1 6	2 33	0 33	21 51	0 25	1 38	1 11	19 33	1 44	19 55	0 9	22 1	1 18	12 53	9 49	22 19	22 27	24 4	15 5	3 37			
S 7	16 30	11 53	5 14	5 59	1 16	2 2	0 29	21 57	0 24	1 42	1 11	19 34	1 44	19 55	0 9	22 2	1 18	12 53	9 49	22 19	22 28	24 3	15 6	3 37			
M 8	16 13	16 33	5 6	5 26	1 27	1 32	0 26	22 3	0 23	1 46	1 11	19 34	1 44	19 55	0 9	22 2	1 18	12 53	9 50	22 19	22 28	24 1	15 6	3 37			
T 9	15 56	20 22	4 42	4 53	1 38	1 1	0 22	22 9	0 22	1 50	1 11	19 34	1 43	19 55	0 9	22 2	1 18	12 53	9 50	22 20	22 28	24 0	15 7	3 37			
W10	15 39	23 11	4 7	4 21	1 49	0 30	0 18	22 14	0 21	1 54	1 10	19 34	1 43	19 55	0 9	22 2	1 18	12 53	9 50	22 20	22 29	23 59	15 7	3 37			
T 11	15 21	24 55	3 21	3 50	2 0	0s 0	0 14	22 19	0 21	1 59	1 10	19 34	1 43	19 55	0 9	22 2	1 18	12 53	9 50	22 19	22 29	23 58	15 8	3 36			
F 12	15 3	25 29	2 27	3 20	2 11	0 31	0 10	22 24	0 20	2 3	1 10	19 35	1 43	19 55	0 9	22 2	1 18	12 53	9 50	22 19	22 30	23 56	15 8	3 36			
S 13	14 45	24 54	1 27	2 52	2 22	1 2	0 6	22 29	0 19	2 7	1 10	19 35	1 42	19 55	0 9	22 2	1 18	12 53	9 50	22 19	22 30	23 55	15 9	3 36			
S 14	14 27	23 12	0 24	2 25	2 33	1 32	0 2	22 34	0 18	2 12	1 10	19 35	1 42	19 55	0 9	22 2	1 18	12 53	9 50	22 19	22 30	23 54	15 10	3 36			
M15	14 8	20 28	0s41	1 59	2 44	2 3	0s 2	22 38	0 17	2 16	1 10	19 35	1 42	19 55	0 9	22 2	1 18	12 53	9 51	22 19	22 31	23 52	15 10	3 36			
T 16	13 49	16 51	1 45	1 35	2 55	2 33	0 7	22 43	0 16	2 20	1 10	19 36	1 42	19 55	0 9	22 2	1 18	12 53	9 51	22 19	22 31	23 51	15 11	3 36			
W17	13 30	12 30	2 44	1 12	3 6	3 4	0 11	22 47	0 15	2 25	1 9	19 36	1 41	19 55	0 9	22 2	1 18	12 53	9 51	22 20	22 31	23 50	15 12	3 36			
T 18	13 11	7 36	3 37	0 52	3 16	3 35	0 16	22 51	0 14	2 29	1 9	19 37	1 41	19 55	0 9	22 2	1 18	12 52	9 51	22 20	22 32	23 49	15 12	3 35			
F 19	12 52	2 20	4 20	0 33	3 26	4 5	0 20	22 54	0 13	2 33	1 9	19 37	1 41	19 55	0 9	22 2	1 18	12 52	9 51	22 21	22 32	23 47	15 13	3 35			
S 20	12 32	3s 7	4 50	0 17	3 36	4 35	0 24	22 58	0 12	2 38	1 9	19 37	1 41	19 56	0 9	22 2	1 18	12 52	9 51	22 22	22 33	23 46	15 14	3 35			
S 21	12 12	8 31	5 7	0 3	3 45	5 6	0 29	23 1	0 11	2 42	1 9	19 38	1 41	19 56	0 9	22 2	1 18	12 52	9 52	22 23	22 33	23 45	15 15	3 35			
M22	11 52	13 38	5 8	0s 8	3 53	5 36	0 34	23 5	0 10	2 47	1 9	19 38	1 40	19 56	0 9	22 2	1 18	12 52	9 52	22 23	22 33	23 43	15 16	3 35			
T 23	11 32	18 11	4 52	0 17	4 1	6 6	0 38	23 8	0 9	2 51	1 9	19 39	1 40	19 56	0 9	22 2	1 18	12 52	9 52	22 24	22 34	23 42	15 16	3 35			
W24	11 11	21 52	4 20	0 23	4 9	6 36	0 43	23 11	0 8	2 56	1 9	19 39	1 40	19 56	0 9	22 2	1 18	12 52	9 52	22 24	22 34	23 41	15 17	3 35			
T 25	10 51	24 22	3 32	0 26	4 15	7 6	0 48	23 13	0 7	3 1	1 8	19 39	1 40	19 56	0 9	22 2	1 18	12 52	9 52	22 24	22 35	23 39	15 18	3 35			
F 26	10 30	25 23	2 30	0 25	4 20	7 36	0 53	23 16	0 6	3 5	1 8	19 40	1 39	19 57	0 9	22 2	1 18	12 52	9 52	22 24	22 35	23 38	15 19	3 34			
S 27	10 9	24 45	1 19	0 21	4 25	8 5	0 58	23 18	0 5	3 10	1 8	19 40	1 39	19 57	0 9	22 2	1 18	12 51	9 53	22 24	22 35	23 37	15 20	3 34			
S 28	9 48	22 27	0 1	0 14	4 28	8 35	1 3	23 20	0 4	3 14	1 8	19 41	1 39	19 57	0 9	22 2	1 18	12 51	9 53	22 24	22 35	23 35	15 21	3 34			
M29	9 27	18 40	1n17	0 3	4 29	9 4	1 7	23 22	0 3	3 19	1 8	19 42	1 39	19 57	0 9	22 2	1 18	12 51	9 53	22 24	22 36	23 34	15 22	3 34			
T 30	9 5	13 44	2 30	0n12	4 29	9 33	1 12	23 24	0 2	3 24	1 8	19 42	1 39	19 58	0 9	22 2	1 18	12 51	9 53	22 24	22 36	23 32	15 23	3 34			
W31	8n44	8s 2	3n33	0n30	4s28	10s 2	1s18	23n26	0s 1	3s28	1n 8	19s43	1n38	19s58	0n 9	22n 2	1s19	12n51	9s53	22s25	22s37	23n31	15s24	3n34			

ASTRODIENST EPHEMERIS for the year 1898
geocentric

SEPTEMBER 1898

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	22 40 43	8 ^m 32'57	14 ^h 46	17°R33	23 ^h 46	28 ^h 50	11 ^h 46	6 ^h 3	29 ^h 45	24 ^h 36	15 ^h 41	16°R31	14 ^h 57	10 ^h 9	24 ^h 21	T 1
F 2	22 44 39	9°31'02	28°54	16 ^m 41	24°51	29°27	11°48	6°5	29°46	24°37	15°41	16 ^h 22	14°54	10°16	24°25	F 2
S 3	22 48 36	10°29'10	12 ^h 40	15°45	25°55	0 ^h 54	12°0	6°8	29°48	24°37	15°41	16°14	14°51	10°23	24°28	S 3
S 4	22 52 32	11°27'19	26°2	14°48	26°59	0°40	12°12	6°10	29°49	24°38	15°42	16°5	14°47	10°29	24°32	S 4
M 5	22 56 29	12°25'30	9 ^h 8	13°49	28°3	1°17	12°24	6°13	29°50	24°39	15°42	15°59	14°44	10°36	24°37	M 5
T 6	23 0 25	13°23'43	21°35	12°50	29°6	1°53	12°36	6°15	29°52	24°40	15°42	15°54	14°41	10°43	24°41	T 6
W 7	23 4 22	14°21'59	3 ^h 11	11°52	0 ^m 10	2°29	12°48	6°18	29°53	24°40	15°42	15°52	14°38	10°49	24°45	W 7
T 8	23 8 19	15°20'16	15°52	10°58	1°13	3°5	13°0	6°21	29°55	24°41	15°42	15°D51	14°35	10°56	24°49	T 8
F 9	23 12 15	16°18'36	27°44	10°7	2°16	3°41	13°12	6°23	29°57	24°42	15°43	15°52	14°32	11°2	24°54	F 9
S 10	23 16 12	17°16'57	9 ^h 32	9°22	3°18	4°16	13°24	6°26	29°58	24°42	15°43	15°52	14°28	11°9	24°58	S 10
S 11	23 20 8	18°15'21	21°21	8°43	4°21	4°52	13°37	6°29	29°59	24°43	15°43	15°R52	14°25	11°16	25°3	S 11
M 12	23 24 5	19°13'46	3 ^h 16	8°11	5°23	5°27	13°49	6°32	0 ^h 2	24°43	15°43	15°51	14°22	11°22	25°7	M 12
T 13	23 28 1	20°12'14	15°21	7°48	6°24	6°2	14°1	6°35	0°3	24°44	15°43	15°47	14°19	11°29	25°12	T 13
W 14	23 31 58	21°10'44	27°39	7°33	7°26	6°37	14°14	6°39	0°5	24°44	15°43	15°40	14°16	11°36	25°17	W 14
T 15	23 35 54	22°9'15	10 ^h 13	7°D28	8°27	7°12	14°26	6°42	0°7	24°45	15°R43	15°31	14°12	11°42	25°22	T 15
F 16	23 39 51	23°7'49	23°3	7°32	9°28	7°47	14°39	6°46	0°9	24°45	15°43	15°21	14°9	11°49	25°27	F 16
S 17	23 43 48	24°6'24	6 ^h 8	7°46	10°29	8°21	14°51	6°49	0°11	24°46	15°43	15°9	14°6	11°56	25°32	S 17
S 18	23 47 44	25°5'01	19°28	8°9	11°29	8°56	15°4	6°53	0°13	24°46	15°43	14°57	14°3	12°2	25°37	S 18
M 19	23 51 41	26°3'41	3 ^h 10	8°41	12°29	9°30	15°16	6°56	0°15	24°46	15°43	14°47	14°0	12°9	25°42	M 19
T 20	23 55 37	27°2'22	16°43	9°23	13°29	10°4	15°29	7°0	0°17	24°47	15°43	14°39	13°57	12°16	25°47	T 20
W 21	23 59 34	28°1'05	0 ^h 23	10°12	14°28	10°38	15°42	7°4	0°19	24°47	15°43	14°34	13°53	12°22	25°53	W 21
T 22	0 3 30	28°59'49	14°29	11°10	15°27	11°11	15°54	7°8	0°21	24°47	15°42	14°32	13°50	12°29	25°58	T 22
F 23	0 7 27	29°58'35	28°32	12°15	16°25	11°45	16°7	7°12	0°24	24°47	15°42	14°D31	13°47	12°35	26°3	F 23
S 24	0 11 23	0 ^h 57'23	12 ^h 39	13°26	17°23	12°18	16°20	7°16	0°26	24°47	15°42	14°R31	13°44	12°42	26°9	S 24
S 25	0 15 20	1°56'13	26°49	14°43	18°21	12°51	16°33	7°20	0°28	24°47	15°42	14°31	13°41	12°49	26°14	S 25
M 26	0 19 17	2°55'04	11 ^h 3	16°6	19°18	13°24	16°45	7°24	0°31	24°48	15°42	14°28	13°38	12°55	26°20	M 26
T 27	0 23 13	3°53'57	25°16	17°33	20°15	13°57	16°58	7°29	0°33	24°48	15°41	14°24	13°34	13°2	26°26	T 27
W 28	0 27 10	4°52'52	9 ^h 26	19°4	21°11	14°29	17°11	7°33	0°35	24°R48	15°41	14°16	13°31	13°9	26°32	W 28
T 29	0 31 6	5°51'48	23°28	20°39	22°7	15°1	17°24	7°37	0°38	24°48	15°41	14°6	13°28	13°15	26°37	T 29
F 30	0 35 3	6 ^h 50'47	7 ^h 17	22 ^h 17	23 ^h 10	15°33	17°43	7 ^h 42	0 ^h 40	24 ^h 48	15 ^h 41	13 ^h 54	13 ^h 25	13°22	26 ^h 43	F 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
T 1	8n22	1s59	4n21	0n52	4s24	10s31	1s23	23n27	0n 0	3s33	1n 8	19s43	1n38	19s58	0n 9	22n 2	1s19	12n51	9s53	22s26	22s37	23n30	15s25	3n34	
F 2	8 0	4n 2	4 52	1 17	4 19	10 59	1 28	23 28	0 1	3 38	1 8	19 44	1 38	19 58	0 9	22 2	1 19	12 51	9 54	22 27	22 37	23 28	15 26	3 34	
S 3	7 38	9 41	5 6	1 45	4 12	11 28	1 33	23 30	0 2	3 43	1 7	19 44	1 38	19 59	0 9	22 2	1 19	12 51	9 54	22 28	22 38	23 27	15 27	3 33	
S 4	7 16	14 44	5 2	2 16	4 2	11 56	1 38	23 31	0 4	3 47	1 7	19 45	1 37	19 59	0 9	22 2	1 19	12 50	9 54	22 29	22 38	23 25	15 28	3 33	
M 5	6 54	18 57	4 42	2 49	3 51	12 23	1 43	23 31	0 5	3 52	1 7	19 46	1 37	19 59	0 9	22 2	1 19	12 50	9 54	22 30	22 38	23 24	15 29	3 33	
T 6	6 32	22 11	4 9	3 23	3 38	12 51	1 48	23 32	0 6	3 57	1 7	19 46	1 37	20 0	0 9	22 2	1 19	12 50	9 54	22 30	22 39	23 23	15 30	3 33	
W 7	6 9	24 18	3 26	3 58	3 24	13 18	1 54	23 33	0 7	4 2	1 7	19 47	1 37	20 0	0 9	22 2	1 19	12 50	9 54	22 31	22 39	23 21	15 31	3 33	
T 8	5 47	25 15	2 34	4 34	3 8	13 46	1 59	23 33	0 8	4 6	1 7	19 48	1 37	20 0	0 9	22 2	1 19	12 50	9 55	22 31	22 39	23 20	15 32	3 33	
F 9	5 24	25 2	1 36	5 9	2 50	14 12	2 4	23 33	0 9	4 11	1 7	19 48	1 36	20 1	0 8	22 2	1 19	12 50	9 55	22 31	22 40	23 18	15 34	3 33	
S 10	5 2	23 41	0 34	5 43	2 32	14 39	2 9	23 33	0 10	4 16	1 7	19 49	1 36	20 1	0 8	22 2	1 19	12 49	9 55	22 31	22 40	23 17	15 35	3 33	
S 11	4 39	21 17	0s29	6 15	2 13	15 5	2 15	23 33	0 11	4 21	1 7	19 50	1 36	20 1	0 8	22 2	1 19	12 49	9 55	22 31	22 40	23 16	15 36	3 33	
M 12	4 16	17 57	1 32	6 45	1 53	15 31	2 20	23 33	0 13	4 26	1 7	19 50	1 36	20 2	0 8	22 2	1 19	12 49	9 55	22 31	22 41	23 14	15 37	3 32	
T 13	3 53	13 51	2 31	7 12	1 34	15 57	2 25	23 33	0 14	4 31	1 7	19 51	1 35	20 2	0 8	22 2	1 19	12 49	9 55	22 31	22 41	23 13	15 38	3 32	
W 14	3 30	9 7	3 23	7 36	1 14	16 22	2 30	23 32	0 15	4 36	1 7	19 52	1 35	20 3	0 8	22 2	1 19	12 49	9 56	22 32	22 41	23 11	15 40	3 32	
T 15	3 7	3 55	4 7	7 55	0 55	16 47	2 36	23 32	0 16	4 40	1 6	19 53	1 35	20 3	0 8	22 2	1 19	12 49	9 56	22 33	22 42	23 10	15 41	3 32	
F 16	2 44	1s31	4 40	8 11	0 36	17 12	2 41	23 31	0 17	4 45	1 6	19 54	1 35	20 3	0 8	22 2	1 19	12 48	9 56	22 34	22 42	23 8	15 42	3 32	
S 17	2 21	7 0	4 58	8 23	0 18	17 36	2 46	23 30	0 19	4 50	1 6	19 54	1 35	20 4	0 8	22 2	1 19	12 48	9 56	22 36	22 42	23 7	15 43	3 32	
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M 19	1 34	17 1	4 47	8 33	0n15	18 24	2 57	23 28	0 21	5 0	1 6	19 56	1 34	20 5	0 8	22 2	1 19	12 48	9 56	22 38	22 43	23 4	15 46	3 32	
T 20	1 11	20 56	4 17	8 31	0 30	18 47	3 2	23 27	0 22	5 5	1 6	19 57	1 34	20 5	0 8	22 2	1 19	12 48	9 57	22 39	22 43	23 2	15 47	3 32	
W 21	0 47	23 43	3 31	8 25	0 43	19 10	3 7	23 25	0 24	5 10	1 6	19 58	1 34	20 6	0 8	22 2	1 19	12 48	9 57	22 39	22 44	23 1	15 48	3 32	
T 22	0 24	25 4	2 32	8 15	0 56	19 32	3 12	23 24	0 25	5 15	1 6	19 58	1 34	20 6	0 8	22 2	1 19	12 47	9 57	22 40	22 44	22 59	15 50	3 32	
F 23	0 1	24 50	1 24	8 0	1 7	19 54	3 17	23 22	0 26	5 20	1 6	19 59	1 33	20 7	0 8	22 2	1 19	12 47	9 57	22 40	22 44	22 58	15 51	3 32	
S 24	0s23	23 1	0 10	7 42	1 17	20 16	3 23	23 20	0 27	5 25	1 6	20 0	1 33	20 7	0 8	22 2	1 19	12 47	9 57	22 40	22 45	22 56	15 52	3 31	
S 25	0 46	19 45	1n 5	7 20	1 26	20 37	3 28	23 19	0 29	5 30	1 6	20 1	1 33	20 8	0 8	22 2	1 19	12 47	9 58	22 40	22 45	22 55	15 54	3 31	
M 26	1 10	15 18	2 16	6 55	1 33	20 58	3 33	23 17	0 30	5 35	1 6	20 2	1 33	20 8	0 8	22 2	1 20	12 47	9 58	22 40	22 45	22 53	15 55	3 31	
T 27	1 33	10 0	3 18	6 27	1 39	21 19	3 38	23 15	0 31	5 40	1 6	20 3	1 33	20 9	0 8	22 2	1 20	12 46	9 58	22 40	22 46	22 52	15 56	3 31	
W 28	1 56	4 13	4 7	5 56	1 44	21 39	3 43	23 13	0 33	5 44	1 6	20 4	1 33	20 9	0 8	22 2	1 20	12 46	9 58	22 41	22 46	22 50	15 58	3 31	
T 29	2 20	1n43	4 42	5 22	1 48	21 58	3 47	23 10	0 34	5 49	1 6	20 5	1 32	20 10	0 8	22 1	1 20	12 46	9 58	22 42	22 46	22 49	15 59	3 31	
F 30	2s43	7n28	4n59	4n46	1n51	22s17	3s52	23n 8	0n36	5s54	1n 6	20s 5	1n32	20s10	0n 8	22n 1	1s20	12n46	9s58	22s44	22s47	16s 1	3n31		

ASTRODIENST EPHEMERIS for the year 1898

geocentric

OCTOBER 1898

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	0 38 59	7♂49'47	20♂50	23♂56	23♂57	16♂5	17♂50	7♂46	0♂43	24♂47	15♂40	13♂41	13♂22	13♂29	26♂49	S 1
S 2	0 42 56	8°48'50	4♂3	25°38	24°51	16°37	18°3	7°51	0°46	24♂47	15♂40	13♂30	13°18	13°35	26°55	S 2
M 3	0 46 52	9°47'55	16°56	27°21	25°44	17°8	18°15	7°56	0°48	24°47	15°40	13°19	13°15	13°42	27°1	M 3
T 4	0 50 49	10°47'02	29°28	29°6	26°37	17°40	18°28	8°1	0°51	24°47	15°39	13°11	13°12	13°49	27°7	T 4
W 5	0 54 46	11°46'11	11♂43	0♂51	27°30	18°11	18°41	8°6	0°54	24°47	15°39	13°6	13°9	13°55	27°14	W 5
T 6	0 58 42	12°45'23	23°44	2°36	28°22	18°41	18°54	8°11	0°56	24°46	15°38	13°4	13°6	14°2	27°20	T 6
F 7	1 2 39	13°44'37	5♂36	4°22	29°13	19°12	19°7	8°16	0°59	24°46	15°38	13°3	13°3	14°9	27°26	F 7
S 8	1 6 35	14°43'53	17°24	6°8	0♂3	19°42	19°20	8°21	1°2	24°46	15°37	13°3	12°59	14°15	27°32	S 8
S 9	1 10 32	15°43'12	29°13	7°54	0°53	20°12	19°33	8°26	1°5	24°45	15°37	13°2	12°56	14°22	27°39	S 9
M10	1 14 28	16°42'33	11♂10	9°40	1°42	20°42	19°46	8°31	1°8	24°45	15°36	13°1	12°53	14°28	27°45	M10
T 11	1 18 25	17°41'56	23°19	11°25	2°30	21°12	19°59	8°36	1°11	24°45	15°36	12°57	12°50	14°35	27°52	T 11
W12	1 22 21	18°41'21	5♂44	13°11	3°18	21°41	20°12	8°41	1°13	24°44	15°35	12°50	12°47	14°42	27°58	W12
T 13	1 26 18	19°40'49	18°29	14°55	4°4	22°10	20°25	8°47	1°16	24°44	15°35	12°40	12°44	14°48	28°5	T 13
F 14	1 30 14	20°40'19	1♂34	16°39	4°50	22°39	20°38	8°52	1°19	24°43	15°34	12°29	12°40	14°55	28°12	F 14
S 15	1 34 11	21°39'51	15°0	18°23	5°35	23°7	20°51	8°58	1°22	24°43	15°34	12°16	12°37	15°2	28°18	S 15
S 16	1 38 8	22°39'25	28°44	20°6	6°19	23°36	21°4	9°3	1°26	24°42	15°33	12°4	12°34	15°8	28°25	S 16
M17	1 42 4	23°39'01	12♂42	21°49	7°2	24°3	21°18	9°9	1°29	24°41	15°32	11°53	12°31	15°15	28°32	M17
T 18	1 46 1	24°38'39	26°50	23°31	7°44	24°31	21°31	9°15	1°32	24°41	15°32	11°44	12°28	15°22	28°39	T 18
W19	1 49 57	25°38'19	11♂3	25°12	8°25	24°58	21°44	9°20	1°35	24°40	15°31	11°38	12°24	15°28	28°45	W19
T 20	1 53 54	26°38'00	25°17	26°53	9°5	25°26	21°57	9°26	1°38	24°39	15°30	11°35	12°21	15°35	28°52	T 20
F 21	1 57 50	27°37'44	9♂29	28°33	9°44	25°52	22°10	9°32	1°41	24°39	15°30	11°D34	12°18	15°42	28°59	F 21
S 22	2 1 47	28°37'29	23°38	0♂12	10°21	26°19	22°23	9°38	1°45	24°38	15°29	11°R34	12°15	15°48	29°6	S 22
S 23	2 5 44	29°37'15	7♂42	1°51	10°58	26°45	22°36	9°44	1°48	24°37	15°28	11°34	12°12	15°55	29°13	S 23
M24	2 9 40	0♂137'04	21°40	3°29	11°32	27°11	22°49	9°50	1°51	24°36	15°27	11°33	12°9	16°1	29°20	M24
T 25	2 13 37	1°36'54	5♂32	5°7	12°6	27°36	23°2	9°56	1°54	24°35	15°27	11°28	12°5	16°8	29°27	T 25
W26	2 17 33	2°36'45	19°16	6°44	12°38	28°1	23°15	10°2	1°58	24°34	15°26	11°22	12°2	16°15	29°34	W26
T 27	2 21 30	3°36'39	2♂52	8°21	13°9	28°26	23°27	10°8	2°1	24°34	15°25	11°12	11°59	16°21	29°42	T 27
F 28	2 25 26	4°36'34	16°16	9°57	13°38	28°50	23°40	10°14	2°4	24°33	15°24	11°1	11°56	16°28	29°49	F 28
S 29	2 29 23	5°36'31	29°27	11°33	14°6	29°15	23°53	10°21	2°8	24°32	15°23	10°50	11°53	16°35	29°56	S 29
S 30	2 33 19	6°36'29	12♂24	13°8	14°32	29°38	24°6	10°27	2°11	24°31	15°23	10°38	11°49	16°41	0♂3	S 30
M31	2 37 16	7♂136'30	25♂4	14♂43	14♂56	0♂2	24♂19	10♂33	2♂15	24♂30	15♂22	10♂29	11♂46	16♂48	0♂10	M31

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	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	lat
S 1	3s 6	12n44	4n58	4n 9	1n53	22s36	3s57	23n 6	0n37	5s59	1n 6	20s 6	1n32	20s11	0n 8	22n 1	1s20	12n46	9s59	22s45	22s47	22n46	16s 2	3n31									
S 2	3 30	17 17	4 42	3 29	1 54	22 54	4 2	23 3	0 38	6 4	1 5	20 7	1 32	20 11	0 8	22 1	1 20	12 45	9 59	22 46	22 47	22 44	16 3	3 31									
M 3	3 53	20 55	4 11	2 48	1 55	23 11	4 6	23 1	0 40	6 9	1 5	20 8	1 32	20 12	0 8	22 1	1 20	12 45	9 59	22 47	22 48	22 42	16 5	3 31									
T 4	4 16	23 27	3 29	2 6	1 54	23 29	4 11	22 58	0 41	6 14	1 5	20 9	1 31	20 12	0 8	22 1	1 20	12 45	9 59	22 48	22 48	22 41	16 6	3 31									
W 5	4 39	24 49	2 38	1 23	1 53	23 45	4 15	22 55	0 43	6 19	1 5	20 10	1 31	20 13	0 8	22 1	1 20	12 45	9 59	22 48	22 48	22 39	16 8	3 31									
T 6	5 2	24 59	1 40	0 40	1 51	24 1	4 20	22 52	0 44	6 24	1 5	20 11	1 31	20 14	0 8	22 1	1 20	12 45	9 59	22 49	22 48	22 38	16 9	3 31									
F 7	5 26	23 59	0 39	0s 5	1 49	24 17	4 24	22 50	0 45	6 29	1 5	20 12	1 31	20 14	0 8	22 1	1 20	12 44	9 59	22 49	22 49	22 36	16 10	3 31									
S 8	5 49	21 56	0s23	0 49	1 46	24 32	4 28	22 47	0 47	6 34	1 5	20 13	1 31	20 15	0 8	22 1	1 20	12 44	10 0	22 49	22 49	22 35	16 12	3 31									
S 9	6 11	18 57	1 25	1 34	1 42	24 47	4 32	22 44	0 48	6 39	1 5	20 14	1 31	20 15	0 8	22 1	1 20	12 44	10 0	22 49	22 49	22 33	16 13	3 31									
M10	6 34	15 8	2 23	2 20	1 38	25 1	4 36	22 41	0 50	6 44	1 5	20 15	1 30	20 16	0 8	22 1	1 20	12 44	10 0	22 49	22 50	22 31	16 15	3 31									
T 11	6 57	10 40	3 16	3 5	1 34	25 15	4 40	22 38	0 51	6 49	1 5	20 16	1 30	20 17	0 8	22 1	1 20	12 44	10 0	22 49	22 50	22 30	16 16	3 31									
W12	7 20	5 41	4 1	3 50	1 29	25 28	4 44	22 35	0 53	6 54	1 5	20 17	1 30	20 17	0 8	22 1	1 20	12 43	10 0	22 50	22 50	22 28	16 18	3 31									
T 13	7 42	0 21	4 35	4 35	1 24	25 41	4 47	22 31	0 54	6 59	1 5	20 18	1 30	20 18	0 8	22 1	1 20	12 43	10 0	22 51	22 51	22 27	16 19	3 31									
F 14	8 5	5s 8	4 55	5 20	1 19	25 53	4 51	22 28	0 56	7 3	1 5	20 19	1 30	20 18	0 8	22 1	1 20	12 43	10 0	22 52	22 51	22 25	16 20	3 31									
S 15	8 27	10 32	5 0	6 5	1 13	26 4	4 54	22 25	0 58	7 8	1 5	20 20	1 30	20 19	0 8	22 1	1 20	12 43	10 1	22 53	22 51	22 23	16 22	3 31									
S 16	8 49	15 31	4 48	6 49	1 8	26 15	4 57	22 22	0 59	7 13	1 5	20 21	1 29	20 20	0 8	22 1	1 20	12 43	10 1	22 54	22 52	22 22	16 23	3 31									
M17	9 11	19 46	4 19	7 33	1 2	26 26	5 0	22 19	1 1	7 18	1 5	20 22	1 29	20 20	0 8	22 1	1 20	12 42	10 1	22 55	22 52	22 20	16 25	3 31									
T 18	9 33	22 55	3 33	8 17	0 55	26 36	5 3	22 15	1 2	7 23	1 5	20 23	1 29	20 21	0 8	22 1	1 20	12 42	10 1	22 56	22 52	22 19	16 26	3 31									
W19	9 55	24 39	2 34	8 59	0 49	26 45	5 6	22 12	1 4	7 28	1 5	20 24	1 29	20 22	0 8	22 0	1 20	12 42	10 1	22 57	22 52	22 17	16 28	3 31									
T 20	10 17	24 47	1 25	9 42	0 43	26 54	5 8	22 9	1 6	7 33	1 5	20 25	1 29	20 22	0 8	22 0	1 20	12 42	10 1	22 57	22 53	22 15	16 29	3 31									
F 21	10 38	23 18	0 11	10 24	0 36	27 2	5 11	22 5	1 7	7 38	1 5	20 26	1 29	20 23	0 8	22 0	1 20	12 42	10 1	22 57	22 53	22 14	16 31	3 31									
S 22	11 0	20 20	1n 4	11 5	0 30	27 10	5 13	22 2	1 9	7 42	1 5	20 27	1 29	20 24	0 8	22 0	1 20	12 41	10 2	22 57	22 53	22 12	16 32	3 31									
S 23	11 21	16 12	2 14	11 46	0 23	27 17	5 14	21 59	1 11	7 47	1 5	20 28	1 28	20 24	0 8	22 0	1 20	12 41	10 2	22 57	22 54	22 10	16 33	3 31									
M24	11 42	11 12	3 16	12 26	0 16	27 24	5 16	21 55	1 13	7 52	1 5	20 29	1 28	20 25	0 8	22 0	1 20	12 41	10 2	22 57	22 54	22 9	16 35	3 31									
T 25	12 3	5 41	4 6	13 5	0 10	27 30	5 17	21 52	1 14	7 57	1 5	20 30	1 28	20 26	0 8	22 0	1 21	12 41	10 2	22 57	22 54	22 7	16 36	3 31									
W26	12 23	0n 4	4 41	13 44	0 3	27 35	5 19	21 49	1 16	8 2	1 5	20 31	1 28	20 26	0 8	22 0	1 21	12 41	10 2	22 58	22 54	22 5	16 38	3 31									
T 27	12 44	5 43	4 59	14 21	0s 4	27 40	5 19	21 45	1 18	8 6	1 5	20 32	1 28	20 27	0 8	22 0	1 21	12 41	10 2	22 59	22 55	22 4	16 39	3 31									
F 28	13 4	11 2	5 1	14 58	0 11	27 45	5 20	21 42	1 20	8 11	1 5	20 33	1 28	20 28	0 8	22 0	1 21	12 40	10 2	23 0	22 55	22 2	16 41	3 31									
S 29	13 24	15 45	4 47	15 35	0 17	27 48	5 20	21 39	1 21	8 16	1 5	20 34	1 28	20 28	0 8	22 0	1 21	12 40	10 2	23 1	22 55	22 0	16 42	3 31									
S 30	13 44	19 39	4 18	16 10	0 24	27 51	5 20	21 36	1 23	8 21	1 5	20 35	1 27	20 29	0 8	22 0	1 21	12 40	10 2	23 2	22 56	21 59	16 44	3 32									
M31	14s 3	22n33	3n37	16s45	0s31	27s54	5s20	21n33	1n25	8s25	1n 5	20s36	1n27	20s30	0n 8	22n 0	1s21	12n40	10s 2	23s 2	22s56	21n57	16s45	3n32									

ASTRODIENST EPHEMERIS for the year 1898
geocentric

NOVEMBER 1898

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	2 41 12	8♉36°33	7♊28	16♈17	15♈19	0♈25	24♈32	10♈39	2♈18	24°R29	15°R21	10°R21	11♈43	16♈55	0♈18	T 1
W 2	2 45 9	9°36'38	19°38	17°51	15°39	0°47	24°45	10°46	2°22	24♊27	15♊20	10♊17	11°40	17° 1	0°25	W 2
T 3	2 49 6	10°36'44	1♉37	19°24	15°58	1° 9	24°58	10°52	2°25	24°26	15°19	10°14	11°37	17° 8	0°32	T 3
F 4	2 53 2	11°36'53	13°27	20°57	16°15	1°31	25°10	10°59	2°29	24°25	15°18	10°D14	11°34	17°15	0°40	F 4
S 5	2 56 59	12°37'04	25°15	22°30	16°30	1°53	25°23	11° 5	2°32	24°24	15°17	10°15	11°30	17°21	0°47	S 5
S 6	3 0 55	13°37'17	7♊ 3	24° 2	16°43	2°14	25°36	11°12	2°36	24°23	15°16	10°16	11°27	17°28	0°55	S 6
M 7	3 4 52	14°37'32	18°59	25°34	16°53	2°34	25°49	11°18	2°39	24°22	15°15	10°R16	11°24	17°34	1° 2	M 7
T 8	3 8 48	15°37'49	1♊ 8	27° 6	17° 2	2°54	26° 1	11°25	2°43	24°20	15°14	10°14	11°21	17°41	1° 9	T 8
W 9	3 12 45	16°38'08	13°33	28°37	17° 8	3°14	26°14	11°32	2°46	24°19	15°13	10°11	11°18	17°48	1°17	W 9
T 10	3 16 41	17°38'28	26°21	0♈ 8	17°12	3°33	26°27	11°38	2°50	24°18	15°12	10° 5	11°15	17°54	1°24	T 10
F 11	3 20 38	18°38'51	9♈32	1°38	17°R14	3°52	26°39	11°45	2°54	24°17	15°11	9°57	11°11	18° 1	1°32	F 11
S 12	3 24 35	19°39'15	23° 9	3° 8	17°13	4°10	26°52	11°52	2°57	24°15	15°10	9°49	11° 8	18° 8	1°39	S 12
S 13	3 28 31	20°39'42	7♈ 9	4°38	17°10	4°28	27° 4	11°58	3° 1	24°14	15° 9	9°40	11° 5	18°14	1°47	S 13
M14	3 32 28	21°40'10	21°29	6° 8	17° 4	4°45	27°17	12° 5	3° 4	24°13	15° 8	9°33	11° 2	18°21	1°55	M14
T 15	3 36 24	22°40'40	6♈ 2	7°37	16°56	5° 2	27°29	12°12	3° 8	24°11	15° 7	9°27	10°59	18°28	2° 2	T 15
W16	3 40 21	23°41'11	20°42	9° 5	16°46	5°18	27°41	12°19	3°12	24°10	15° 6	9°23	10°55	18°34	2°10	W16
T 17	3 44 17	24°41'44	5♈22	10°33	16°33	5°34	27°54	12°26	3°15	24° 8	15° 5	9°D21	10°52	18°41	2°17	T 17
F 18	3 48 14	25°42'18	19°56	12° 1	16°17	5°49	28° 6	12°33	3°19	24° 7	15° 4	9°22	10°49	18°48	2°25	F 18
S 19	3 52 11	26°42'53	4♈19	13°28	16° 0	6° 3	28°18	12°40	3°23	24° 6	15° 3	9°23	10°46	18°54	2°32	S 19
S 20	3 56 7	27°43'30	18°30	14°55	15°40	6°17	28°31	12°46	3°26	24° 4	15° 2	9°24	10°43	19° 1	2°40	S 20
M21	4 0 4	28°44'07	2♈26	16°21	15°17	6°31	28°43	12°53	3°30	24° 3	15° 1	9°R25	10°40	19° 8	2°48	M21
T 22	4 4 0	29°44'46	16° 8	17°46	14°53	6°43	28°55	13° 0	3°34	24° 1	14°59	9°23	10°36	19°14	2°55	T 22
W23	4 7 57	0♈45'26	29°36	19°10	14°26	6°56	29° 7	13° 7	3°38	24° 0	14°58	9°20	10°33	19°21	3° 3	W23
T 24	4 11 53	1°46'06	12♈50	20°34	13°58	7° 7	29°19	13°14	3°41	23°58	14°57	9°15	10°30	19°27	3°10	T 24
F 25	4 15 50	2°46'48	25°51	21°56	13°28	7°18	29°31	13°21	3°45	23°56	14°56	9° 9	10°27	19°34	3°18	F 25
S 26	4 19 46	3°47'31	8♈39	23°17	12°56	7°29	29°43	13°28	3°49	23°55	14°55	9° 3	10°24	19°41	3°26	S 26
S 27	4 23 43	4°48'16	21°15	24°37	12°23	7°38	29°54	13°35	3°52	23°53	14°54	8°57	10°21	19°47	3°33	S 27
M28	4 27 39	5°49'01	3♈38	25°56	11°48	7°47	0♈ 6	13°42	3°56	23°52	14°53	8°51	10°17	19°54	3°41	M28
T 29	4 31 36	6°49'48	15°50	27°12	11°13	7°56	0°18	13°49	4° 0	23°50	14°52	8°47	10°14	20° 1	3°48	T 29
W30	4 35 33	7♈50'36	27♈52	28♈27	10♈37	8° 4	0♈30	13♈57	4♈ 3	23♈49	14♈50	8♈45	10♈11	20♈ 7	3♈56	W30

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	14s23	24n18	2n46	17s19	0s37	27s56	5s19	21n29	1n27	8s30	1n 5	20s37	1n27	20s30	0n 8	22n 0	1s21	12n40	10s 3	23s 3	22s56	21n55	16s46	3n32	
W 2	14 42	24 51	1 48	17 52	0 44	27 57	5 18	21 26	1 29	8 35	1 5	20 38	1 27	20 31	0 8	22 0	1 21	12 39	10 3	23 3	22 56	21 53	16 48	3 32	
T 3	15 1	24 13	0 46	18 24	0 50	27 58	5 17	21 23	1 31	8 39	1 5	20 39	1 27	20 32	0 8	21 59	1 21	12 39	10 3	23 3	22 57	21 52	16 49	3 32	
F 4	15 20	22 29	0s17	18 55	0 57	27 58	5 15	21 20	1 33	8 44	1 5	20 40	1 27	20 33	0 8	21 59	1 21	12 39	10 3	23 3	22 57	21 50	16 51	3 32	
S 5	15 38	19 48	1 20	19 25	1 3	27 57	5 13	21 18	1 35	8 49	1 5	20 41	1 27	20 33	0 8	21 59	1 21	12 39	10 3	23 3	22 57	21 48	16 52	3 32	
S 6	15 56	16 17	2 19	19 54	1 9	27 56	5 10	21 15	1 37	8 53	1 5	20 42	1 27	20 34	0 8	21 59	1 21	12 39	10 3	23 3	22 58	21 47	16 53	3 32	
M 7	16 14	12 5	3 13	20 23	1 15	27 54	5 7	21 12	1 39	8 58	1 5	20 43	1 26	20 35	0 8	21 59	1 21	12 39	10 3	23 3	22 58	21 45	16 55	3 32	
T 8	16 32	7 21	3 59	20 50	1 21	27 51	5 3	21 9	1 41	9 2	1 5	20 44	1 26	20 35	0 8	21 59	1 21	12 38	10 3	23 3	22 58	21 43	16 56	3 32	
W 9	16 49	2 14	4 35	21 16	1 27	27 48	4 59	21 7	1 43	9 7	1 5	20 45	1 26	20 36	0 8	21 59	1 21	12 38	10 3	23 4	22 58	21 41	16 58	3 33	
T 10	17 6	3s 7	4 58	21 42	1 32	27 44	4 55	21 4	1 45	9 11	1 6	20 46	1 26	20 37	0 8	21 59	1 21	12 38	10 3	23 4	22 59	21 40	16 59	3 33	
F 11	17 23	8 29	5 7	22 6	1 38	27 39	4 50	21 2	1 47	9 16	1 6	20 47	1 26	20 37	0 8	21 59	1 21	12 38	10 3	23 5	22 59	21 38	17 0	3 33	
S 12	17 39	13 37	4 59	22 29	1 43	27 33	4 44	21 0	1 49	9 20	1 6	20 48	1 26	20 38	0 8	21 59	1 21	12 38	10 3	23 5	22 59	21 36	17 2	3 33	
S 13	17 56	18 12	4 33	22 51	1 48	27 27	4 38	20 57	1 51	9 25	1 6	20 49	1 26	20 39	0 8	21 59	1 21	12 38	10 3	23 6	22 59	21 34	17 3	3 33	
M14	18 12	21 50	3 49	23 12	1 53	27 19	4 31	20 55	1 53	9 29	1 6	20 50	1 26	20 40	0 8	21 59	1 21	12 37	10 4	23 7	23 0	21 33	17 4	3 33	
T 15	18 27	24 7	2 50	23 31	1 57	27 11	4 24	20 53	1 56	9 34	1 6	20 51	1 26	20 40	0 8	21 59	1 21	12 37	10 4	23 7	23 0	21 31	17 6	3 33	
W16	18 42	24 47	1 39	23 50	2 2	27 2	4 16	20 52	1 58	9 38	1 6	20 52	1 25	20 41	0 8	21 59	1 21	12 37	10 4	23 7	23 0	21 29	17 7	3 34	
T 17	18 57	23 42	0 22	24 7	2 6	26 53	4 7	20 50	2 0	9 42	1 6	20 53	1 25	20 42	0 8	21 58	1 21	12 37	10 4	23 7	23 0	21 27	17 8	3 34	
F 18	19 12	21 2	0n57	24 23	2 10	26 42	3 58	20 48	2 2	9 47	1 6	20 54	1 25	20 42	0 8	21 58	1 21	12 37	10 4	23 7	23 1	21 26	17 10	3 34	
S 19	19 26	17 4	2 11	24 38	2 13	26 30	3 49	20 47	2 5	9 51	1 6	20 55	1 25	20 43	0 8	21 58	1 21	12 37	10 4	23 7	23 1	21 24	17 11	3 34	
S 20	19 40	12 11	3 16	24 51	2 16	26 18	3 38	20 46	2 7	9 55	1 6	20 56	1 25	20 44	0 8	21 58	1 21	12 37	10 4	23 7	23 1	21 22	17 12	3 34	
M21	19 53	6 44	4 9	25 3	2 19	26 5	3 27	20 45	2 9	10 0	1 6	20 57	1 25	20 45	0 8	21 58	1 21	12 36	10 4	23 7	23 1	21 20	17 13	3 34	
T 22	20 6	1 5	4 46	25 14	2 22	25 50	3 16	20 44	2 12	10 4	1 6	20 58	1 25	20 45	0 8	21 58	1 21	12 36	10 4	23 7	23 2	21 18	17 15	3 35	
W23	20 19	4n31	5 6	25 24	2 24	25 35	3 4	20 43	2 14	10 8	1 6	20 59	1 25	20 46	0 7	21 58	1 21	12 36	10 4	23 7	23 2	21 17	17 16	3 35	
T 24	20 32	9 50	5 10	25 32	2 25	25 19	2 51	20 42	2 16	10 12	1 6	21 0	1 25	20 47	0 7	21 58	1 21	12 36	10 4	23 8	23 2	21 15	17 17	3 35	
F 25	20 44	14 37	4 58	25 39	2 26	25 3	2 38	20 42	2 19	10 16	1 6	21 1	1 25	20 47	0 7	21 58	1 21	12 36	10 4	23 8	23 2	21 13	17 18	3 35	
S 26	20 55	18 40	4 31	25 44	2 27	24 45	2 24	20 41	2 21	10 20	1 6	21 2	1 25	20 48	0 8	21 58	1 21	12 36	10 4	23 9	23 3	21 11	17 20	3 35	
S 27	21 6	21 47	3 51	25 48	2 27	24 27	2 10	20 41	2 24	10 24	1 7	21 3	1 25	20 49	0 7	21 58	1 21	12 36	10 4	23 9	23 3	21 9	17 21	3 36	
M28	21 17	23 50	3 0	25 50	2 27	24 8	1 56	20 41	2 26	10 28	1 7	21 4	1 24	20 50	0 7	21 58	1 21	12 35	10 4	23 9	23 3	21 7	17 22	3 36	
T 29	21 28	24 44	2 2	25 51	2 26	23 48	1 41	20 41	2 29	10 33	1 7	21 5	1 24	20 50	0 7	21 57	1 21	12 35	10 4	23 10	23 3	21 6	17 23	3 36	
W30	21s38	24n25	0n59	25s51	2s24	23s28	1s26	20n42	2n31	10s37	1n 7	21s 5	1n24	20s51	0n 7	21n57	1s21	12n35	10s 4	23s10	23s 4	21n 4	17s24	3n36	

ASTRODIENST EPHEMERIS for the year 1898
geocentric

DECEMBER 1898

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	4 39 29	8°51'26	9°47	29°39	10°R 1	8°11	0°41	14°4	4°7	23°R47	14°R49	8°D45	10°8	20°14	4°4	T 1
F 2	4 43 26	9°52'16	21°35	0°49	9°24	8°17	0°53	14°11	4°11	23°II45	14°II48	8°345	10°5	20°21	4°11	F 2
S 3	4 47 22	10°53'08	3°12	1°55	8°48	8°23	1°4	14°18	4°15	23°44	14°47	8°47	10°1	20°27	4°19	S 3
S 4	4 51 19	11°54'01	15°11	2°58	8°12	8°27	1°15	14°25	4°18	23°42	14°46	8°49	9°58	20°34	4°26	S 4
M 5	4 55 15	12°54'55	27°6	3°56	7°36	8°32	1°27	14°32	4°22	23°40	14°45	8°50	9°55	20°41	4°34	M 5
T 6	4 59 12	13°55'51	9°12	4°50	7°2	8°35	1°38	14°39	4°26	23°39	14°44	8°R51	9°52	20°47	4°41	T 6
W 7	5 3 9	14°56'48	21°34	5°39	6°28	8°38	1°49	14°46	4°29	23°37	14°42	8°51	9°49	20°54	4°49	W 7
T 8	5 7 5	15°57'46	4°17	6°22	5°56	8°39	2°0	14°53	4°33	23°35	14°41	8°50	9°46	21°1	4°56	T 8
F 9	5 11 2	16°58'45	17°24	6°57	5°25	8°40	2°11	15°0	4°37	23°34	14°40	8°48	9°42	21°7	5°0	F 9
S 10	5 14 58	17°59'45	0°15	7°25	4°56	8°R41	2°22	15°7	4°40	23°32	14°39	8°45	9°39	21°14	5°11	S 10
S 11	5 18 55	19°0'47	15°1	7°45	4°28	8°40	2°33	15°15	4°44	23°30	14°38	8°42	9°36	21°20	5°19	S 11
M 12	5 22 51	20°1'49	29°28	7°R55	4°3	8°39	2°44	15°22	4°47	23°28	14°37	8°39	9°33	21°27	5°26	M 12
T 13	5 26 48	21°2'53	14°14	7°54	3°40	8°37	2°55	15°29	4°51	23°27	14°35	8°37	9°30	21°34	5°34	T 13
W 14	5 30 44	22°3'57	29°14	7°43	3°19	8°34	3°5	15°36	4°55	23°25	14°34	8°36	9°27	21°40	5°41	W 14
T 15	5 34 41	23°5'02	14°18	7°20	3°0	8°30	3°16	15°43	4°58	23°23	14°33	8°D36	9°23	21°47	5°48	T 15
F 16	5 38 38	24°6'08	29°17	6°46	2°43	8°25	3°26	15°50	5°2	23°22	14°32	8°37	9°20	21°54	5°56	F 16
S 17	5 42 34	25°7'14	14°4	6°0	2°29	8°20	3°36	15°57	5°5	23°20	14°31	8°38	9°17	22°0	6°3	S 17
S 18	5 46 31	26°8'20	28°33	5°3	2°18	8°13	3°47	16°4	5°9	23°18	14°30	8°39	9°14	22°7	6°10	S 18
M 19	5 50 27	27°9'26	12°40	3°57	2°9	8°6	3°57	16°11	5°12	23°17	14°29	8°40	9°11	22°14	6°18	M 19
T 20	5 54 24	28°10'33	26°25	2°43	2°2	7°58	4°7	16°18	5°16	23°15	14°28	8°R40	9°7	22°20	6°25	T 20
W 21	5 58 20	29°11'39	9°49	1°24	1°58	7°49	4°17	16°25	5°19	23°13	14°26	8°40	9°4	22°27	6°32	W 21
T 22	6 2 17	0°12'46	22°52	0°1	1°D56	7°40	4°27	16°32	5°23	23°12	14°25	8°39	9°1	22°34	6°39	T 22
F 23	6 6 13	1°13'53	5°38	28°39	1°57	7°29	4°36	16°39	5°26	23°10	14°24	8°39	8°58	22°40	6°46	F 23
S 24	6 10 10	2°15'00	18°9	2°19	2°0	7°18	4°46	16°46	5°30	23°8	14°23	8°38	8°55	22°47	6°53	S 24
S 25	6 14 7	3°16'08	0°12	26°5	2°6	7°6	4°56	16°53	5°33	23°6	14°22	8°37	8°52	22°54	7°0	S 25
M 26	6 18 3	4°17'15	12°35	24°57	2°14	6°53	5°5	17°0	5°36	23°5	14°21	8°36	8°48	23°0	7°7	M 26
T 27	6 22 0	5°18'23	24°35	23°59	2°24	6°39	5°14	17°7	5°40	23°3	14°20	8°36	8°45	23°7	7°14	T 27
W 28	6 25 56	6°19'31	6°29	23°10	2°36	6°25	5°24	17°13	5°43	23°1	14°19	8°D36	8°42	23°14	7°21	W 28
T 29	6 29 53	7°20'39	18°19	22°31	2°51	6°10	5°33	17°20	5°46	23°0	14°18	8°36	8°39	23°20	7°28	T 29
F 30	6 33 49	8°21'48	0°1	22°3	3°7	5°54	5°42	17°27	5°50	22°58	14°17	8°R36	8°36	23°27	7°35	F 30
S 31	6 37 46	9°22'56	11°15	21°46	3°26	5°13	5°50	17°34	5°53	22°57	14°16	8°36	8°33	23°33	7°42	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	21s47	23n 0	0s 6	25s49	2s22	23s 8	1s11	20n42	2n34	10s40	1n 7	21s 6	1n24	20s52	0n 7	21n57
F 2	21 57	20 34	1 10	25 46	2 19	22 47	0 55	20 43	2 36	10 44	1 7	21 7	1 24	20 52	0 7	21 57
S 3	22 5	17 17	2 11	25 41	2 15	22 26	0 40	20 44	2 39	10 48	1 7	21 8	1 24	20 53	0 7	21 57
S 4	22 14	13 18	3 7	25 35	2 10	22 5	0 24	20 45	2 42	10 52	1 7	21 9	1 24	20 54	0 7	21 57
M 5	22 22	8 48	3 56	25 28	2 4	21 44	0 9	20 47	2 44	10 56	1 7	21 10	1 24	20 54	0 7	21 57
T 6	22 29	3 53	4 34	25 19	1 57	21 23	0n 7	20 49	2 47	11 0	1 7	21 11	1 24	20 55	0 7	21 57
W 7	22 36	1s16	5 1	25 9	1 49	21 2	0 22	20 50	2 50	11 4	1 7	21 12	1 24	20 56	0 7	21 57
T 8	22 43	6 31	5 15	24 58	1 40	20 42	0 37	20 53	2 52	11 7	1 8	21 12	1 24	20 56	0 7	21 57
F 9	22 49	11 38	5 12	24 46	1 30	20 22	0 52	20 55	2 55	11 11	1 8	21 13	1 24	20 57	0 7	21 57
S 10	22 55	16 23	4 52	24 33	1 18	20 2	1 7	20 57	2 58	11 15	1 8	21 14	1 24	20 58	0 7	21 57
S 11	23 0	20 24	4 15	24 19	1 5	19 43	1 21	21 0	3 0	11 18	1 8	21 15	1 24	20 58	0 7	21 57
M 12	23 5	23 18	3 20	24 4	0 51	19 25	1 35	21 3	3 3	11 22	1 8	21 16	1 24	20 59	0 7	21 56
T 13	23 9	24 41	2 11	23 49	0 36	19 8	1 48	21 6	3 6	11 25	1 8	21 17	1 24	21 0	0 7	21 56
W 14	23 13	24 19	0 52	23 32	0 19	18 51	2 1	21 10	3 8	11 29	1 8	21 17	1 24	21 0	0 7	21 56
T 15	23 16	22 10	0n32	23 16	0 1	18 35	2 13	21 13	3 11	11 32	1 8	21 18	1 23	21 1	0 7	21 56
F 16	23 19	18 29	1 52	22 59	0n18	18 20	2 25	21 17	3 14	11 36	1 8	21 19	1 23	21 2	0 7	21 56
S 17	23 22	13 41	3 4	22 41	0 38	18 7	2 37	21 21	3 17	11 39	1 9	21 20	1 23	21 2	0 7	21 56
S 18	23 24	8 11	4 3	22 23	0 58	17 54	2 47	21 26	3 19	11 42	1 9	21 20	1 23	21 3	0 7	21 56
M 19	23 25	2 25	4 46	22 6	1 18	17 42	2 58	21 30	3 22	11 46	1 9	21 21	1 23	21 4	0 7	21 56
T 20	23 26	3n19	5 10	21 48	1 37	17 31	3 7	21 35	3 25	11 49	1 9	21 22	1 23	21 4	0 7	21 56
W 21	23 27	8 45	5 17	21 31	1 56	17 21	3 17	21 40	3 27	11 52	1 9	21 23	1 23	21 5	0 7	21 56
T 22	23 27	13 39	5 8	21 15	2 13	17 12	3 25	21 45	3 30	11 55	1 9	21 23	1 23	21 6	0 7	21 56
F 23	23 27	17 51	4 43	20 59	2 28	17 5	3 33	21 50	3 33	11 59	1 9	21 24	1 23	21 6	0 7	21 56
S 24	23 26	21 10	4 5	20 45	2 40	16 58	3 41	21 55	3 35	12 2	1 9	21 25	1 23	21 7	0 7	21 56
S 25	23 25	23 28	3 17	20 33	2 51	16 52	3 48	22 1	3 38	12 5	1 10	21 26	1 23	21 7	0 7	21 55
M 26	23 23	24 38	2 20	20 23	2 59	16 47	3 55	22 7	3 40	12 8	1 10	21 26	1 23	21 8	0 7	21 55
T 27	23 21	24 38	1 17	20 15	3 4	16 43	4 1	22 13	3 43	12 11	1 10	21 27	1 23	21 9	0 7	21 55
W 28	23 18	23 29	0 12	20 9	3 7	16 40	4 6	22 19	3 45	12 14	1 10	21 28	1 23	21 9	0 7	21 55
T 29	23 15	21 19	0s54	20 6	3 8	16 37	4 12	22 25	3 48	12 17	1 10	21 28	1 23	21 10	0 7	21 55
F 30	23 11	18 14	1 57	20 6	3 8	16 36	4 16	22 31	3 50	12 19	1 10	21 29	1 23	21 10	0 7	21 55
S 31	23s 7	14n25	2s55	20s 7	3n 5	16s35	4n21	22n38	3n53	12s22	1n10	21s29	1n23	21s11	0n 7	21n55

Julian Day Number = 2414624.5, Delta T = -3.11 sec
Ecliptic obliquity = 23°27'10, Nutation = 0°00'16, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 23°19'43, Lahiri = 22°26'43