



Astrodienst Ephemeris Tables for the year 1888

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 1888
geocentric

JANUARY 1888

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	6 40 21	10 ³ 3'32	0 ⁰ 6	29 ³ 39	25 ¹¹ 31	12 ¹² 40	27 ¹¹ 31	4 ⁰ R51	17 ¹² 3	27 ⁰ R38	3 ⁰ R24	9 ⁰ R50	11 ⁰ 15	26 ⁰ Y 2	28 ⁰ R38	S 1
M 2	6 44 18	11 ⁰ 4'40	13 ⁰ 30	1 ⁰ 12	26 ⁰ 40	13 ⁰ 7	27 ⁰ 43	4 ⁰ 47	17 ⁰ 4	27 ⁰ 37	3 ⁰ II23	9 ⁰ D50	11 ⁰ 12	26 ⁰ 9	28 ⁰ II34	M 2
T 3	6 48 14	12 ⁰ 5'49	27 ⁰ 5	2 ⁰ 45	27 ⁰ 49	13 ⁰ 34	27 ⁰ 54	4 ⁰ 42	17 ⁰ 5	27 ⁰ 36	3 ⁰ 23	9 ⁰ 50	11 ⁰ 9	26 ⁰ 16	28 ⁰ 30	T 3
W 4	6 52 11	13 ⁰ 6'58	10 ⁰ 50	4 ⁰ 18	28 ⁰ 59	14 ⁰ 1	28 ⁰ 5	4 ⁰ 38	17 ⁰ 6	27 ⁰ 35	3 ⁰ 22	9 ⁰ 52	11 ⁰ 5	26 ⁰ 22	28 ⁰ 26	W 4
T 5	6 56 7	14 ⁰ 8'07	24 ⁰ 44	5 ⁰ 52	0 ⁰ 8	14 ⁰ 28	28 ⁰ 16	4 ⁰ 34	17 ⁰ 7	27 ⁰ 34	3 ⁰ 21	9 ⁰ 53	11 ⁰ 2	26 ⁰ 29	28 ⁰ 22	T 5
F 6	7 0 4	15 ⁰ 9'17	8 ⁰ 46	7 ⁰ 26	1 ⁰ 18	14 ⁰ 54	28 ⁰ 27	4 ⁰ 29	17 ⁰ 8	27 ⁰ 33	3 ⁰ 20	9 ⁰ R54	10 ⁰ 59	26 ⁰ 36	28 ⁰ 19	F 6
S 7	7 4 1	16 ⁰ 10'26	22 ⁰ 55	9 ⁰ 1	2 ⁰ 28	15 ⁰ 21	28 ⁰ 38	4 ⁰ 25	17 ⁰ 9	27 ⁰ 32	3 ⁰ 19	9 ⁰ 54	10 ⁰ 56	26 ⁰ 43	28 ⁰ 15	S 7
S 8	7 7 57	17 ⁰ 11'36	7 ⁰ 9	10 ⁰ 35	3 ⁰ 37	15 ⁰ 47	28 ⁰ 49	4 ⁰ 20	17 ⁰ 9	27 ⁰ 31	3 ⁰ 19	9 ⁰ 53	10 ⁰ 53	26 ⁰ 49	28 ⁰ 11	S 8
M 9	7 11 54	18 ⁰ 12'45	21 ⁰ 26	12 ⁰ 11	4 ⁰ 47	16 ⁰ 12	29 ⁰ 0	4 ⁰ 15	17 ⁰ 10	27 ⁰ 30	3 ⁰ 18	9 ⁰ 51	10 ⁰ 50	26 ⁰ 56	28 ⁰ 7	M 9
T 10	7 15 50	19 ⁰ 13'55	5 ⁰ 43	13 ⁰ 47	5 ⁰ 58	16 ⁰ 38	29 ⁰ 11	4 ⁰ 11	17 ⁰ 11	27 ⁰ 29	3 ⁰ 17	9 ⁰ 48	10 ⁰ 46	27 ⁰ 3	28 ⁰ 4	T 10
W 11	7 19 47	20 ⁰ 15'05	19 ⁰ 54	15 ⁰ 23	7 ⁰ 8	17 ⁰ 3	29 ⁰ 21	4 ⁰ 6	17 ⁰ 12	27 ⁰ 28	3 ⁰ 16	9 ⁰ 45	10 ⁰ 43	27 ⁰ 10	28 ⁰ 0	W 11
T 12	7 23 43	21 ⁰ 16'15	3 ⁰ 35	17 ⁰ 0	8 ⁰ 18	17 ⁰ 28	29 ⁰ 32	4 ⁰ 1	17 ⁰ 12	27 ⁰ 27	3 ⁰ 16	9 ⁰ 43	10 ⁰ 40	27 ⁰ 16	27 ⁰ 57	T 12
F 13	7 27 40	22 ⁰ 17'24	17 ⁰ 56	18 ⁰ 37	9 ⁰ 29	17 ⁰ 53	29 ⁰ 42	3 ⁰ 57	17 ⁰ 13	27 ⁰ 26	3 ⁰ 15	9 ⁰ 41	10 ⁰ 37	27 ⁰ 23	27 ⁰ 53	F 13
S 14	7 31 36	23 ⁰ 18'33	1 ⁰ 17	20 ⁰ 14	10 ⁰ 39	18 ⁰ 17	29 ⁰ 53	3 ⁰ 52	17 ⁰ 13	27 ⁰ 26	3 ⁰ 14	9 ⁰ 40	10 ⁰ 34	27 ⁰ 30	27 ⁰ 50	S 14
S 15	7 35 33	24 ⁰ 19'41	14 ⁰ 30	21 ⁰ 53	11 ⁰ 50	18 ⁰ 41	0 ⁰ 3	3 ⁰ 47	17 ⁰ 14	27 ⁰ 25	3 ⁰ 13	9 ⁰ D40	10 ⁰ 31	27 ⁰ 36	27 ⁰ 46	S 15
M 16	7 39 30	25 ⁰ 20'49	27 ⁰ 24	23 ⁰ 31	13 ⁰ 1	19 ⁰ 5	0 ⁰ 13	3 ⁰ 42	17 ⁰ 14	27 ⁰ 24	3 ⁰ 13	9 ⁰ 40	10 ⁰ 27	27 ⁰ 43	27 ⁰ 43	M 16
T 17	7 43 26	26 ⁰ 21'56	10 ⁰ 0	25 ⁰ 10	14 ⁰ 12	19 ⁰ 29	0 ⁰ 23	3 ⁰ 37	17 ⁰ 14	27 ⁰ 23	3 ⁰ 12	9 ⁰ 41	10 ⁰ 24	27 ⁰ 50	27 ⁰ 40	T 17
W 18	7 47 23	27 ⁰ 23'02	22 ⁰ 19	26 ⁰ 50	15 ⁰ 23	19 ⁰ 52	0 ⁰ 33	3 ⁰ 32	17 ⁰ 14	27 ⁰ 23	3 ⁰ 12	9 ⁰ 43	10 ⁰ 21	27 ⁰ 57	27 ⁰ 36	W 18
T 19	7 51 19	28 ⁰ 24'07	4 ⁰ 26	28 ⁰ 30	16 ⁰ 34	20 ⁰ 15	0 ⁰ 43	3 ⁰ 28	17 ⁰ 15	27 ⁰ 22	3 ⁰ 11	9 ⁰ 44	10 ⁰ 18	28 ⁰ 3	27 ⁰ 33	T 19
F 20	7 55 16	29 ⁰ 25'11	16 ⁰ 23	0 ⁰ 11	17 ⁰ 45	20 ⁰ 38	0 ⁰ 52	3 ⁰ 23	17 ⁰ 15	27 ⁰ 21	3 ⁰ 10	9 ⁰ 45	10 ⁰ 15	28 ⁰ 10	27 ⁰ 30	F 20
S 21	7 59 12	0 ⁰ 26'15	28 ⁰ 16	1 ⁰ 53	18 ⁰ 56	21 ⁰ 1	1 ⁰ 2	3 ⁰ 18	17 ⁰ 15	27 ⁰ 21	3 ⁰ 10	9 ⁰ R45	10 ⁰ 11	28 ⁰ 17	27 ⁰ 27	S 21
S 22	8 3 9	1 ⁰ 27'17	10 ⁰ 8	3 ⁰ 35	20 ⁰ 7	21 ⁰ 23	1 ⁰ 11	3 ⁰ 13	17 ⁰ R15	27 ⁰ 20	3 ⁰ 9	9 ⁰ 45	10 ⁰ 8	28 ⁰ 23	27 ⁰ 24	S 22
M 23	8 7 5	2 ⁰ 28'19	22 ⁰ 6	5 ⁰ 17	21 ⁰ 19	21 ⁰ 44	1 ⁰ 21	3 ⁰ 8	17 ⁰ 15	27 ⁰ 20	3 ⁰ 9	9 ⁰ 44	10 ⁰ 5	28 ⁰ 30	27 ⁰ 21	M 23
T 24	8 11 2	3 ⁰ 29'19	4 ⁰ 14	7 ⁰ 0	22 ⁰ 30	22 ⁰ 6	1 ⁰ 30	3 ⁰ 3	17 ⁰ 15	27 ⁰ 19	3 ⁰ 8	9 ⁰ 44	10 ⁰ 2	28 ⁰ 37	27 ⁰ 18	T 24
W 25	8 14 59	4 ⁰ 30'19	16 ⁰ 34	8 ⁰ 44	23 ⁰ 42	22 ⁰ 27	1 ⁰ 39	2 ⁰ 58	17 ⁰ 15	27 ⁰ 19	3 ⁰ 8	9 ⁰ 43	9 ⁰ 59	28 ⁰ 44	27 ⁰ 15	W 25
T 26	8 18 55	5 ⁰ 31'17	29 ⁰ 11	10 ⁰ 28	24 ⁰ 53	22 ⁰ 48	1 ⁰ 48	2 ⁰ 53	17 ⁰ 14	27 ⁰ 18	3 ⁰ 7	9 ⁰ 42	9 ⁰ 56	28 ⁰ 50	27 ⁰ 12	T 26
F 27	8 22 52	6 ⁰ 32'14	12 ⁰ 7	12 ⁰ 13	26 ⁰ 5	23 ⁰ 8	1 ⁰ 57	2 ⁰ 48	17 ⁰ 14	27 ⁰ 18	3 ⁰ 7	9 ⁰ 42	9 ⁰ 52	28 ⁰ 57	27 ⁰ 9	F 27
S 28	8 26 48	7 ⁰ 33'11	25 ⁰ 22	13 ⁰ 58	27 ⁰ 17	23 ⁰ 28	2 ⁰ 6	2 ⁰ 43	17 ⁰ 14	27 ⁰ 18	3 ⁰ 7	9 ⁰ 42	9 ⁰ 49	29 ⁰ 4	27 ⁰ 7	S 28
S 29	8 30 45	8 ⁰ 34'06	8 ⁰ 56	15 ⁰ 43	28 ⁰ 29	23 ⁰ 48	2 ⁰ 15	2 ⁰ 38	17 ⁰ 13	27 ⁰ 17	3 ⁰ 6	9 ⁰ D42	9 ⁰ 46	29 ⁰ 11	27 ⁰ 4	S 29
M 30	8 34 41	9 ⁰ 35'00	22 ⁰ 56	17 ⁰ 29	29 ⁰ 40	24 ⁰ 7	2 ⁰ 23	2 ⁰ 33	17 ⁰ 13	27 ⁰ 17	3 ⁰ 6	9 ⁰ R42	9 ⁰ 43	29 ⁰ 17	27 ⁰ 1	M 30
T 31	8 38 38	10 ⁰ 35'53	6 ⁰ 50	19 ⁰ 15	0 ⁰ 52	24 ⁰ 26	2 ⁰ 32	2 ⁰ 29	17 ⁰ 13	27 ⁰ 17	3 ⁰ 5	9 ⁰ 42	9 ⁰ 40	29 ⁰ 24	26 ⁰ II59	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	decl	lat
S 1	23s 4	19n16	0s53	24s16	0s49	16s32	2n42	3s 4	2n 7	18s46	0n53	19n30	0n28	6s 5	0n40	17n57	1s44	8n37	12s27	17n48	17n25	5n26	16n49	6s38									
M 2	22 59	17 6	0n20	24 21	0 55	16 49	2 41	3 14	2 7	18 48	0 53	19 32	0 28	6 6	0 40	17 57	1 44	8 37	12 26	17 48	17 26	5 28	16 49	6 38									
T 3	22 54	13 57	1 33	24 26	1 1	17 5	2 40	3 24	2 8	18 51	0 53	19 33	0 28	6 6	0 40	17 57	1 44	8 37	12 26	17 48	17 26	5 30	16 49	6 38									
W 4	22 48	10 0	2 42	24 29	1 6	17 22	2 39	3 34	2 8	18 53	0 53	19 34	0 28	6 6	0 40	17 57	1 44	8 37	12 26	17 47	17 27	5 32	16 49	6 38									
T 5	22 42	5 30	3 42	24 31	1 12	17 38	2 37	3 43	2 9	18 56	0 53	19 35	0 28	6 7	0 40	17 57	1 44	8 37	12 26	17 47	17 28	5 35	16 49	6 38									
F 6	22 35	0 39	4 29	24 32	1 17	17 53	2 36	3 53	2 10	18 58	0 53	19 36	0 28	6 7	0 40	17 56	1 44	8 37	12 26	17 47	17 29	5 37	16 49	6 38									
S 7	22 28	4s15	5 1	24 31	1 22	18 8	2 34	4 2	2 10	19 1	0 53	19 38	0 28	6 7	0 40	17 56	1 44	8 37	12 25	17 47	17 30	5 39	16 49	6 38									
S 8	22 21	8 57	5 14	24 29	1 27	18 23	2 33	4 12	2 11	19 3	0 53	19 39	0 28	6 8	0 40	17 56	1 44	8 37	12 25	17 47	17 31	5 41	16 49	6 38									
M 9	22 13	13 10	5 8	24 25	1 32	18 38	2 31	4 21	2 12	19 5	0 53	19 40	0 29	6 8	0 40	17 56	1 44	8 37	12 25	17 47	17 32	5 43	16 49	6 38									
T 10	22 4	16 37	4 43	24 20	1 36	18 52	2 29	4 30	2 12	19 7	0 53	19 41	0 29	6 8	0 40	17 56	1 44	8 38	12 25	17 48	17 32	5 46	16 49	6 37									
W 11	21 55	19 4	4 1	24 13	1 40	19 6	2 27	4 39	2 13	19 10	0 53	19 42	0 29	6 8	0 40	17 56	1 43	8 38	12 25	17 49	17 33	5 48	16 49	6 37									
T 12	21 46	20 19	3 5	24 6	1 44	19 19	2 25	4 48	2 13	19 12	0 53	19 44	0 29	6 9	0 40	17 55	1 43	8 38	12 24	17 50	17 34	5 50	16 49	6 37									
F 13	21 36	20 19	1 58	23 56	1 48	19 31	2 23	4 57	2 14	19 14	0 53	19 45	0 29	6 9	0 40	17 55	1 43	8 38	12 24	17 50	17 35	5 52	16 49	6 37									
S 14	21 26	19 8	0 46	23 45	1 51	19 44	2 21	5 6	2 15	19 16	0 53	19 46	0 29	6 9	0 40	17 55	1 43	8 38	12 24	17 50	17 36	5 54	16 49	6 37									
S 15	21 16	16 55	0s27	23 33	1 54	19 56	2 19	5 15	2 15	19 18	0 53	19 47	0 29	6 9	0 40	17 55	1 43	8 38	12 24	17 50	17 37	5 56	16 49	6 37									
M 16	21 5	13 53	1 37	23 19	1 57	20 7	2 16	5 23	2 16	19 20	0 53	19 49	0 29	6 9	0 40	17 55	1 43	8 38	12 23	17 50	17 38	5 59	16 49	6 36									
T 17	20 53	10 18	2 40	23 4	1 59	20 18	2 14	5 31	2 16	19 22	0 53	19 50	0 29	6 9	0 40	17 55	1 43	8 38	12 23	17 50	17 39	6 1	16 50	6 36									
W 18	20 42	6 20	3 35	22 47	2 1	20 28	2 12	5 40	2 17	19 24	0 53	19 51	0 30	6 9	0 40	17 55	1 43	8 38	12 23	17 50	17 39	6 3	16 50	6 36									
T 19	20 30	2 12	4 19	22 28	2 3	20 38	2 9	5 48	2 18	19 26	0 53	19 52	0 30	6 9	0 40	17 55	1 43	8 39	12 23	17 49	17 40	6 5	16 50	6 36									
F 20	20 17	1n58	4 51	22 8	2 4	20 47	2 6	5 56	2 18	19 28	0 53	19 54	0 30	6 9	0 40	17 55	1 43	8 39	12 22	17 49	17 41	6 7	16 50	6 36									
S 21	20 4	6 1	5 11	21 47	2 5	20 56	2 4	6 3	2 19	19 30	0 53	19 55	0 30	6 9	0 40	17 54	1 43	8 39	12 22	17 49	17 42	6 10	16 50	6 35									
S 22	19 51	9 51	5 17	21 23	2 5	21 4	2 1	6 11	2 20	19 32	0 54	19 56	0 30	6 9	0 40	17 54	1 43	8 39	12 22	17 49	17 43	6 12	16 50	6 35									
M 23	19 37	13 19	5 10	20 59	2 5	21 12	1 58	6 19	2 20	19 34	0 54	19 57	0 30	6 9	0 40	17 54	1 43	8 39	12 22	17 49	17 44	6 14	16 51	6 35									
T 24	19 23	16 16	4 49	20 32	2 5	21 19	1 56	6 26	2 21	19 36	0 54	19 59	0 30	6 9	0 40	17 54	1 43	8 39	12 21	17 49	17 45	6 16	16 51	6 35									
W 25	19 9	18 34	4 14	20 5	2 4	21 26	1 53	6 33	2 21	19 38	0 54	20 0	0 30	6 9	0 41	17 54	1 43	8 40	12 21	17 50	17 45	6 18	16 51	6 34									
T 26	18 54	20 1	3 26	19 35	2 3	21 31	1 50	6 40	2 22	19 39	0 54	20 1	0 30	6 9	0 41	17 54	1 43	8 40	12 21	17 50	17 46	6 21	16 51	6 34									
F 27	18 39	20 27	2 27	19 4	2 1	21 37	1 47	6 47	2 23	19 41	0 54	20 2	0 31	6 9	0 41	17 54	1 43	8 40	12 21	17 50	17 47	6 23	16 51	6 34									
S 28	18 24	19 47	1 19	18 32	1 58	21 42	1 44	6 54	2 23	19 43	0 54	20 4	0 31	6 9	0 41	17 54	1 42	8 40	12 20	17 50	17 48	6 25	16 52	6 34									
S 29	18 8	17 58	0	14 58	1 55	21 46	1 41	7 1	2 24	19 44	0 54	20 5	0 31	6 9	0 41	17 54	1 42	8 40	12 20	17 50	17 49	6 27	16 52	6 33									
M 30	17 52	15 4	0n12	17 23	1 52	21 49	1 38	7 7	2 24	19 46	0 54	20 6	0 31	6 8	0 41	17 54	1 42	8 41	12 20	17 50	17 50	6 29	16 52	6 33									
T 31	17s35	11n15	2n25	16s46	1s48	21s52	1n35	7s14	2n25	19s48	0n54	20n 7	0n31	6s 8	0n41	17n54	1s42	8n41	12s19	17n50	17n50	6n31	16n52	6s33									

ASTRODIENST EPHEMERIS for the year 1888

geocentric

FEBRUARY 1888

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	8 42 34	11°36'46	21°17' 3	21°38' 1	2°38' 4	24°45' 5	2°40' 4	2°R24	17°R12	27°R17	3°R 5	9°R41	9°Ω37	29°Υ31	26°R57	W 1
T 2	8 46 31	12°37'37	5°42'22	22°47' 3	3°16' 5	25°3' 3	2°48' 2	2°Ω19	17°Ω11	27°Ω16	3°II 5	9°Ω41	9°33' 29°37	26°II54	T 2	
F 3	8 50 28	13°38'27	19°41' 3	24°33' 5	4°29' 5	25°21' 3	2°56' 2	2°14' 17°11	27°16' 3	3°4' 9°41	9°30' 29°44	9°30' 29°51	26°52' 26°50	F 3		
S 4	8 54 24	14°39'17	3°15'59	26°18' 5	5°41' 5	25°38' 3	3°4' 2°9	17°10' 27°16	3°4' 9°41	9°27' 29°51	26°50' 26°50	S 4				
S 5	8 58 21	15°40'06	18°10' 2	28°3' 6	5°53' 5	25°55' 3	3°12' 2°5	17°9' 27°16	3°4' 9°D40	9°24' 29°58	26°48' 26°48	S 5				
M 6	9 2 17	16°40'54	2°14'14	29°47' 8	5°5' 5	26°12' 3	3°20' 2°0	17°9' 27°16	3°4' 9°41	9°21' 0°8	26°45' 26°45	M 6				
T 7	9 6 14	17°41'41	16°9' 1	30°18' 9	5°18' 9	26°28' 3	3°27' 1°55	17°8' 27°D16	3°3' 9°41	9°17' 0°11	26°43' 26°43	T 7				
W 8	9 10 10	18°42'27	29°53' 3	12°3' 10	5°30' 10	26°43' 3	3°35' 1°51	17°7' 27°16	3°3' 9°42	9°14' 0°18	26°42' 26°42	W 8				
T 9	9 14 7	19°43'12	13°32'56	4°51' 11	5°42' 11	26°58' 3	3°42' 1°46	17°6' 27°16	3°3' 9°43	9°11' 0°24	26°40' 26°40	T 9				
F 10	9 18 3	20°43'56	26°47' 6	29°53' 12	5°55' 12	27°13' 3	3°49' 1°42	17°5' 27°16	3°3' 9°44	9°8' 0°31	26°38' 26°38	F 10				
S 11	9 22 0	21°44'38	9°55'55	8°3' 14	5°8' 14	27°27' 3	3°56' 1°37	17°4' 27°16	3°3' 9°R44	9°5' 0°38	26°36' 26°36	S 11				
S 12	9 25 57	22°45'19	22°49' 9	34°15' 15	5°20' 15	27°41' 4	3°3' 1°33	17°3' 27°17	3°3' 9°44	9°2' 0°45	26°35' 26°35	S 12				
M13	9 29 53	23°45'59	5°30'30	11°0' 16	5°33' 16	27°54' 4	3°10' 1°28	17°1' 27°17	3°3' 9°42	8°58' 0°51	26°33' 26°33	M13				
T 14	9 33 50	24°46'37	17°57'12	12°23' 17	5°45' 17	28°6' 4	3°16' 1°24	17°0' 27°17	3°3' 9°41	8°55' 0°58	26°32' 26°32	T 14				
W15	9 37 46	25°47'14	0°12'12	13°39' 18	5°58' 18	28°19' 4	3°23' 1°20	16°59' 27°17	3°3' 9°38	8°52' 1°5	26°30' 26°30	W15				
T 16	9 41 43	26°47'49	12°17'14	14°50' 20	5°11' 20	28°30' 4	3°29' 1°15	16°58' 27°18	3°3' 9°35	8°49' 1°11	26°29' 26°29	T 16				
F 17	9 45 39	27°48'22	24°14'15	54°21' 21	5°23' 21	28°41' 4	3°35' 1°11	16°56' 27°18	3°3' 9°33	8°46' 1°18	26°28' 26°28	F 17				
S 18	9 49 36	28°48'53	6°8'7	16°51' 22	5°36' 22	28°51' 4	3°41' 1°7	16°55' 27°18	3°3' 9°30	8°42' 1°25	26°27' 26°27	S 18				
S 19	9 53 32	29°49'23	17°59'17	39°17' 23	5°49' 23	29°1' 4	3°47' 1°3	16°53' 27°19	3°3' 9°29	8°39' 1°32	26°26' 26°26	S 19				
M20	9 57 29	0°49'51	29°55'18	19°25' 2	5°10' 2	29°10' 4	3°52' 0°59	16°52' 27°19	3°3' 9°D28	8°36' 1°38	26°25' 26°25	M20				
T 21	10 1 26	1°50'17	12°11'0	18°49' 26	5°15' 26	29°19' 4	3°58' 0°55	16°50' 27°20	3°3' 9°29	8°33' 1°45	26°24' 26°24	T 21				
W22	10 5 22	2°50'41	24°18'19	10°19' 27	5°28' 27	29°27' 5	3°3' 0°51	16°49' 27°20	3°3' 9°30	8°30' 1°52	26°23' 26°23	W22				
T 23	10 9 19	3°51'03	6°53'55	19°21' 28	5°40' 28	29°35' 5	3°8' 0°48	16°47' 27°21	3°3' 9°32	8°27' 1°59	26°22' 26°22	T 23				
F 24	10 13 15	4°51'23	19°53'19	23°19' 29	5°53' 29	29°41' 5	3°13' 0°44	16°46' 27°21	3°3' 9°33	8°23' 2°5	26°22' 26°22	F 24				
S 25	10 17 12	5°51'42	3°14'14	19°14' 1	5°6' 1	29°48' 5	3°18' 0°41	16°44' 27°22	3°3' 9°R34	8°20' 2°12	26°21' 26°21	S 25				
S 26	10 21 8	6°51'58	17°1'18	56°2' 19	5°53' 19	29°53' 5	3°23' 0°37	16°42' 27°22	3°4' 9°34	8°17' 2°19	26°21' 26°21	S 26				
M27	10 25 5	7°52'13	1°11'11	18°29' 3	5°32' 3	29°58' 5	3°27' 0°34	16°40' 27°23	3°4' 9°33	8°14' 2°25	26°21' 26°21	M27				
T 28	10 29 1	8°52'25	15°40'17	53°17' 4	5°45' 4	0°11' 2	5°32' 0°30	16°38' 27°24	3°4' 9°30	8°11' 2°32	26°20' 26°20	T 28				
W29	10 32 58	9°52'36	0°42'23	17°10'17	5°58' 17	0°11' 6	5°36' 0°27	16°37' 27°25	3°4' 9°Ω26	8°8' 2°39	26°20' 26°20	W29				

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat	
W 1	17s19	6n46	3n30	16s 8	1s43	21s55	1n31	7s20	2n26	19s49	0n54	20n 8	0n31	6s 8	0n41	17n54	1s42	8n41	12s19	17n50	17n51	6n34	16n53	6s32	
T 2	17 2	1 53	4 22	15 28	1 38	21 57	1 28	7 26	2 26	19 51	0 54	20 10	0 31	6 8	0 41	17 54	1 42	8 41	12 19	17 50	17 52	6 36	16 53	6 32	
F 3	16 44	3s 6	4 58	14 47	1 32	21 58	1 25	7 32	2 27	19 52	0 54	20 11	0 31	6 7	0 41	17 54	1 42	8 41	12 19	17 50	17 53	6 38	16 53	6 32	
S 4	16 27	7 54	5 16	14 5	1 25	21 58	1 22	7 37	2 28	19 54	0 54	20 12	0 31	6 7	0 41	17 54	1 42	8 42	12 18	17 50	17 54	6 40	16 54	6 31	
S 5	16 9	12 13	5 14	13 22	1 18	21 58	1 18	7 43	2 28	19 55	0 55	20 13	0 31	6 7	0 41	17 54	1 42	8 42	12 18	17 50	17 55	6 42	16 54	6 31	
M 6	15 51	15 50	4 53	12 38	1 10	21 57	1 15	7 48	2 29	19 56	0 55	20 14	0 31	6 6	0 41	17 54	1 42	8 42	12 18	17 50	17 56	6 45	16 54	6 31	
T 7	15 32	18 30	4 15	11 53	1 1	21 56	1 12	7 54	2 29	19 58	0 55	20 15	0 32	6 6	0 41	17 54	1 42	8 42	12 17	17 50	17 56	6 47	16 54	6 30	
W 8	15 14	20 4	3 23	11 8	0 51	21 54	1 8	7 59	2 30	19 59	0 55	20 16	0 32	6 6	0 41	17 54	1 42	8 43	12 17	17 50	17 57	6 49	16 55	6 30	
T 9	14 55	20 27	2 21	10 22	0 40	21 51	1 5	8 4	2 30	20 0	0 55	20 18	0 32	6 5	0 41	17 54	1 42	8 43	12 17	17 50	17 58	6 51	16 55	6 30	
F 10	14 35	19 39	1 11	9 36	0 31	20 48	1 2	8 8	2 31	20 2	0 55	20 19	0 32	6 5	0 41	17 55	1 42	8 43	12 17	17 49	17 59	6 53	16 55	6 29	
S 11	14 16	17 47	0s 1	8 50	0 18	21 44	0 58	8 13	2 32	20 3	0 55	20 20	0 32	6 4	0 41	17 55	1 42	8 43	12 16	17 49	18 0	6 56	16 56	6 29	
S 12	13 56	15 3	1 12	8 4	0 6	21 40	0 55	8 17	2 32	20 4	0 55	20 21	0 32	6 4	0 41	17 55	1 42	8 44	12 16	17 49	18 1	6 58	16 56	6 28	
M13	13 36	11 38	2 18	7 19	0n 8	21 34	0 52	8 21	2 33	20 5	0 55	20 22	0 32	6 4	0 41	17 55	1 42	8 44	12 16	17 50	18 1	7 0	16 57	6 28	
T 14	13 16	7 46	3 16	6 36	0 21	21 29	0 48	8 25	2 33	20 6	0 55	20 23	0 32	6 3	0 41	17 55	1 41	8 44	12 15	17 50	18 2	7 2	16 57	6 28	
W15	12 56	3 39	4 4	5 53	0 36	21 22	0 45	8 29	2 34	20 7	0 55	20 24	0 32	6 3	0 41	17 55	1 41	8 44	12 15	17 51	18 3	7 4	16 57	6 27	
T 16	12 35	0n33	4 40	5 12	0 50	21 15	0 41	8 33	2 34	20 8	0 55	20 25	0 32	6 2	0 41	17 55	1 41	8 45	12 15	17 52	18 4	7 7	16 58	6 27	
F 17	12 15	4 41	5 4	4 33	1 6	21 7	0 38	8 36	2 35	20 9	0 56	20 26	0 32	6 1	0 41	17 55	1 41	8 45	12 15	17 52	18 5	7 9	16 58	6 26	
S 18	11 54	8 37	5 15	3 57	1 21	20 59	0 35	8 39	2 35	20 10	0 56	20 27	0 32	6 1	0 41	17 56	1 41	8 45	12 14	17 53	18 6	7 11	16 58	6 26	
S 19	11 32	12 12	5 12	3 24	1 36	20 50	0 31	8 42	2 36	20 11	0 56	20 28	0 33	6 0	0 41	17 56	1 41	8 46	12 14	17 53	18 6	7 13	16 59	6 26	
M20	11 11	15 20	4 55	2 55	1 52	20 41	0 28	8 45	2 36	20 12	0 56	20 29	0 33	6 0	0 41	17 56	1 41	8 46	12 14	17 54	18 7	7 15	16 59	6 25	
T 21	10 50	17 51	4 26	2 29	2 7	20 31	0 25	8 48	2 37	20 13	0 56	20 30	0 33	5 59	0 41	17 56	1 41	8 46	12 13	17 53	18 8	7 17	17 0	6 25	
W22	10 28	19 36	3 44	2 7	2 22	20 20	0 21	8 50	2 37	20 14	0 56	20 31	0 33	5 58	0 41	17 56	1 41	8 47	12 13	17 53	18 9	7 20	17 0	6 24	
T 23	10 6	20 27	2 50	1 49	2 36	20 9	0 18	8 52	2 38	20 15	0 56	20 31	0 33	5 58	0 41	17 56	1 41	8 47	12 13	17 53	18 10	7 22	17 0	6 24	
F 24	9 44	20 14	1 46	1 37	2 49	19 57	0 15	8 54	2 38	20 16	0 56	20 32	0 33	5 57	0 41	17 57	1 41	8 47	12 12	17 52	18 11	7 24	17 1	6 23	
S 25	9 22	18 53	0 35	1 29	3 2	19 44	0 11	8 56	2 38	20 16	0 56	20 33	0 33	5 57	0 41	17 57	1 41	8 48	12 12	17 52	18 11	7 26	17 1	6 23	
S 26	9 0	16 23	0n41	1 26	3 13	19 31	0 8	8 57	2 39	20 17	0 56	20 34	0 33	5 56	0 41	17 57	1 41	8 48	12 12	17 52	18 12	7 28	17 2	6 23	
M27	8 37	12 52	1 56	1 27	3 22	19 18	0 5	8 59	2 39	20 18	0 56	20 35	0 33	5 55	0 41	17 57	1 41	8 48	12 12	17 52	18 13	7 31	17 2	6 22	
T 28	8 15	8 29	3 5	1 34	3 30	19 3	0 2	9 0	2 40	20 19	0 57	20 36	0 33	5 54	0 41	17 57	1 41	8 49	12 11	17 53	18 14	7 33	17 3	6 22	
W29	7s52	3n34	4n 3	1s45	3n36	18s49	0s 1	9s 1	2n40	20s19	0n57	20n36	0n33	5s54	0n41	17n58	1s41	8n49	12s11	17n54	18n15	7n35	17n 3	6s21	

ASTRODIENST EPHEMERIS for the year 1888

geocentric

MARCH 1888

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	10 36 55	10 ^h 52'45	15 ^h 11	16°R21	7 ^h 11	0 ^h 9	5 ^h 40	0°R24	16°R35	27 ^h 25	3 ^h 5	9°R21	8 ^h 4	2 ^h 46	26°D20	T 1
F 2	10 40 51	11°52'53	29°57	15 ^h 26	8°25	0°11	5°43	0 ^h 21	16 ^h 33	27°26	3°5	9 ^h 17	8°1	2°52	26 ^h 20	F 2
S 3	10 44 48	12°52'59	14 ^h 34	14°28	9°38	0°12	5°47	0°18	16°31	27°27	3°5	9°13	7°58	2°59	26°20	S 3
S 4	10 48 44	13°53'03	28°57	13°27	10°51	0°R13	5°51	0°15	16°29	27°28	3°6	9°10	7°55	3°6	26°20	S 4
M 5	10 52 41	14°53'06	13 ^h 27	12°26	12°4	0°13	5°54	0°12	16°27	27°29	3°6	9°D 9	7°52	3°13	26°21	M 5
T 6	10 56 37	15°53'08	26°49	11°25	13°17	0°12	5°57	0°9	16°25	27°30	3°6	9°10	7°48	3°19	26°21	T 6
W 7	11 0 34	16°53'08	10 ^h 31	10°27	14°30	0°11	6°0	0°7	16°23	27°31	3°7	9°11	7°45	3°26	26°21	W 7
T 8	11 4 30	17°53'06	23°31	9°31	15°44	0°8	6°3	0°4	16°20	27°32	3°7	9°13	7°42	3°33	26°22	T 8
F 9	11 8 27	18°53'02	6 ^h 29	8°39	16°57	0°5	6°5	0°2	16°18	27°33	3°8	9°R13	7°39	3°39	26°23	F 9
S 10	11 12 24	19°52'57	19°14	7°53	18°10	0°1	6°8	29°59	16°16	27°34	3°8	9°13	7°36	3°46	26°23	S 10
S 11	11 16 20	20°52'50	1 ^h 48	7°12	19°23	29°57	6°10	29°57	16°14	27°35	3°9	9°11	7°33	3°53	26°24	S 11
M12	11 20 17	21°52'41	14°12	6°36	20°37	29°51	6°12	29°55	16°12	27°36	3°9	9°6	7°29	4°0	26°25	M12
T 13	11 24 13	22°52'30	26°27	6°7	21°50	29°45	6°14	29°53	16°9	27°37	3°10	8°59	7°26	4°6	26°26	T 13
W14	11 28 10	23°52'17	8 ^h 34	5°45	23°3	29°38	6°15	29°51	16°7	27°38	3°10	8°51	7°23	4°13	26°27	W14
T 15	11 32 6	24°52'02	20°34	5°28	24°17	29°31	6°17	29°50	16°5	27°39	3°11	8°42	7°20	4°20	26°28	T 15
F 16	11 36 3	25°51'45	2 ^h 29	5°19	25°30	29°22	6°18	29°48	16°2	27°41	3°12	8°33	7°17	4°26	26°29	F 16
S 17	11 39 59	26°51'26	14°20	5°D15	26°43	29°13	6°19	29°46	16°0	27°42	3°12	8°25	7°14	4°33	26°30	S 17
S 18	11 43 56	27°51'04	26°12	5°17	27°57	29°3	6°20	29°45	15°57	27°43	3°13	8°18	7°10	4°40	26°32	S 18
M19	11 47 52	28°50'40	8 ^h 31	5°25	29°10	28°52	6°21	29°43	15°55	27°45	3°13	8°14	7°7	4°47	26°33	M19
T 20	11 51 49	29°50'15	20°9	5°39	0 ^h 23	28°41	6°21	29°42	15°53	27°46	3°14	8°11	7°4	4°53	26°35	T 20
W21	11 55 46	0 ^h 49'46	2 ^h 23	5°57	1°37	28°28	6°21	29°41	15°50	27°47	3°15	8°D11	7°1	5°0	26°36	W21
T 22	11 59 42	1°49'16	14°54	6°21	2°50	28°15	6°R22	29°40	15°48	27°49	3°16	8°11	6°58	5°7	26°38	T 22
F 23	12 3 39	2°48'43	27°47	6°49	4°3	28°2	6°22	29°39	15°45	27°50	3°16	8°12	6°54	5°14	26°40	F 23
S 24	12 7 35	3°48'08	11 ^h 12	6°72	5°17	27°47	6°21	29°38	15°43	27°52	3°17	8°R13	6°51	5°20	26°42	S 24
S 25	12 11 32	4°47'31	24°54	7°59	6°30	27°32	6°21	29°37	15°40	27°53	3°18	8°11	6°48	5°27	26°44	S 25
M26	12 15 28	5°46'51	9 ^h 10	8°40	7°44	27°16	6°20	29°37	15°38	27°55	3°19	8°8	6°45	5°34	26°46	M26
T 27	12 19 25	6°46'09	23°51	9°25	8°57	27°0	6°20	29°36	15°35	27°56	3°19	8°2	6°42	5°40	26°48	T 27
W28	12 23 21	7°45'25	8 ^h 52	10°13	10°10	26°43	6°19	29°36	15°33	27°58	3°20	7°54	6°39	5°47	26°50	W28
T 29	12 27 18	8°44'39	24°3	11°4	11°24	26°25	6°17	29°36	15°30	27°59	3°21	7°45	6°35	5°54	26°52	T 29
F 30	12 31 15	9°43'50	9 ^h 13	11°59	12°37	26°7	6°16	29°35	15°27	28°1	3°22	7°36	6°32	6°1	26°55	F 30
S 31	12 35 11	10 ^h 43'01	24 ^h 13	12 ^h 56	13 ^h 51	25°48	6°15	29°D35	15°25	28°3	3°23	7°28	6°D29	6°7	26°57	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
T 1	7s29	1s36	4n45	2s 1	3n40	18s34	0s 5	9s 2	2n40	20s20	0n57	20n37	0n33	5s53	0n41	17n58	1s40	8n49	12s11	17n55	18n16	7n37	17n 3	6s21			
F 2	7 7	6 39	5 8	2 20	3 42	18 18	0 8	9 2	2 40	20 20	0 57	20 38	0 33	5 52	0 41	17 58	1 40	8 50	12 10	17 57	18 16	7 39	17 4	6 20			
S 3	6 44	11 16	5 10	2 43	3 42	18 1	0 11	9 2	2 41	20 21	0 57	20 39	0 33	5 51	0 42	17 58	1 40	8 50	12 10	17 58	18 17	7 41	17 4	6 20			
S 4	6 21	15 9	4 54	3 8	3 39	17 45	0 14	9 2	2 41	20 21	0 57	20 39	0 33	5 51	0 42	17 59	1 40	8 50	12 10	17 58	18 18	7 44	17 5	6 19			
M 5	5 57	18 5	4 19	3 35	3 35	17 27	0 17	9 2	2 41	20 22	0 57	20 40	0 34	5 50	0 42	17 59	1 40	8 51	12 10	17 59	18 19	7 46	17 5	6 19			
T 6	5 34	19 55	3 30	4 4	3 28	17 9	0 20	9 2	2 41	20 22	0 57	20 40	0 34	5 49	0 42	17 59	1 40	8 51	12 9	17 58	18 20	7 48	17 6	6 19			
W 7	5 11	20 33	2 31	4 34	3 20	16 51	0 23	9 1	2 41	20 23	0 57	20 41	0 34	5 48	0 42	17 59	1 40	8 51	12 9	17 58	18 20	7 50	17 6	6 18			
T 8	4 47	20 1	1 24	5 4	3 10	16 32	0 26	9 0	2 42	20 23	0 57	20 42	0 34	5 47	0 42	18 0	1 40	8 52	12 9	17 58	18 21	7 52	17 7	6 18			
F 9	4 24	18 25	0 15	5 33	2 59	16 13	0 29	8 59	2 42	20 23	0 58	20 42	0 34	5 46	0 42	18 0	1 40	8 52	12 8	17 57	18 22	7 55	17 7	6 17			
S 10	4 1	15 55	0s54	6 2	2 47	15 53	0 31	8 58	2 42	20 24	0 58	20 43	0 34	5 46	0 42	18 0	1 40	8 52	12 8	17 58	18 23	7 57	17 8	6 17			
S 11	3 37	12 42	1 59	6 30	2 34	15 33	0 34	8 56	2 42	20 24	0 58	20 43	0 34	5 45	0 42	18 1	1 40	8 53	12 8	17 58	18 24	7 59	17 8	6 16			
M12	3 13	8 57	2 58	6 55	2 20	15 13	0 37	8 54	2 42	20 24	0 58	20 44	0 34	5 44	0 42	18 1	1 40	8 53	12 8	17 59	18 25	8 1	17 9	6 16			
T 13	2 50	4 53	3 47	7 19	2 6	14 52	0 39	8 52	2 41	20 25	0 58	20 44	0 34	5 43	0 42	18 1	1 40	8 53	12 7	18 1	18 25	8 3	17 9	6 15			
W14	2 26	0 40	4 26	7 41	1 51	14 30	0 42	8 50	2 41	20 25	0 58	20 45	0 34	5 42	0 42	18 1	1 40	8 54	12 7	18 3	18 26	8 5	17 10	6 15			
T 15	2 2	3n31	4 52	8 1	1 36	14 8	0 45	8 48	2 41	20 25	0 58	20 45	0 34	5 41	0 42	18 2	1 40	8 54	12 7	18 6	18 27	8 8	17 10	6 14			
F 16	1 39	7 33	5 5	8 19	1 21	13 46	0 47	8 45	2 41	20 25	0 58	20 46	0 34	5 40	0 42	18 2	1 40	8 55	12 7	18 8	18 28	8 10	17 10	6 14			
S 17	1 15	11 17	5 5	8 34	1 7	13 23	0 50	8 42	2 41	20 25	0 58	20 46	0 34	5 39	0 42	18 2	1 40	8 55	12 6	18 10	18 29	8 12	17 11	6 14			
S 18	0 51	14 34	4 52	8 46	0 52	13 0	0 52	8 39	2 40	20 25	0 58	20 46	0 34	5 38	0 42	18 3	1 39	8 55	12 6	18 12	18 29	8 14	17 11	6 13			
M19	0 28	17 17	4 27	8 57	0 38	12 37	0 54	8 35	2 40	20 25	0 58	20 47	0 34	5 37	0 42	18 3	1 39	8 56	12 6	18 13	18 30	8 16	17 12	6 13			
T 20	0 4	19 17	3 49	9 5	0 24	12 13	0 57	8 31	2 39	20 25	0 59	20 47	0 34	5 37	0 42	18 4	1 39	8 56	12 5	18 14	18 31	8 19	17 12	6 12			
W21	0n20	20 26	3 0	9 10	0 10	11 49	0 59	8 28	2 39	20 25	0 59	20 47	0 34	5 36	0 42	18 4	1 39	8 56	12 5	18 14	18 32	8 21	17 13	6 12			
T 22	0 43	20 36	2 2	9 14	0s 3	11 25	1 1	8 24	2 38	20 25	0 59	20 47	0 34	5 35	0 42	18 4	1 39	8 57	12 5	18 14	18 33	8 23	17 13	6 11			
F 23	1 7	19 42	0 56	9 15	0 15	11 0	1 3	8 19	2 38	20 25	0 59	20 48	0 34	5 34	0 42	18 5	1 39	8 57	12 5	18 13	18 33	8 25	17 14	6 11			
S 24	1 31	17 42	0n16	9 14	0 27	10 35	1 5	8 15	2 37	20 25	0 59	20 48	0 34	5 33	0 42	18 5	1 39	8 58	12 4	18 13	18 34	8 27	17 14	6 10			
S 25	1 54	14 37	1 28	9 11	0 39	10 10	1 7	8 10	2 36	20 25	0 59	20 48	0 34	5 32	0 42	18 5	1 39	8 58	12 4	18 14	18 35	8 29	17 15	6 10			
M26	2 18	10 34	2 38	9 6	0 50	9 44	1 9	8 5	2 36	20 25	0 59	20 48	0 34	5 31	0 42	18 6	1 39	8 58	12 4	18 15	18 36	8 32	17 15	6 10			
T 27	2 41	5 47	3 39	8 59	1 0	9 19	1 11	8 0	2 35	20 24	0 59	20 48	0 35	5 30	0 42	18 6	1 39	8 59	12 4	18 16	18 37	8 34	17 16	6 9			
W28	3 5	0 34	4 26	8 50	1 10	8 53	1 13	7 55	2 34	20 24	0 59	20 49	0 35	5 29	0 42	18 7	1 39	8 59	12 3	18 18	18 37	8 36	17 16	6 9			
T 29	3 28	4s45	4 55	8 39	1 20	8 26	1 14	7 49	2 33	20 24	0 59	20 49	0 35	5 28	0 42	18 7	1 39	9 0	12 3	18 21	18 38	8 38	17 17	6 8			
F 30	3 51	9 46	5 4	8 26	1 29	8 0	1 16	7 44	2 32	20 23	0 59	20 49	0 35	5 27	0 42	18 7	1 39	9 0	12 3	18 23	18 39	8 40	17 17	6 8			
S 31	4n15	14s 8	4n51	8s12	1s37	7s33	1s17	7s38	2n31	20s23	0n59	20n49	0n35	5s26	0n42	18n 8	1s39	9n 0	12s 3	18n25	18n40	8n42	17n18	6s 7			

ASTRODIENST EPHEMERIS for the year 1888
geocentric

APRIL 1888

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
S 1	12 39 8	11°42'09	8♌53	13♋57	15♊4	25°R29	6°R13	29°☾35	15°R22	28♎4	3♐24	7°R21	6♑26	6♒14	27♈0	S 1
M 2	12 43 4	12°41'15	23°11	15° 0	16°18	25♊9	6♋11	29°36	15♌20	28° 6	3°25	7♍18	6°23	6°21	27° 2	M 2
T 3	12 47 1	13°40'20	7♎2	16° 5	17°31	24°49	6° 9	29°36	15°17	28° 8	3°25	7°16	6°19	6°27	27° 5	T 3
W 4	12 50 57	14°39'23	20°29	17°13	18°44	24°28	6° 7	29°36	15°15	28° 9	3°26	7°D16	6°16	6°34	27° 8	W 4
T 5	12 54 54	15°38'25	3♎34	18°24	19°58	24° 7	6° 4	29°37	15°12	28°11	3°27	7°R16	6°13	6°41	27°10	T 5
F 6	12 58 50	16°37'24	16°20	19°36	21°11	23°45	6° 2	29°37	15° 9	28°13	3°28	7°16	6°10	6°48	27°13	F 6
S 7	13 2 47	17°36'22	28°50	20°51	22°25	23°23	5°59	29°38	15° 7	28°15	3°29	7°14	6° 7	6°54	27°16	S 7
S 8	13 6 44	18°35'18	11♋10	22° 8	23°38	23° 1	5°56	29°39	15° 4	28°16	3°30	7° 9	6° 4	7° 1	27°19	S 8
M 9	13 10 40	19°34'12	23°20	23°26	24°52	22°39	5°53	29°40	15° 2	28°18	3°31	7° 2	6° 0	7° 8	27°22	M 9
T 10	13 14 37	20°33'04	5♎23	24°47	26° 5	22°16	5°49	29°41	14°59	28°20	3°32	6°52	5°57	7°15	27°26	T 10
W11	13 18 33	21°31'54	17°22	26°10	27°19	21°53	5°46	29°42	14°57	28°22	3°33	6°39	5°54	7°21	27°29	W11
T 12	13 22 30	22°30'42	29°17	27°34	28°32	21°30	5°42	29°43	14°54	28°24	3°34	6°25	5°51	7°28	27°32	T 12
F 13	13 26 26	23°29'28	11♎9	29° 0	29°46	21° 7	5°38	29°44	14°51	28°26	3°36	6°12	5°48	7°35	27°35	F 13
S 14	13 30 23	24°28'13	23° 1	0♎28	0♎59	20°45	5°34	29°46	14°49	28°28	3°37	5°59	5°45	7°41	27°39	S 14
S 15	13 34 19	25°26'55	4♐53	1°58	2°13	20°22	5°30	29°47	14°46	28°30	3°38	5°48	5°41	7°48	27°42	S 15
M16	13 38 16	26°25'35	16°49	3°30	3°26	19°59	5°26	29°49	14°44	28°32	3°39	5°39	5°38	7°55	27°46	M16
T 17	13 42 12	27°24'13	28°52	5° 3	4°39	19°36	5°21	29°51	14°41	28°34	3°40	5°34	5°35	8° 2	27°50	T 17
W18	13 46 9	28°22'48	11♎5	6°38	5°53	19°14	5°16	29°53	14°39	28°36	3°41	5°31	5°32	8° 8	27°53	W18
T 19	13 50 6	29°21'22	23°33	8°14	7° 6	18°51	5°12	29°55	14°36	28°38	3°42	5°30	5°29	8°15	27°57	T 19
F 20	13 54 2	0♒19'53	6♑21	9°53	8°20	18°29	5° 7	29°57	14°34	28°40	3°43	5°30	5°25	8°22	28° 1	F 20
S 21	13 57 59	1°18'22	19°34	11°33	9°33	18° 8	5° 2	29°59	14°31	28°42	3°45	5°30	5°22	8°28	28° 5	S 21
S 22	14 1 55	2°16'49	3♎14	13°14	10°47	17°46	4°56	0♑1	14°29	28°44	3°46	5°28	5°19	8°35	28° 9	S 22
M23	14 5 52	3°15'14	17°24	14°58	12° 0	17°25	4°51	0° 4	14°27	28°46	3°47	5°24	5°16	8°42	28°13	M23
T 24	14 9 48	4°13'36	2♊2	16°43	13°14	17° 5	4°45	0° 6	14°24	28°48	3°48	5°17	5°13	8°49	28°17	T 24
W25	14 13 45	5°11'57	17° 4	18°30	14°27	16°44	4°40	0° 9	14°22	28°50	3°49	5° 8	5°10	8°55	28°21	W25
T 26	14 17 41	6°10'16	2♎21	20°18	15°41	16°25	4°34	0°12	14°19	28°52	3°51	4°57	5° 6	9° 2	28°25	T 26
F 27	14 21 38	7° 8'33	17°42	22° 9	16°54	16° 6	4°28	0°14	14°17	28°54	3°52	4°46	5° 3	9° 9	28°29	F 27
S 28	14 25 35	8° 6'48	2♌56	24° 1	18° 7	15°47	4°22	0°17	14°15	28°56	3°53	4°36	5° 0	9°16	28°34	S 28
S 29	14 29 31	9° 5'01	17°51	25°55	19°21	15°29	4°16	0°20	14°13	28°58	3°54	4°28	4°57	9°22	28°38	S 29
M30	14 33 28	10♒3'13	2♒22	27°Y50	20°Y34	15♊12	4♌10	0♑23	14♊10	29♎0	3♐56	4♑23	4♑54	9♒29	28♐43	M30

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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	decl	lat	decl	decl	decl	decl	lat	decl	decl	decl	lat
S 1	4n38	17s31	4n19	7s56	1s45	7s 6	1s19	7s32	2n29	20s23	1n 0	20n49	0n35	5s25	0n42	18n 8	1s39	9n 1	12s 2	18n27	18n41	8n45	17n18	6s 7									
M 2	5 1	19 45	3 32	7 38	1 52	6 39	1 20	7 26	2 28	20 22	1 0	20 49	0 35	5 24	0 42	18 9	1 39	9 1	12 2	18 28	18 41	8 47	17 19	6 7									
T 3	5 24	20 43	2 34	7 19	1 59	6 11	1 22	7 20	2 27	20 22	1 0	20 49	0 35	5 23	0 42	18 9	1 39	9 1	12 2	18 28	18 42	8 49	17 19	6 6									
W 4	5 47	20 26	1 28	6 58	2 5	5 44	1 23	7 14	2 25	20 22	1 0	20 49	0 35	5 22	0 42	18 9	1 39	9 2	12 2	18 28	18 43	8 51	17 20	6 6									
T 5	6 10	19 3	0 20	6 35	2 10	5 16	1 24	7 8	2 24	20 21	1 0	20 49	0 35	5 21	0 42	18 10	1 39	9 2	12 2	18 28	18 44	8 53	17 20	6 5									
F 6	6 32	16 43	0s48	6 12	2 15	4 48	1 25	7 1	2 22	20 21	1 0	20 49	0 35	5 20	0 42	18 10	1 39	9 3	12 1	18 28	18 44	8 55	17 21	6 5									
S 7	6 55	13 38	1 52	5 46	2 20	4 20	1 27	6 55	2 21	20 20	1 0	20 48	0 35	5 19	0 42	18 11	1 39	9 3	12 1	18 28	18 45	8 58	17 21	6 5									
S 8	7 17	10 0	2 49	5 20	2 24	3 52	1 28	6 48	2 19	20 19	1 0	20 48	0 35	5 18	0 42	18 11	1 39	9 3	12 1	18 30	18 46	9 0	17 21	6 4									
M 9	7 40	5 59	3 38	4 52	2 27	3 24	1 29	6 41	2 17	20 19	1 0	20 48	0 35	5 17	0 42	18 12	1 38	9 4	12 1	18 31	18 47	9 2	17 22	6 4									
T 10	8 2	1 47	4 17	4 22	2 30	2 55	1 29	6 35	2 15	20 18	1 0	20 48	0 35	5 16	0 42	18 12	1 38	9 4	12 1	18 34	18 48	9 4	17 22	6 3									
W11	8 24	2n27	4 44	3 52	2 32	2 27	1 30	6 28	2 14	20 17	1 0	20 48	0 35	5 15	0 42	18 12	1 38	9 5	12 0	18 37	18 48	9 6	17 23	6 3									
T 12	8 46	6 35	4 58	3 20	2 34	1 58	1 31	6 21	2 12	20 17	1 0	20 48	0 35	5 14	0 42	18 13	1 38	9 5	12 0	18 41	18 49	9 9	17 23	6 3									
F 13	9 8	10 26	4 59	2 47	2 36	1 30	1 32	6 15	2 10	20 16	1 0	20 47	0 35	5 13	0 42	18 13	1 38	9 5	12 0	18 44	18 50	9 11	17 24	6 2									
S 14	9 29	13 54	4 47	2 12	2 36	1 1	1 32	6 8	2 7	20 15	1 0	20 47	0 35	5 12	0 42	18 14	1 38	9 6	12 0	18 47	18 51	9 13	17 24	6 2									
S 15	9 51	16 49	4 23	1 37	2 37	0 32	1 33	6 1	2 5	20 15	1 0	20 47	0 35	5 11	0 42	18 14	1 38	9 6	12 0	18 50	18 52	9 15	17 25	6 1									
M16	10 12	19 2	3 47	1 0	2 36	0 4	1 33	5 55	2 3	20 14	1 0	20 46	0 35	5 10	0 42	18 15	1 38	9 6	11 59	18 52	18 52	9 17	17 25	6 1									
T 17	10 33	20 26	3 1	0 22	2 36	0n25	1 34	5 48	2 1	20 13	1 0	20 46	0 35	5 9	0 42	18 15	1 38	9 7	11 59	18 53	18 53	9 19	17 25	6 1									
W18	10 54	20 55	2 5	0n16	2 34	0 54	1 34	5 42	1 59	20 12	1 0	20 46	0 35	5 8	0 42	18 16	1 38	9 7	11 59	18 54	18 54	9 21	17 26	6 0									
T 19	11 15	20 22	1 3	0 56	2 32	1 23	1 34	5 36	1 56	20 11	1 1	20 45	0 35	5 7	0 42	18 16	1 38	9 8	11 59	18 54	18 55	9 24	17 26	6 0									
F 20	11 36	18 46	0n 4	1 37	2 30	1 52	1 34	5 30	1 54	20 10	1 1	20 45	0 35	5 6	0 42	18 17	1 38	9 8	11 59	18 54	18 55	9 26	17 27	6 0									
S 21	11 56	16 7	1 14	2 19	2 27	2 21	1 34	5 24	1 52	20 9	1 1	20 44	0 35	5 5	0 42	18 17	1 38	9 8	11 58	18 54	18 56	9 28	17 27	5 59									
S 22	12 16	12 31	2 21	3 1	2 24	2 49	1 34	5 18	1 49	20 8	1 1	20 44	0 35	5 4	0 42	18 18	1 38	9 9	11 58	18 55	18 57	9 30	17 27	5 59									
M23	12 36	8 5	3 22	3 45	2 20	3 18	1 34	5 12	1 47	20 7	1 1	20 43	0 35	5 4	0 42	18 18	1 38	9 9	11 58	18 56	18 58	9 32	17 28	5 59									
T 24	12 56	3 2	4 12	4 29	2 15	3 47	1 34	5 7	1 44	20 6	1 1	20 43	0 35	5 3	0 41	18 18	1 38	9 9	11 58	18 58	18 59	9 34	17 28	5 58									
W25	13 16	2s19	4 46	5 15	2 10	4 15	1 34	5 1	1 41	20 5	1 1	20 42	0 35	5 2	0 41	18 19	1 38	9 10	11 58	19 0	18 59	9 37	17 29	5 58									
T 26	13 35	7 36	5 0	6 1	2 5	4 44	1 34	4 56	1 39	20 4	1 1	20 42	0 35	5 1	0 41	18 19	1 38	9 10	11 58	19 2	19 0	9 39	17 29	5 58									
F 27	13 54	12 26	4 53	6 47	1 59	5 12	1 33	4 51	1 36	20 3	1 1	20 41	0 36	5 0	0 41	18 20	1 38	9 11	11 57	19 5	19 1	9 41	17 29	5 57									
S 28	14 13	16 26	4 25	7 35	1 53	5 41	1 33	4 46	1 34	20 2	1 1	20 41	0 36	4 59	0 41	18 20	1 38	9 11	11 57	19 7	19 2	9 43	17 30	5 57									
S 29	14 32	19 16	3 39	8 22	1 46	6 9	1 33	4 42	1 31	20 1	1 1	20 40	0 36	4 58	0 41	18 21	1 38	9 11	11 57	19 9	19 2	9 45	17 30	5 57									
M30	14n50	20s46	2n40	9n11	1s38	6n37	1s32	4s38	1n28	20s 0	1n 1	20n39	0n36	4s57	0n41	18n21	1s38	9n12	11s57	19n10	19n 3	9n47	17n30	5s56									

ASTRODIENST EPHEMERIS for the year 1888
geocentric

MAY 1888

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Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	14 37 24	11°18'124	16°324	29°47	21°48	14°R55	4°R 3	0°26	14°R 8	29°R 3	3°57	4°R21	4°51	9°36	28°47	T 1
W 2	14 41 21	11°59'33	29°57	1°46	23° 1	14°39	3°57	0°30	14° 6	29° 5	3°58	4°D20	4°47	9°42	28°51	W 2
T 3	14 45 17	12°57'41	13° 4	3°47	24°15	14°23	3°50	0°33	14° 4	29° 7	3°59	4°R20	4°44	9°49	28°56	T 3
F 4	14 49 14	13°55'47	25°48	5°49	25°28	14° 9	3°43	0°37	14° 2	29° 9	4° 1	4°19	4°41	9°56	29° 1	F 4
S 5	14 53 10	14°53'52	8°15	7°53	26°42	13°55	3°37	0°40	14° 0	29°11	4° 2	4°17	4°38	10° 3	29° 5	S 5
S 6	14 57 7	15°51'55	20°27	9°58	27°55	13°41	3°30	0°44	13°57	29°14	4° 3	4°13	4°35	10° 9	29°10	S 6
M 7	15 1 4	16°49'57	2°30	12° 4	29° 9	13°29	3°23	0°48	13°55	29°16	4° 4	4° 6	4°31	10°16	29°15	M 7
T 8	15 5 0	17°47'58	14°27	14°12	0°22	13°17	3°16	0°51	13°53	29°18	4° 6	3°56	4°28	10°23	29°20	T 8
W 9	15 8 57	18°45'57	26°20	16°21	1°36	13° 6	3° 9	0°55	13°51	29°20	4° 7	3°44	4°25	10°30	29°24	W 9
T 10	15 12 53	19°43'54	8°12	18°31	2°49	12°56	3° 1	0°59	13°49	29°22	4° 8	3°31	4°22	10°36	29°29	T 10
F 11	15 16 50	20°41'50	20° 4	20°41	4° 2	12°46	2°54	1° 3	13°48	29°25	4°10	3°18	4°19	10°43	29°34	F 11
S 12	15 20 46	21°39'45	1°58	22°52	5°16	12°38	2°47	1° 8	13°46	29°27	4°11	3° 5	4°16	10°50	29°39	S 12
S 13	15 24 43	22°37'38	13°54	25° 3	6°29	12°30	2°39	1°12	13°44	29°29	4°12	2°55	4°12	10°56	29°44	S 13
M14	15 28 39	23°35'30	25°56	27°14	7°43	12°23	2°32	1°16	13°42	29°31	4°14	2°47	4° 9	11° 3	29°49	M14
T 15	15 32 36	24°33'20	8° 5	29°25	8°56	12°17	2°25	1°21	13°40	29°34	4°15	2°42	4° 6	11°10	29°55	T 15
W16	15 36 33	25°31'08	20°23	1°35	10°10	12°11	2°17	1°25	13°39	29°36	4°16	2°39	4° 3	11°17	29°59	W16
T 17	15 40 29	26°28'55	2°55	3°44	11°23	12° 7	2° 9	1°30	13°37	29°38	4°18	2°D38	4° 0	11°23	0° 5	T 17
F 18	15 44 26	27°26'40	15°43	5°52	12°37	12° 3	2° 2	1°34	13°35	29°40	4°19	2°39	3°56	11°30	0°10	F 18
S 19	15 48 22	28°24'23	28°53	7°58	13°50	12° 0	1°54	1°39	13°34	29°43	4°21	2°R39	3°53	11°37	0°15	S 19
S 20	15 52 19	29°22'05	12°26	10° 3	15° 4	11°58	1°47	1°44	13°32	29°45	4°22	2°38	3°50	11°43	0°21	S 20
M21	15 56 15	0°19'45	26°26	12° 6	16°17	11°57	1°39	1°49	13°31	29°47	4°23	2°36	3°47	11°50	0°26	M21
T 22	16 0 12	1°17'23	10°53	14° 7	17°30	11°D56	1°31	1°54	13°29	29°49	4°25	2°31	3°44	11°57	0°31	T 22
W23	16 4 8	2°15'00	25°42	16° 5	18°44	11°56	1°24	1°59	13°28	29°52	4°26	2°24	3°41	12° 4	0°37	W23
T 24	16 8 5	3°12'36	10°49	18° 1	19°57	11°57	1°16	2° 4	13°26	29°54	4°27	2°15	3°37	12°10	0°42	T 24
F 25	16 12 2	4°10'10	26° 3	19°55	21°11	11°59	1° 8	2° 9	13°25	29°56	4°29	2° 7	3°34	12°17	0°48	F 25
S 26	16 15 58	5° 7'43	11°14	21°46	22°24	12° 2	1° 1	2°15	13°24	29°58	4°30	1°59	3°31	12°24	0°53	S 26
S 27	16 19 55	6° 5'16	26°12	23°34	23°38	12° 5	0°53	2°20	13°22	0° 1	4°31	1°53	3°28	12°31	0°59	S 27
M28	16 23 51	7° 2'47	10°48	25°20	24°51	12° 9	0°46	2°25	13°21	0° 3	4°33	1°49	3°25	12°37	1° 4	M28
T 29	16 27 48	8° 0'17	24°57	27° 2	26° 5	12°14	0°38	2°31	13°20	0° 5	4°34	1°47	3°22	12°44	1°10	T 29
W30	16 31 44	8°57'46	8°37	28°42	27°18	12°19	0°31	2°36	13°19	0° 7	4°36	1°D47	3°18	12°51	1°16	W30
T 31	16 35 41	9°55'14	21°51	0°19	28°32	12°25	0°23	2°42	13°18	0° 9	4°37	1°48	3°15	12°57	1°21	T 31

Day	☉	☽	♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉	♊	♋	♌
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	lat	decl	lat
T 1	15n 9	20s54	1n33	10n 0	1s30	7n 5	1s31	4s34	1n26	19s59	1n 1	20n39	0n36	4s57	0n41	18n22	1s38	9n12	11s57	19n11	19n 4	9n50	17n31	5s56	
W 2	15 27	19 48	0 23	10 49	1 22	7 33	1 31	4 30	1 23	19 57	1 1	20 38	0 36	4 56	0 41	18 22	1 38	9 12	11 57	19 11	19 5	9 52	17 31	5 56	
T 3	15 44	17 38	0s46	11 38	1 14	8 1	1 30	4 26	1 20	19 56	1 1	20 37	0 36	4 55	0 41	18 23	1 38	9 13	11 57	19 11	19 5	9 54	17 31	5 56	
F 4	16 2	14 40	1 51	12 27	1 4	8 28	1 29	4 23	1 18	19 55	1 1	20 37	0 36	4 54	0 41	18 23	1 38	9 13	11 57	19 11	19 6	9 56	17 32	5 55	
S 5	16 19	11 6	2 49	13 17	0 55	8 55	1 28	4 20	1 15	19 54	1 1	20 36	0 36	4 53	0 41	18 24	1 38	9 13	11 56	19 12	19 7	9 58	17 32	5 55	
S 6	16 36	7 8	3 38	14 6	0 45	9 23	1 28	4 18	1 12	19 52	1 1	20 35	0 36	4 53	0 41	18 24	1 38	9 14	11 56	19 13	19 8	10 0	17 32	5 55	
M 7	16 52	2 56	4 17	14 54	0 35	9 50	1 27	4 15	1 10	19 51	1 0	20 34	0 36	4 52	0 41	18 25	1 38	9 14	11 56	19 15	19 8	10 2	17 32	5 55	
T 8	17 9	1n20	4 44	15 43	0 25	10 16	1 26	4 13	1 7	19 50	1 0	20 34	0 36	4 51	0 41	18 25	1 38	9 14	11 56	19 17	19 9	10 5	17 33	5 54	
W 9	17 25	5 32	4 58	16 30	0 15	10 43	1 24	4 11	1 4	19 49	1 0	20 33	0 36	4 50	0 41	18 26	1 38	9 15	11 56	19 20	19 10	10 7	17 33	5 54	
T 10	17 41	9 31	5 0	17 17	0 4	11 9	1 23	4 10	1 2	19 47	1 0	20 32	0 36	4 50	0 41	18 26	1 38	9 15	11 56	19 23	19 11	10 9	17 33	5 54	
F 11	17 56	13 8	4 48	18 2	0n 6	11 35	1 22	4 8	0 59	19 46	1 0	20 31	0 36	4 49	0 41	18 27	1 38	9 15	11 56	19 26	19 11	10 11	17 33	5 54	
S 12	18 11	16 15	4 24	18 46	0 17	12 1	1 21	4 7	0 57	19 45	1 0	20 30	0 36	4 48	0 41	18 27	1 38	9 16	11 56	19 29	19 12	10 13	17 34	5 53	
S 13	18 26	18 42	3 48	19 29	0 27	12 26	1 20	4 7	0 54	19 43	1 0	20 29	0 36	4 47	0 41	18 28	1 38	9 16	11 56	19 31	19 13	10 15	17 34	5 53	
M14	18 41	20 22	3 2	20 10	0 38	12 51	1 18	4 6	0 51	19 42	1 0	20 28	0 36	4 47	0 41	18 28	1 38	9 16	11 56	19 33	19 14	10 17	17 34	5 53	
T 15	18 55	21 6	2 7	20 49	0 48	13 16	1 17	4 6	0 49	19 40	1 0	20 27	0 36	4 46	0 41	18 29	1 38	9 17	11 55	19 34	19 15	10 20	17 34	5 53	
W16	19 9	20 50	1 5	21 26	0 57	13 41	1 15	4 7	0 46	19 39	1 0	20 26	0 36	4 45	0 41	18 29	1 38	9 17	11 55	19 35	19 15	10 22	17 35	5 53	
T 17	19 23	19 33	0n 1	22 0	1 7	14 5	1 14	4 7	0 44	19 38	1 0	20 25	0 36	4 45	0 41	18 30	1 38	9 17	11 55	19 35	19 16	10 24	17 35	5 52	
F 18	19 36	17 14	1 9	22 32	1 16	14 29	1 12	4 8	0 41	19 36	1 0	20 24	0 36	4 44	0 41	18 30	1 38	9 17	11 55	19 35	19 17	10 26	17 35	5 52	
S 19	19 49	13 59	2 15	23 2	1 24	14 53	1 11	4 9	0 39	19 35	1 0	20 23	0 36	4 44	0 41	18 31	1 38	9 18	11 55	19 35	19 18	10 28	17 35	5 52	
S 20	20 2	9 54	3 16	23 29	1 32	15 16	1 9	4 10	0 36	19 33	1 0	20 22	0 36	4 43	0 41	18 31	1 38	9 18	11 55	19 35	19 18	10 30	17 35	5 52	
M21	20 14	5 11	4 6	23 53	1 39	15 39	1 7	4 12	0 34	19 32	1 0	20 21	0 36	4 43	0 41	18 32	1 38	9 18	11 55	19 35	19 19	10 32	17 35	5 52	
T 22	20 26	0 2	4 43	24 15	1 46	16 1	1 5	4 14	0 32	19 30	0 59	20 20	0 36	4 42	0 41	18 32	1 38	9 19	11 55	19 37	19 20	10 35	17 36	5 51	
W23	20 37	5s15	5 2	24 34	1 51	16 23	1 4	4 16	0 29	19 29	0 59	20 19	0 36	4 41	0 41	18 33	1 38	9 19	11 55	19 38	19 20	10 37	17 36	5 51	
T 24	20 49	10 18	5 1	24 51	1 57	16 45	1 2	4 19	0 27	19 28	0 59	20 18	0 36	4 41	0 41	18 33	1 38	9 19	11 55	19 40	19 21	10 39	17 36	5 51	
F 25	20 59	14 46	4 38	25 5	2 1	17 6	1 0	4 22	0 25	19 26	0 59	20 17	0 36	4 40	0 41	18 33	1 38	9 19	11 55	19 42	19 22	10 41	17 36	5 51	
S 26	21 10	18 14	3 56	25 16	2 4	17 27	0 58	4 25	0 23	19 25	0 59	20 16	0 36	4 40	0 41	18 34	1 38	9 20	11 55	19 44	19 23	10 43	17 36	5 51	
S 27	21 20	20 25	2 59	25 25	2 7	17 47	0 56	4 28	0 20	19 23	0 59	20 15	0 36	4 40	0 41	18 34	1 38	9 20	11 55	19 45	19 23	10 45	17 36	5 51	
M28	21 30	21 11	1 50	25 31	2 9	18 7	0 54	4 32	0 18	19 22	0 59	20 13	0 36	4 39	0 41	18 35	1 38	9 20	11 55	19 46	19 24	10 47	17 36	5 51	
T 29	21 39	20 33	0 37	25 36	2 11	18 27	0 52	4 35	0 16	19 20	0 59	20 12	0 37	4 39	0 40	18 35	1 38	9 20	11 55	19 46	19 25	10 50	17 36	5 51	
W30	21 48	18 42	0s37	25 38	2 11	18 45	0 50	4 40	0 14	19 19	0 59	20 11	0 37	4 38	0 40	18 36	1 38	9 21	11 55	19 46	19 26	10 52	17 36	5 50	
T 31	21n57	15s54	1s46	25n38	2n11	19n 4	0s48	4s44	0n12	19s17	0n58	20n10	0n37	4s38	0n40	18n36	1s38	9n21	11s55	19n46	19n26	10n54	17n36	5s50	

ASTRODIENST EPHEMERIS for the year 1888
geocentric

JUNE 1888

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
F 1	16 39 37	10 ^{II} 52'42	4 [♋] 39	19 [♊] 53	29 [♈] 45	12 [♎] 32	0°R16	2 [♏] 48	13°R17	0 ^{II} 12	4 ^{II} 38	1 [♏] 49	3 [♏] 12	13 [♈] 4	1 [♊] 27	F 1
S 2	16 43 34	11°50'09	17° 8	3°25	0 ^{II} 59	12°40	0 [♊] 8	2°53	13 [♎] 16	0°14	4°40	1°R49	3° 9	13°11	1°33	S 2
S 3	16 47 31	12°47'35	29°20	4°53	2°12	12°48	0° 1	2°59	13°15	0°16	4°41	1°47	3° 6	13°18	1°38	S 3
M 4	16 51 27	13°45'01	11 [♑] 22	6°18	3°26	12°57	29 [♏] 54	3° 5	13°14	0°18	4°42	1°44	3° 2	13°24	1°44	M 4
T 5	16 55 24	14°42'26	23°17	7°40	4°39	13° 6	29°47	3°11	13°13	0°20	4°44	1°38	2°59	13°31	1°50	T 5
W 6	16 59 20	15°39'50	5 [♈] 8	9° 0	5°53	13°16	29°39	3°17	13°13	0°23	4°45	1°31	2°56	13°38	1°55	W 6
T 7	17 3 17	16°37'13	17° 0	10°16	7° 6	13°27	29°32	3°23	13°12	0°25	4°46	1°23	2°53	13°44	2° 1	T 7
F 8	17 7 13	17°34'36	28°54	11°29	8°20	13°39	29°25	3°29	13°11	0°27	4°48	1°15	2°50	13°51	2° 7	F 8
S 9	17 11 10	18°31'59	10 ^{II} 52	12°38	9°33	13°51	29°19	3°35	13°11	0°29	4°49	1° 7	2°47	13°58	2°13	S 9
S 10	17 15 6	19°29'20	22°57	13°45	10°47	14° 3	29°12	3°42	13°10	0°31	4°50	1° 1	2°43	14° 5	2°19	S 10
M 11	17 19 3	20°26'41	5 [♊] 9	14°48	12° 0	14°17	29° 5	3°48	13°10	0°33	4°52	0°56	2°40	14°11	2°25	M 11
T 12	17 23 0	21°24'01	17°29	15°48	13°14	14°30	28°58	3°54	13° 9	0°36	4°53	0°53	2°37	14°18	2°31	T 12
W 13	17 26 56	22°21'21	0 [♏] 1	16°44	14°27	14°45	28°52	4° 1	13° 9	0°38	4°54	0°D52	2°34	14°25	2°36	W 13
T 14	17 30 53	23°18'39	12°44	17°36	15°41	15° 0	28°45	4° 7	13° 8	0°40	4°56	0°53	2°31	14°32	2°42	T 14
F 15	17 34 49	24°15'57	25°43	18°25	16°55	15°15	28°39	4°14	13° 8	0°42	4°57	0°54	2°28	14°38	2°48	F 15
S 16	17 38 46	25°13'14	8 [♏] 58	19°10	18° 8	15°31	28°33	4°20	13° 8	0°44	4°58	0°56	2°24	14°45	2°54	S 16
S 17	17 42 42	26°10'29	22°32	19°52	19°22	15°48	28°27	4°27	13° 8	0°46	4°59	0°R57	2°21	14°52	3° 0	S 17
M 18	17 46 39	27° 7'45	6 [♎] 26	20°29	20°35	16° 5	28°21	4°33	13° 7	0°48	5° 1	0°56	2°18	14°58	3° 6	M 18
T 19	17 50 35	28° 4'59	20°40	21° 2	21°49	16°23	28°15	4°40	13° 7	0°50	5° 2	0°55	2°15	15° 5	3°12	T 19
W 20	17 54 32	29° 2'13	5 [♏] 12	21°31	23° 3	16°41	28° 9	4°47	13°D 7	0°52	5° 3	0°52	2°12	15°12	3°18	W 20
T 21	17 58 29	29°59'26	19°59	21°56	24°16	17° 0	28° 4	4°54	13° 7	0°54	5° 5	0°48	2° 8	15°19	3°24	T 21
F 22	18 2 25	0 [♊] 56'38	4 [♊] 52	22°16	25°30	17°19	27°58	5° 0	13° 7	0°56	5° 6	0°44	2° 5	15°25	3°30	F 22
S 23	18 6 22	1°53'50	19°45	22°32	26°43	17°38	27°53	5° 7	13° 7	0°58	5° 7	0°40	2° 2	15°32	3°36	S 23
S 24	18 10 18	2°51'02	4 [♊] 59	22°43	27°57	17°58	27°48	5°14	13° 8	1° 0	5° 8	0°37	1°59	15°39	3°42	S 24
M 25	18 14 15	3°48'13	18°57	22°50	29°11	18°19	27°43	5°21	13° 8	1° 2	5°10	0°35	1°56	15°45	3°48	M 25
T 26	18 18 11	4°45'25	3 [♋] 4	22°R52	0 [♊] 24	18°40	27°38	5°28	13° 8	1° 4	5°11	0°D35	1°53	15°52	3°54	T 26
W 27	18 22 8	5°42'36	16°45	22°49	1°38	19° 1	27°33	5°35	13° 8	1° 6	5°12	0°36	1°49	15°59	4° 0	W 27
T 28	18 26 5	6°39'47	0 [♋] 2	22°42	2°52	19°23	27°29	5°42	13° 9	1° 8	5°13	0°37	1°46	16° 6	4° 6	T 28
F 29	18 30 1	7°36'58	12°55	22°31	4° 5	19°45	27°25	5°49	13° 9	1°10	5°14	0°38	1°43	16°12	4°12	F 29
S 30	18 33 58	8 [♊] 34'09	25 [♋] 27	22 [♊] 15	5 [♊] 19	20 [♎] 8	27 [♏] 20	5 [♏] 57	13 [♎] 10	1 ^{II} 12	5 ^{II} 15	0 [♏] 40	1 [♏] 40	16 [♊] 19	4 [♊] 18	S 30

Day	☉	☽		♊		♋		♌		♍		♎		♏		♐		♑		♒		♓		♈	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	22n 5	12s24	2s47	25n36	2n10	19n22	0s46	4s48	0n10	19s16	0n58	20n 8	0n37	4s38	0n40	18n37	1s38	9n21	11s55	19n46	19n27	10n56	17n37	5s50	
S 2	22 13	8 27	3 39	25 32	2 8	19 39	0 44	4 53	0 8	19 15	0 58	20 7	0 37	4 37	0 40	18 37	1 38	9 21	11 55	19 46	19 28	10 58	17 37	5 50	
S 3	22 21	4 14	4 20	25 27	2 5	19 56	0 41	4 58	0 5	19 13	0 58	20 6	0 37	4 37	0 40	18 38	1 38	9 22	11 55	19 46	19 29	11 0	17 37	5 50	
M 4	22 28	0n 4	4 49	25 19	2 1	20 13	0 39	5 4	0 4	19 12	0 58	20 4	0 37	4 37	0 40	18 38	1 38	9 22	11 55	19 47	19 29	11 2	17 37	5 50	
T 5	22 34	4 20	5 4	25 11	1 57	20 29	0 37	5 9	0 2	19 10	0 58	20 3	0 37	4 36	0 40	18 39	1 38	9 22	11 55	19 48	19 30	11 4	17 37	5 50	
W 6	22 41	8 25	5 7	25 1	1 52	20 44	0 35	5 15	0s 0	19 9	0 57	20 2	0 37	4 36	0 40	18 39	1 38	9 22	11 55	19 50	19 31	11 7	17 37	5 50	
T 7	22 47	12 11	4 56	24 49	1 46	20 59	0 32	5 21	0 2	19 8	0 57	20 0	0 37	4 36	0 40	18 39	1 38	9 23	11 55	19 52	19 32	11 9	17 37	5 50	
F 8	22 52	15 29	4 33	24 37	1 40	21 13	0 30	5 27	0 4	19 6	0 57	19 59	0 37	4 36	0 40	18 40	1 38	9 23	11 55	19 53	19 32	11 11	17 36	5 50	
S 9	22 57	18 10	3 57	24 23	1 33	21 26	0 28	5 33	0 6	19 5	0 57	19 58	0 37	4 35	0 40	18 40	1 38	9 23	11 55	19 55	19 33	11 13	17 36	5 50	
S 10	23 2 20	5 3	11 24	9 1	25 21	39 0	25 5	40 0	8 19	4 0	57 19	56 0	37 4	35 0	40 18	41 1	38 9	23 11	55 19	57 19	34 11	15 17	36 5	50 5	
M11	23 6 21	6 2	15 23	53 1	16 21	52 0	23 5	47 0	10 19	3 0	57 19	55 0	37 4	35 0	40 18	41 1	38 9	23 11	55 19	58 19	34 11	17 17	36 5	50 5	
T 12	23 10 21	7 1	12 23	37 1	7 22	3 0	21 5	54 0	11 19	1 0	56 19	53 0	37 4	35 0	40 18	42 1	38 9	24 11	55 19	58 19	35 11	19 17	36 5	50 5	
W13	23 14 20	5 0	5 23	30 0	57 22	15 0	18 6	1 0	13 19	0 0	56 19	52 0	37 4	35 0	40 18	42 1	38 9	24 11	55 19	58 19	36 11	21 17	36 5	49 5	
T 14	23 17 18	1 1n	4 23	3 0	46 22	25 0	16 6	8 0	15 18	59 0	56 19	50 0	37 4	35 0	40 18	42 1	38 9	24 11	55 19	58 19	37 11	23 17	36 5	49 5	
F 15	23 20 15	1 2	11 22	45 0	35 22	35 0	14 6	16 0	16 18	58 0	56 19	49 0	37 4	35 0	40 18	43 1	38 9	24 11	55 19	58 19	37 11	26 17	36 5	49 5	
S 16	23 22 11	11 3	13 22	27 0	23 22	44 0	11 6	24 0	18 18	56 0	56 19	47 0	37 4	35 0	40 18	43 1	38 9	24 11	55 19	58 19	38 11	28 17	36 5	49 5	
S 17	23 24 6	4 43	4 5	22 9	0 10	22 53	0 9	6 31	0 20	18 55	0 56	19 46	0 37	4 35	0 40	18 44	1 38	9 24	11 55	19 58	19 39	11 30	17 36	5 49	
M18	23 25 1 48	4 44	21 50	0s 3	23 1	0 6	6 40	0 21	18 54	0 55	19 44	0 37	4 34	0 40	18 44	1 38	9 25	11 55	19 58	19 39	11 32	17 36	5 49		
T 19	23 26 3s20	5 7	21 32	0	17 23	8 0	4 6	48	0 23	18 53	0 55	19 43	0 37	4 34	0 40	18 44	1 38	9 25	11 55	19 58	19 40	11 34	17 35	5 50	
W20	23 27 8 22	5 11	21 13	0	31 23	15 0	2 6	56	0 24	18 52	0 55	19 41	0 37	4 35	0 40	18 45	1 38	9 25	11 55	19 59	19 41	11 36	17 35	5 50	
T 21	23 27 13	0 4	55 20	55 0	46 23	20 0n	1 7	5 0	26 18	51 0	55 19	40 0	37 4	35 0	40 18	45 1	38 9	25 11	55 19	59 19	42 11	38 17	35 5	50 5	
F 22	23 27 16 53	4 19	20 37	1 1	23 26	0 3	7 13	0 27	18 50	0 55	19 38	0 38	4 35	0 40	18 46	1 38	9 25	11 55	20 0	19 42	11 40	17 35	5 50		
S 23	23 26 19 39	3 25	20 19	1 16	23 30	0 6	7 22	0 29	18 49	0 54	19 36	0 38	4 35	0 39	18 46	1 38	9 25	11 55	20 1	19 43	11 42	17 35	5 50		
S 24	23 25 21 4	2 18	20 2	1 32	23 34	0 8	7 31	0 30	18 48	0 54	19 35	0 38	4 35	0 39	18 46	1 38	9 25	11 56	20 2	19 44	11 45	17 34	5 50		
M25	23 24 21 4	1 3	19 45	1 48	23 37	0 10	7 40	0 32	18 47	0 54	19 33	0 38	4 35	0 39	18 47	1 38	9 26	11 56	20 2	19 44	11 47	17 34	5 50		
T 26	23 22 19 42	0s14	19 29	2 4	23 40	0 13	7 50	0 33	18 46	0 54	19 31	0 38	4 35	0 39	18 47	1 38	9 26	11 56	20 2	19 45	11 49	17 34	5 50		
W27	23 20 17 13	1 28	19 13	2 20	23 42	0 15	7 59	0 35	18 45	0 53	19 30	0 38	4 35	0 39	18 48	1 38	9 26	11 56	20 2	19 46	11 51	17 34	5 50		
T 28	23 17 13 53	2 35	18 59	2 36	23 43	0 17	8 9	0 36	18 45	0 53	19 28	0 38	4 35	0 39	18 48	1 38	9 26	11 56	20 2	19 47	11 53	17 33	5 50		
F 29	23 14 9 59	3 32	18 45	2 51	23 43	0 20	8 18	0 37	18 44	0 53	19 26	0 38	4 36	0 39	18 48	1 38	9 26	11 56	20 1	19 47	11 55	17 33	5 50		
S 30	23n10	5s45	4s18	18n33	3s 7	23n43	0n22	8s28	0s39	18s43	0n53	19n25	0n38	4s36	0n39	18n49	1s38	9n26	11s56	20n 1	19n48	11n57	17n33	5s50	

ASTRODIENST EPHEMERIS for the year 1888
geocentric

JULY 1888

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
S 1	18 37 54	9♌31'21	7♋43	21°R55	6♊33	20♌31	27°R16	6♏4	13♌10	1♐14	5♐17	0°R40	1♏37	16♌26	4♌24	S 1
M 2	18 41 51	10°28'33	19°46	21♌31	7°46	20°54	27♌12	6°11	13°11	1°16	5°18	0♏40	1°34	16°32	4°30	M 2
T 3	18 45 47	11°25'44	1♌42	21°4	9°0	21°18	27°9	6°18	13°12	1°17	5°19	0°39	1°30	16°39	4°36	T 3
W 4	18 49 44	12°22'57	13°34	20°33	10°14	21°42	27°5	6°25	13°12	1°19	5°20	0°37	1°27	16°46	4°42	W 4
T 5	18 53 40	13°20'09	25°27	20°0	11°27	22°7	27°2	6°33	13°13	1°21	5°21	0°34	1°24	16°53	4°48	T 5
F 6	18 57 37	14°17'22	7♐24	19°24	12°41	22°31	26°58	6°40	13°14	1°23	5°22	0°32	1°21	16°59	4°54	F 6
S 7	19 1 34	15°14'35	19°29	18°47	13°55	22°57	26°55	6°47	13°15	1°24	5°23	0°30	1°18	17°6	5°0	S 7
S 8	19 5 30	16°11'48	1♌42	18°9	15°9	23°22	26°52	6°55	13°16	1°26	5°24	0°28	1°14	17°13	5°6	S 8
M 9	19 9 27	17°9'02	14°7	17°31	16°23	23°48	26°50	7°2	13°16	1°28	5°26	0°26	1°11	17°20	5°11	M 9
T 10	19 13 23	18°6'16	26°44	16°53	17°36	24°15	26°47	7°10	13°17	1°30	5°27	0°D26	1°8	17°26	5°17	T 10
W11	19 17 20	19°3'30	9♏35	16°16	18°50	24°41	26°45	7°17	13°19	1°31	5°28	0°26	1°5	17°33	5°23	W11
T 12	19 21 16	20°0'44	22°38	15°40	20°4	25°8	26°42	7°25	13°20	1°33	5°29	0°27	1°2	17°40	5°29	T 12
F 13	19 25 13	20°57'58	5♐56	15°7	21°18	25°36	26°40	7°32	13°21	1°35	5°30	0°27	0°59	17°46	5°35	F 13
S 14	19 29 9	21°55'13	19°27	14°36	22°32	26°3	26°39	7°40	13°22	1°36	5°31	0°28	0°55	17°53	5°41	S 14
S 15	19 33 6	22°52'27	3♌11	14°9	23°46	26°31	26°37	7°47	13°23	1°38	5°32	0°29	0°52	18°0	5°47	S 15
M16	19 37 3	23°49'42	17°8	13°46	24°59	27°0	26°35	7°55	13°25	1°39	5°33	0°29	0°49	18°7	5°53	M16
T 17	19 40 59	24°46'56	1♌17	13°27	26°13	27°28	26°34	8°2	13°26	1°41	5°34	0°R29	0°46	18°13	5°58	T 17
W18	19 44 56	25°44'11	15°36	13°13	27°27	27°57	26°33	8°10	13°27	1°42	5°35	0°29	0°43	18°20	6°4	W18
T 19	19 48 52	26°41'26	0♊1	13°4	28°41	28°26	26°32	8°17	13°29	1°44	5°35	0°29	0°40	18°27	6°10	T 19
F 20	19 52 49	27°38'42	14°29	13°D 0	29°55	28°56	26°31	8°25	13°30	1°45	5°36	0°28	0°36	18°33	6°16	F 20
S 21	19 56 45	28°35'58	28°56	13°2	1♏9	29°25	26°31	8°33	13°32	1°47	5°37	0°28	0°33	18°40	6°21	S 21
S 22	20 0 42	29°33'14	13♌16	13°10	2°23	29°55	26°30	8°40	13°34	1°48	5°38	0°28	0°30	18°47	6°27	S 22
M23	20 4 38	0♏30'31	27°23	13°23	3°37	0♌26	26°30	8°48	13°35	1°49	5°39	0°28	0°27	18°54	6°33	M23
T 24	20 8 35	1°27'48	11♌15	13°43	4°51	0°56	26°D30	8°56	13°37	1°51	5°40	0°28	0°24	19°0	6°39	T 24
W25	20 12 32	2°25'06	24°48	14°8	6°5	1°27	26°30	9°3	13°39	1°52	5°41	0°28	0°20	19°7	6°44	W25
T 26	20 16 28	3°22'25	8♐1	14°40	7°18	1°58	26°31	9°11	13°40	1°53	5°42	0°28	0°17	19°14	6°50	T 26
F 27	20 20 25	4°19'45	20°53	15°17	8°32	2°29	26°31	9°19	13°42	1°55	5°42	0°27	0°14	19°20	6°55	F 27
S 28	20 24 21	5°17'05	3♋26	16°0	9°46	3°1	26°32	9°27	13°44	1°56	5°43	0°27	0°11	19°27	7°1	S 28
S 29	20 28 18	6°14'27	15°44	16°50	11°0	3°32	26°33	9°34	13°46	1°57	5°44	0°26	0°8	19°34	7°6	S 29
M30	20 32 14	7°11'50	27°48	17°45	12°14	4°4	26°34	9°42	13°48	1°58	5°45	0°26	0°5	19°41	7°12	M30
T 31	20 36 11	8♏9'14	9♌45	18♌46	13♏28	4♌37	26♌35	9♏50	13♌50	1♐59	5♐45	0°D26	0♏1	19♌47	7♌17	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	23n 7	1s23	4s50	18n21	3s21	23n42	0n24	8s38	0s40	18s42	0n53	19n23	0n38	4s36
M 2	23 2	2n58	5 9	18 11	3 36	23 40	0 27	8 48	0 41	18 42	0 52	19 21	0 38	4 36
T 3	22 58	7 9	5 15	18 2	3 49	23 38	0 29	8 58	0 42	18 41	0 52	19 19	0 38	4 37
W 4	22 53	11 2	5 7	17 54	4 2	23 34	0 31	9 8	0 44	18 40	0 52	19 18	0 38	4 37
T 5	22 47	14 30	4 46	17 47	4 13	23 31	0 33	9 19	0 45	18 40	0 52	19 16	0 38	4 37
F 6	22 41	17 24	4 12	17 42	4 23	23 26	0 35	9 29	0 46	18 39	0 51	19 14	0 38	4 38
S 7	22 35	19 35	3 27	17 38	4 32	23 21	0 38	9 39	0 47	18 39	0 51	19 12	0 38	4 38
S 8	22 28	20 54	2 32	17 36	4 40	23 15	0 40	9 50	0 48	18 38	0 51	19 10	0 38	4 38
M 9	22 21	21 14	1 29	17 35	4 46	23 8	0 42	10 1	0 50	18 38	0 51	19 9	0 38	4 39
T 10	22 14	20 29	0 20	17 35	4 50	23 1	0 44	10 11	0 51	18 38	0 51	19 7	0 39	4 39
W11	22 6	18 40	0n50	17 37	4 53	22 53	0 46	10 22	0 52	18 37	0 50	19 5	0 39	4 40
T 12	21 58	15 52	2 0	17 40	4 54	22 44	0 48	10 33	0 53	18 37	0 50	19 3	0 39	4 40
F 13	21 49	12 12	3 4	17 44	4 53	22 35	0 50	10 44	0 54	18 37	0 50	19 1	0 39	4 41
S 14	21 40	7 51	3 59	17 50	4 51	22 25	0 52	10 55	0 55	18 37	0 50	18 59	0 39	4 41
S 15	21 31	3 3	4 42	17 56	4 47	22 14	0 54	11 6	0 56	18 37	0 49	18 58	0 39	4 42
M16	21 21	1s59	5 8	18 4	4 42	22 3	0 55	11 18	0 57	18 36	0 49	18 56	0 39	4 42
T 17	21 11	6 58	5 17	18 12	4 35	21 51	0 57	11 29	0 58	18 36	0 49	18 54	0 39	4 43
W18	21 1	11 38	5 6	18 22	4 27	21 39	0 59	11 40	0 59	18 36	0 49	18 52	0 39	4 43
T 19	20 50	15 40	4 36	18 32	4 18	21 25	1 1	11 51	1 0	18 36	0 48	18 50	0 39	4 44
F 20	20 39	18 46	3 48	18 42	4 8	21 12	1 2	12 3	1 1	18 36	0 48	18 48	0 39	4 45
S 21	20 27	20 41	2 46	18 54	3 56	20 57	1 4	12 14	1 2	18 37	0 48	18 46	0 39	4 45
S 22	20 15	21 14	1 34	19 5	3 44	20 42	1 5	12 26	1 3	18 37	0 48	18 44	0 39	4 46
M23	20 3	20 25	0 17	19 17	3 31	20 26	1 7	12 37	1 4	18 37	0 47	18 42	0 39	4 47
T 24	19 51	18 22	0s59	19 28	3 17	20 10	1 8	12 49	1 5	18 37	0 47	18 40	0 39	4 47
W25	19 38	15 19	2 11	19 40	3 3	19 53	1 10	13 0	1 5	18 37	0 47	18 38	0 40	4 48
T 26	19 25	11 34	3 13	19 51	2 48	19 36	1 11	13 12	1 6	18 38	0 47	18 36	0 40	4 49
F 27	19 11	7 22	4 4	20 2	2 33	19 18	1 12	13 24	1 7	18 38	0 46	18 34	0 40	4 49
S 28	18 57	2 57	4 42	20 12	2 18	19 0	1 14	13 35	1 8	18 38	0 46	18 32	0 40	4 50
S 29	18 43	1n29	5 6	20 22	2 3	18 41	1 15	13 47	1 9	18 39	0 46	18 30	0 40	4 51
M30	18 29	5 46	5 16	20 30	1 47	18 21	1 16	13 59	1 10	18 39	0 46	18 28	0 40	4 52
T 31	18n14	9n48	5s13	20n37	1s32	18n 1	1n17	14s10	1s10	18s40	0n46	18n26	0n40	4s53

Julian Day Number = 2410819.5, Delta T = -3.93 sec
Ecliptic obliquity = 23°27'08, Nutation = - 0°00'14, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 23°10'59, Lahiri = 22°18'00

ASTRODIENST EPHEMERIS for the year 1888

geocentric

AUGUST 1888

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
W 1	20 40 7	9♌ 6'39	21♋38	19♊52	14♌42	5♍ 9	26♍36	9♎57	13♏52	2♐ 0	5♑46	0♒26	29♓58	19♋54	7♌23	W 1
T 2	20 44 4	10° 4'05	3♋32	21° 4	15°56	5°42	26°38	10° 5	13°54	2° 1	5°47	0°27	29°55	20° 1	7°28	T 2
F 3	20 48 1	11° 1'33	15°31	22°21	17°10	6°15	26°40	10°13	13°56	2° 3	5°47	0°27	29°52	20° 7	7°34	F 3
S 4	20 51 57	11°59'01	27°40	23°44	18°24	6°48	26°42	10°21	13°59	2° 4	5°48	0°29	29°49	20°14	7°39	S 4
S 5	20 55 54	12°56'31	10♊ 1	25°11	19°39	7°21	26°44	10°28	14° 1	2° 5	5°49	0°29	29°46	20°21	7°44	S 5
M 6	20 59 50	13°54'03	22°38	26°43	20°53	7°55	26°46	10°36	14° 3	2° 6	5°49	0°30	29°42	20°28	7°50	M 6
T 7	21 3 47	14°51'35	5♊32	28°19	22° 7	8°29	26°49	10°44	14° 5	2° 6	5°50	0°R30	29°39	20°34	7°55	T 7
W 8	21 7 43	15°49'08	18°43	29°59	23°21	9° 3	26°52	10°51	14° 8	2° 7	5°50	0°30	29°36	20°41	8° 0	W 8
T 9	21 11 40	16°46'43	2♋12	1♌44	24°35	9°37	26°54	10°59	14°10	2° 8	5°51	0°28	29°33	20°48	8° 5	T 9
F 10	21 15 36	17°44'18	15°55	3°32	25°49	10°12	26°57	11° 7	14°13	2° 9	5°52	0°26	29°30	20°54	8°10	F 10
S 11	21 19 33	18°41'55	29°50	5°22	27° 3	10°46	27° 1	11°14	14°15	2°10	5°52	0°24	29°26	21° 1	8°15	S 11
S 12	21 23 30	19°39'32	13♊55	7°15	28°17	11°21	27° 4	11°22	14°18	2°11	5°53	0°21	29°23	21° 8	8°20	S 12
M13	21 27 26	20°37'11	28° 6	9°11	29°31	11°56	27° 8	11°30	14°20	2°11	5°53	0°19	29°20	21°15	8°25	M13
T 14	21 31 23	21°34'51	12♌20	11° 8	0♋45	12°32	27°11	11°37	14°23	2°12	5°54	0°18	29°17	21°21	8°30	T 14
W15	21 35 19	22°32'31	26°33	13° 7	2° 0	13° 7	27°15	11°45	14°26	2°13	5°54	0°D18	29°14	21°28	8°35	W15
T 16	21 39 16	23°30'13	10♌45	15° 7	3°14	13°43	27°19	11°53	14°28	2°14	5°54	0°19	29°11	21°35	8°40	T 16
F 17	21 43 12	24°27'55	24°51	17° 7	4°28	14°18	27°23	12° 0	14°31	2°14	5°55	0°20	29° 7	21°41	8°45	F 17
S 18	21 47 9	25°25'39	8♊52	19° 8	5°42	14°54	27°28	12° 8	14°34	2°15	5°55	0°22	29° 4	21°48	8°50	S 18
S 19	21 51 5	26°23'24	22°44	21° 9	6°56	15°31	27°32	12°15	14°37	2°15	5°56	0°22	29° 1	21°55	8°54	S 19
M20	21 55 2	27°21'10	6♋26	23°10	8°10	16° 7	27°37	12°23	14°39	2°16	5°56	0°R23	28°58	22° 2	8°59	M20
T 21	21 58 59	28°18'58	19°55	25°11	9°24	16°44	27°42	12°31	14°42	2°16	5°56	0°21	28°55	22° 8	9° 4	T 21
W22	22 2 55	29°16'46	3♋11	27°11	10°38	17°20	27°47	12°38	14°45	2°17	5°57	0°19	28°51	22°15	9° 8	W22
T 23	22 6 52	0♋14'37	16°11	29°10	11°53	17°57	27°52	12°46	14°48	2°17	5°57	0°15	28°48	22°22	9°13	T 23
F 24	22 10 48	1°12'28	28°55	1♋ 9	13° 7	18°34	27°57	12°53	14°51	2°18	5°57	0°10	28°45	22°28	9°17	F 24
S 25	22 14 45	2°10'22	11♌25	3° 6	14°21	19°11	28° 3	13° 1	14°54	2°18	5°57	0° 4	28°42	22°35	9°21	S 25
S 26	22 18 41	3° 8'17	23°40	5° 3	15°35	19°49	28° 9	13° 8	14°57	2°18	5°58	29♊59	28°39	22°42	9°26	S 26
M27	22 22 38	4° 6'14	5♋44	6°58	16°49	20°26	28°14	13°15	15° 0	2°19	5°58	29°55	28°36	22°49	9°30	M27
T 28	22 26 34	5° 4'13	17°40	8°53	18° 3	21° 4	28°20	13°23	15° 3	2°19	5°58	29°52	28°32	22°55	9°34	T 28
W29	22 30 31	6° 2'13	29°32	10°46	19°18	21°42	28°26	13°30	15° 6	2°19	5°58	29°50	28°29	23° 2	9°38	W29
T 30	22 34 27	7° 0'16	11♌25	12°38	20°32	22°20	28°33	13°37	15° 9	2°19	5°58	29°D50	28°26	23° 9	9°43	T 30
F 31	22 38 24	7♋58'21	23♋24	14♋28	21♋46	22♌58	28♌39	13♌45	15♌13	2♐20	5♑58	29♑51	28♑23	23♒15	9♓47	F 31

Day	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
W 1	17n59	13n25	4s55	20n43	1s17	17n41	1n18	14s22	1s11	18s40	0n45	18n24	0n40	4s53
T 2	17 44	16 31	4 26	20 47	1 2	17 20	1 19	14 34	1 12	18 41	0 45	18 22	0 40	4 54
F 3	17 28	18 57	3 44	20 50	0 47	16 58	1 20	14 45	1 13	18 42	0 45	18 20	0 40	4 55
S 4	17 12	20 34	2 52	20 50	0 32	16 36	1 21	14 57	1 13	18 42	0 45	18 18	0 40	4 56
S 5	16 56	21 14	1 51	20 49	0 18	16 14	1 22	15 8	1 14	18 43	0 44	18 16	0 40	4 57
M 6	16 40	20 50	0 43	20 45	0 5	15 51	1 22	15 20	1 15	18 44	0 44	18 14	0 41	4 58
T 7	16 23	19 21	0n28	20 38	0n 8	15 27	1 23	15 32	1 15	18 45	0 44	18 12	0 41	4 59
W 8	16 6	16 47	1 39	20 30	0 20	15 4	1 24	15 43	1 16	18 45	0 44	18 10	0 41	5 0
T 9	15 49	13 17	2 46	20 18	0 32	14 40	1 24	15 55	1 17	18 46	0 43	18 8	0 41	5 1
F 10	15 31	9 1	3 45	20 4	0 43	14 15	1 25	16 6	1 17	18 47	0 43	18 6	0 41	5 2
S 11	15 14	4 13	4 31	19 47	0 53	13 50	1 25	16 18	1 18	18 48	0 43	18 4	0 41	5 3
S 12	14 56	0s51	5 2	19 28	1 2	13 25	1 26	16 30	1 19	18 49	0 43	18 2	0 41	5 4
M13	14 38	5 54	5 14	19 6	1 10	12 59	1 26	16 41	1 19	18 50	0 43	18 0	0 41	5 5
T 14	14 19	10 39	5 8	18 41	1 18	12 33	1 26	16 52	1 20	18 51	0 42	17 58	0 41	5 6
W15	14 0	14 49	4 42	18 14	1 24	12 7	1 26	17 4	1 20	18 52	0 42	17 56	0 41	5 7
T 16	13 42	18 7	4 0	17 45	1 30	11 40	1 26	17 15	1 21	18 54	0 42	17 54	0 41	5 8
F 17	13 22	20 18	3 3	17 13	1 34	11 13	1 26	17 26	1 22	18 55	0 42	17 52	0 42	5 9
S 18	13 3	21 14	1 55	16 39	1 38	10 46	1 26	17 38	1 22	18 56	0 41	17 50	0 42	5 10
S 19	12 44	20 51	0 42	16 3	1 41	10 18	1 26	17 49	1 23	18 57	0 41	17 48	0 42	5 11
M20	12 24	19 13	0s33	15 26	1 44	9 50	1 26	18 0	1 23	18 58	0 41	17 46	0 42	5 12
T 21	12 4	16 31	1 45	14 47	1 45	9 22	1 26	18 11	1 24	19 0	0 41	17 44	0 42	5 13
W22	11 44	12 59	2 50	14 7	1 46	8 54	1 25	18 22	1 24	19 1	0 41	17 42	0 42	5 15
T 23	11 24	8 54	3 45	13 25	1 46	8 25	1 25	18 33	1 25	19 2	0 40	17 40	0 42	5 16
F 24	11 3	4 30	4 27	12 43	1 45	7 57	1 25	18 44	1 25	19 4	0 40	17 38	0 42	5 17
S 25	10 42	0 1	4 55	11 59	1 44	7 27	1 24	18 54	1 26	19 5	0 40	17 36	0 42	5 18
S 26	10 22	4n24	5 10	11 15	1 42	6 58	1 24	19 5	1 26	19 7	0 40	17 34	0 42	5 19
M27	10 1	8 34	5 10	10 30	1 40	6 29	1 23	19 16	1 27	19 8	0 40	17 32	0 43	5 21
T 28	9 39	12 22	4 57	9 45	1 37	5 59	1 22	19 26	1 27	19 10	0 39	17 30	0 43	5 22
W29	9 18	15 39	4 31	8 59	1 34	5 29	1 21	19 36	1 28	19 11	0 39	17 28	0 43	5 23
T 30	8 57	18 19	3 53	8 12	1 30	4 59	1 21	19 47	1 28	19 13	0 39	17 26	0 43	5 24
F 31	8n35	20n12	3s 5	7n26	1n26	4n29	1n20	19s57	1s28	19s14	0n39	17n24	0n43	5s25

Julian Day Number = 2410850.5, Delta T = -3.92 sec
 Ecliptic obliquity = 23°27'09, Nutation = - 0°00'14, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 23°11'04, Lahiri = 22°18'04

ASTRODIENST EPHEMERIS for the year 1888
geocentric

SEPTEMBER 1888

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	22 42 21	8♍56'27	5♊33	16♍18	23♍0	23♍36	28♍46	13♏52	15♏16	2♐20	5♐58	29♐53	28♐20	23♑22	9♑51	S 1
S 2	22 46 17	9°54'36	17°58	18° 6	24°14	24°15	28°52	13°59	15°19	2°20	5°58	29°54	28°17	23°29	9°55	S 2
M 3	22 50 14	10°52'46	0♏41	19°53	25°28	24°53	28°59	14° 6	15°22	2°20	5°58	29°R55	28°13	23°35	9°58	M 3
T 4	22 54 10	11°50'58	13°47	21°39	26°43	25°32	29° 6	14°14	15°26	2°20	5°59	29°54	28°10	23°42	10° 2	T 4
W 5	22 58 7	12°49'12	27°15	23°24	27°57	26°11	29°13	14°21	15°29	2°R20	5°R59	29°51	28° 7	23°49	10° 6	W 5
T 6	23 2 3	13°47'28	11♍6	25° 7	29°11	26°50	29°20	14°28	15°32	2°20	5°59	29°46	28° 4	23°56	10°10	T 6
F 7	23 6 0	14°45'46	25°16	26°50	0♏25	27°29	29°28	14°35	15°36	2°20	5°58	29°40	28° 1	24° 2	10°13	F 7
S 8	23 9 56	15°44'05	9♏40	28°31	1°39	28° 8	29°35	14°42	15°39	2°20	5°58	29°33	27°57	24° 9	10°17	S 8
S 9	23 13 53	16°42'27	24°12	0♏11	2°54	28°48	29°43	14°49	15°42	2°20	5°58	29°25	27°54	24°16	10°20	S 9
M10	23 17 50	17°40'49	8♍45	1°50	4° 8	29°28	29°51	14°56	15°46	2°19	5°58	29°19	27°51	24°22	10°24	M10
T 11	23 21 46	18°39'14	23°14	3°28	5°22	0♏7	29°59	15° 3	15°49	2°19	5°58	29°15	27°48	24°29	10°27	T 11
W12	23 25 43	19°37'40	7♏33	5° 4	6°36	0°47	0♏7	15° 9	15°53	2°19	5°58	29°12	27°45	24°36	10°30	W12
T 13	23 29 39	20°36'07	21°41	6°40	7°50	1°27	0°15	15°16	15°56	2°19	5°58	29°D12	27°42	24°43	10°34	T 13
F 14	23 33 36	21°34'37	5♊36	8°15	9° 5	2° 7	0°23	15°23	16° 0	2°18	5°58	29°12	27°38	24°49	10°37	F 14
S 15	23 37 32	22°33'08	19°18	9°48	10°19	2°48	0°31	15°30	16° 3	2°18	5°57	29°13	27°35	24°56	10°40	S 15
S 16	23 41 29	23°31'40	2♏48	11°21	11°33	3°28	0°40	15°36	16° 7	2°18	5°57	29°R13	27°32	25° 3	10°43	S 16
M17	23 45 25	24°30'14	16° 5	12°52	12°47	4° 9	0°49	15°43	16°11	2°17	5°57	29°12	27°29	25° 9	10°46	M17
T 18	23 49 22	25°28'50	29°11	14°22	14° 1	4°49	0°57	15°50	16°14	2°17	5°57	29° 8	27°26	25°16	10°49	T 18
W19	23 53 19	26°27'28	12♏6	15°52	15°15	5°30	1° 6	15°56	16°18	2°16	5°56	29° 2	27°23	25°23	10°51	W19
T 20	23 57 15	27°26'07	24°49	17°20	16°29	6°11	1°15	16° 3	16°21	2°16	5°56	28°54	27°19	25°30	10°54	T 20
F 21	0 1 12	28°24'49	7♏21	18°47	17°44	6°52	1°24	16° 9	16°25	2°15	5°56	28°43	27°16	25°36	10°57	F 21
S 22	0 5 8	29°23'32	19°41	20°13	18°58	7°33	1°34	16°15	16°29	2°15	5°55	28°32	27°13	25°43	10°59	S 22
S 23	0 9 5	0♏22'18	1♏50	21°38	20°12	8°14	1°43	16°22	16°32	2°14	5°55	28°21	27°10	25°50	11° 2	S 23
M24	0 13 1	1°21'05	13°51	23° 2	21°26	8°56	1°52	16°28	16°36	2°14	5°55	28°11	27° 7	25°56	11° 4	M24
T 25	0 16 58	2°19'55	25°45	24°25	22°40	9°37	2° 2	16°34	16°40	2°13	5°54	28° 3	27° 3	26° 3	11° 6	T 25
W26	0 20 54	3°18'48	7♐35	25°47	23°54	10°19	2°12	16°40	16°43	2°12	5°54	27°57	27° 0	26°10	11° 8	W26
T 27	0 24 51	4°17'42	19°25	27° 7	25° 8	11° 0	2°21	16°46	16°47	2°12	5°53	27°54	26°57	26°16	11°11	T 27
F 28	0 28 47	5°16'39	1♊22	28°26	26°22	11°42	2°31	16°52	16°51	2°11	5°53	27°D52	26°54	26°23	11°13	F 28
S 29	0 32 44	6°15'38	13°28	29°44	27°37	12°24	2°41	16°58	16°54	2°10	5°52	27°52	26°51	26°30	11°15	S 29
S 30	0 36 41	7♏14'39	25♊51	1♍1	28♏51	13♏6	2♏51	17♏4	16♏58	2♐9	5♐52	27°R53	26♊48	26♏37	11♊17	S 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	8n13	21n12	2 s 8	6n39	1n21	3n59	1n19	20 s 7	1s29	19s16	0n38	17n22	0n43	5s27	0n37	18n59	1s41	9n22	12 s 7	20n11	20n30	14n 6	16n56	6s10			
S 2	7 51	21 11	1 4	5 52	1 16	3 29	1 18	20 17	1 29	19 18	0 38	17 20	0 43	5 28	0 37	18 59	1 41	9 22	12 8	20 11	20 31	14 8	16 56	6 10			
M 3	7 29	20 5	0n 4	5 5	1 11	2 58	1 17	20 27	1 29	19 19	0 38	17 18	0 43	5 29	0 37	18 59	1 41	9 21	12 8	20 11	20 32	14 10	16 55	6 11			
T 4	7 7	17 53	1 15	4 19	1 5	2 28	1 16	20 37	1 30	19 21	0 38	17 16	0 43	5 31	0 37	18 59	1 41	9 21	12 8	20 11	20 32	14 12	16 54	6 11			
W 5	6 45	14 40	2 23	3 32	0 59	1 57	1 14	20 46	1 30	19 23	0 38	17 14	0 44	5 32	0 37	18 59	1 41	9 21	12 8	20 12	20 33	14 14	16 53	6 12			
T 6	6 23	10 33	3 24	2 45	0 53	1 27	1 13	20 56	1 30	19 25	0 38	17 12	0 44	5 33	0 37	18 59	1 41	9 21	12 9	20 13	20 34	14 16	16 52	6 12			
F 7	6 0	5 46	4 14	1 59	0 47	0 56	1 12	21 5	1 31	19 26	0 37	17 10	0 44	5 34	0 37	18 59	1 41	9 21	12 9	20 14	20 34	14 18	16 52	6 13			
S 8	5 38	0 36	4 49	1 13	0 40	0 25	1 10	21 14	1 31	19 28	0 37	17 8	0 44	5 36	0 37	18 59	1 41	9 20	12 9	20 15	20 35	14 20	16 51	6 13			
S 9	5 15	4s38	5 6	0 27	0 34	0s 6	1 9	21 23	1 31	19 30	0 37	17 6	0 44	5 37	0 37	18 59	1 41	9 20	12 9	20 17	20 36	14 22	16 50	6 14			
M10	4 52	9 38	5 3	0s19	0 27	0 37	1 7	21 32	1 32	19 32	0 37	17 4	0 44	5 38	0 37	18 59	1 41	9 20	12 9	20 18	20 36	14 24	16 49	6 15			
T 11	4 29	14 3	4 41	1 4	0 20	1 8	1 6	21 41	1 32	19 34	0 37	17 2	0 44	5 40	0 37	18 59	1 41	9 20	12 10	20 19	20 37	14 26	16 48	6 15			
W12	4 7	17 37	4 2	1 49	0 13	1 38	1 4	21 50	1 32	19 36	0 36	17 0	0 44	5 41	0 37	18 59	1 42	9 19	12 10	20 20	20 37	14 28	16 48	6 16			
T 13	3 44	20 4	3 8	2 34	0 5	2 9	1 3	21 58	1 33	19 37	0 36	16 59	0 45	5 43	0 37	18 59	1 42	9 19	12 10	20 20	20 38	14 30	16 47	6 16			
F 14	3 21	21 17	2 3	3 18	0s 2	2 40	1 1	22 7	1 33	19 39	0 36	16 57	0 45	5 44	0 37	18 58	1 42	9 19	12 10	20 20	20 39	14 32	16 46	6 17			
S 15	2 57	21 11	0 53	4 2	0 9	3 11	0 59	22 15	1 33	19 41	0 36	16 55	0 45	5 45	0 37	18 58	1 42	9 19	12 10	20 20	20 39	14 34	16 45	6 17			
S 16	2 34	19 51	0s19	4 45	0 17	3 42	0 57	22 23	1 33	19 43	0 36	16 53	0 45	5 47	0 37	18 58	1 42	9 18	12 11	20 19	20 40	14 36	16 44	6 18			
M17	2 11	17 26	1 29	5 28	0 24	4 12	0 55	22 31	1 34	19 45	0 35	16 51	0 45	5 48	0 37	18 58	1 42	9 18	12 11	20 20	20 41	14 38	16 44	6 19			
T 18	1 48	14 9	2 33	6 10	0 32	4 43	0 53	22 39	1 34	19 47	0 35	16 49	0 45	5 49	0 37	18 58	1 42	9 18	12 11	20 21	20 41	14 40	16 43	6 19			
W19	1 25	10 14	3 28	6 51	0 40	5 13	0 51	22 46	1 34	19 49	0 35	16 47	0 45	5 51	0 37	18 58	1 42	9 18	12 11	20 22	20 42	14 42	16 42	6 20			
T 20	1 1	5 55	4 12	7 32	0 47	5 44	0 49	22 54	1 34	19 51	0 35	16 46	0 45	5 52	0 37	18 58	1 42	9 17	12 12	20 24	20 42	14 44	16 41	6 20			
F 21	0 38	1 25	4 43	8 13	0 55	6 14	0 47	23 1	1 34	19 53	0 35	16 44	0 46	5 54	0 37	18 58	1 42	9 17	12 12	20 26	20 43	14 46	16 40	6 21			
S 22	0 15	3n 5	5 0	8 52	1 3	6 44	0 45	23 8	1 34	19 55	0 35	16 42	0 46	5 55	0 37	18 57	1 42	9 17	12 12	20 28	20 44	14 48	16 40	6 22			
S 23	0s 9	7 23	5 3	9 31	1 10	7 14	0 43	23 15	1 35	19 57	0 34	16 40	0 46	5 57	0 37	18 57	1 42	9 17	12 12	20 30	20 44	14 50	16 39	6 22			
M24	0 32	11 21	4 52	10 10	1 18	7 44	0 41	23 22	1 35	19 59	0 34	16 39	0 46	5 58	0 37	18 57	1 42	9 16	12 12	20 32	20 45	14 52	16 38	6 23			
T 25	0 56	14 51	4 29	10 47	1 25	8 14	0 38	23 28	1 35	20 1	0 34	16 37	0 46	5 59	0 37	18 57	1 42	9 16	12 13	20 34	20 46	14 54	16 37	6 23			
W26	1 19	17 44	3 54	11 24	1 33	8 43	0 36	23 34	1 35	20 4	0 34	16 35	0 46	6 1	0 37	18 57	1 42	9 16	12 13	20 35	20 46	14 56	16 36	6 24			
T 27	1 42	19 53	3 10	12 0	1 40	9 13	0 34	23 41	1 35	20 6	0 34	16 33	0 46	6 2	0 37	18 56	1 42	9 16	12 13	20 36	20 47	14 58	16 36	6 25			
F 28	2 6	21 11	2 16	12 36	1 47	9 42	0 31	23 47	1 35	20 8	0 34	16 32	0 47	6 4	0 37	18 56	1 42	9 15	12 13	20 36	20 47	15 0	16 35	6 25			
S 29	2 29	21 31	1 16	13 10	1 54	10 11	0 29	23 52	1 35	20 10	0 33	16 30	0 47	6 5	0 36	18 56	1 42	9 15	12 13	20 36	20 48	15 2	16 34	6 26			
S 30	2s53	20n49	0s11	13s44	2s 1	10s39	0n27	23s58	1s35	20s12	0n33	16n28	0n47	6s 7	0n36	18n56	1s42	9n15	12s14	20n36	20n49	15n 4	16n33	6s27			

ASTRODIENST EPHEMERIS for the year 1888

geocentric

OCTOBER 1888

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	0 40 37	8♌13'43	8♌34	2♌16	0♌ 5	13♌48	3♌ 2	17♌10	17♌ 2	2♌ 8	5♌51	27♌52	26♌44	26♌43	11♌18	M 1
T 2	0 44 34	9°12'49	21°42	3°30	1°19	14°30	3°12	17°16	17° 6	2♌ 8	5♌51	27♌50	26°41	26°50	11°20	T 2
W 3	0 48 30	10°11'57	5♌18	4°42	2°33	15°13	3°22	17°21	17° 9	2° 7	5°50	27°45	26°38	26°57	11°22	W 3
T 4	0 52 27	11°11'08	19°21	5°52	3°47	15°55	3°33	17°27	17°13	2° 6	5°50	27°38	26°35	27° 3	11°23	T 4
F 5	0 56 23	12°10'20	3♌49	7° 0	5° 1	16°38	3°43	17°32	17°17	2° 5	5°49	27°28	26°32	27°10	11°25	F 5
S 6	1 0 20	13° 9'35	18°37	8° 7	6°15	17°20	3°54	17°38	17°21	2° 4	5°48	27°17	26°28	27°17	11°26	S 6
S 7	1 4 16	14° 8'51	3♌34	9°11	7°29	18° 3	4° 5	17°43	17°25	2° 3	5°48	27° 6	26°25	27°23	11°28	S 7
M 8	1 8 13	15° 8'10	18°33	10°13	8°43	18°46	4°16	17°49	17°28	2° 2	5°47	26°56	26°22	27°30	11°29	M 8
T 9	1 12 10	16° 7'31	3♌24	11°12	9°57	19°29	4°26	17°54	17°32	2° 1	5°47	26°49	26°19	27°37	11°30	T 9
W10	1 16 6	17° 6'53	17°59	12° 9	11°11	20°12	4°37	17°59	17°36	2° 0	5°46	26°44	26°16	27°44	11°31	W10
T11	1 20 3	18° 6'17	2♌16	13° 3	12°26	20°55	4°49	18° 4	17°40	1°59	5°45	26°41	26°13	27°50	11°32	T11
F12	1 23 59	19° 5'43	16°11	13°53	13°40	21°38	5° 0	18° 9	17°44	1°58	5°44	26°41	26° 9	27°57	11°33	F12
S13	1 27 56	20° 5'11	29°47	14°39	14°54	22°22	5°11	18°14	17°47	1°56	5°44	26°41	26° 6	28° 4	11°34	S13
S14	1 31 52	21° 4'41	13♌ 4	15°22	16° 8	23° 5	5°22	18°19	17°51	1°55	5°43	26°40	26° 3	28°10	11°34	S14
M15	1 35 49	22° 4'12	26° 5	16° 0	17°22	23°49	5°34	18°24	17°55	1°54	5°42	26°37	26° 0	28°17	11°35	M15
T16	1 39 45	23° 3'45	8♌52	16°33	18°36	24°32	5°45	18°28	17°59	1°53	5°41	26°32	25°57	28°24	11°35	T16
W17	1 43 42	24° 3'19	21°29	17° 1	19°50	25°16	5°57	18°33	18° 2	1°52	5°41	26°24	25°54	28°31	11°36	W17
T18	1 47 39	25° 2'56	3♌55	17°23	21° 4	26° 0	6° 8	18°38	18° 6	1°50	5°40	26°13	25°50	28°37	11°36	T18
F19	1 51 35	26° 2'34	16°12	17°39	22°17	26°43	6°20	18°42	18°10	1°49	5°39	26° 0	25°47	28°44	11°36	F19
S20	1 55 32	27° 2'15	28°21	17°47	23°31	27°27	6°32	18°46	18°14	1°48	5°38	25°45	25°44	28°51	11°37	S20
S21	1 59 28	28° 1'57	10♌23	17°49	24°45	28°11	6°44	18°51	18°17	1°46	5°37	25°31	25°41	28°57	11°37	S21
M22	2 3 25	29° 1'42	22°19	17°42	25°59	28°55	6°56	18°55	18°21	1°45	5°36	25°18	25°38	29° 4	11°37	M22
T23	2 7 21	0♌ 1'29	4♌10	17°26	27°13	29°40	7° 8	18°59	18°25	1°44	5°35	25° 7	25°34	29°11	11°37	T23
W24	2 11 18	1° 1'18	15°59	17° 2	28°27	0♌24	7°20	19° 3	18°29	1°42	5°35	24°59	25°31	29°17	11°36	W24
T25	2 15 14	2° 1'09	27°49	16°28	29°41	1° 8	7°32	19° 7	18°32	1°41	5°34	24°54	25°28	29°24	11°36	T25
F26	2 19 11	3° 1'02	9♌43	15°45	0♌55	1°52	7°44	19°11	18°36	1°39	5°33	24°51	25°25	29°31	11°36	F26
S27	2 23 8	4° 0'57	21°47	14°54	2° 9	2°37	7°56	19°15	18°40	1°38	5°32	24°D50	25°22	29°37	11°35	S27
S28	2 27 4	5° 0'55	4♌ 6	13°54	3°23	3°21	8° 9	19°18	18°43	1°36	5°31	24°R50	25°19	29°44	11°35	S28
M29	2 31 1	6° 0'56	16°44	12°47	4°36	4° 6	8°21	19°22	18°47	1°35	5°30	24°50	25°15	29°51	11°34	M29
T30	2 34 57	7° 0'54	29°47	11°35	5°50	4°51	8°33	19°25	18°51	1°33	5°29	24°48	25°12	29°58	11°33	T30
W31	2 38 54	8♌ 1'00	13♌19	10♌18	7♌ 4	5♌35	8♌46	19♌29	18♌54	1♌32	5♌28	24♌44	25♌ 9	0♌ 4	11♌33	W31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
M 1	3s16	19n 2	0n56	14s16	2s 8	11s 8	0n24	24s 3	1s36	20s14	0n33	16n27	0n47	6s 8	0n36	18n56
T 2	3 39	16 13	2 3	14 48	2 15	11 36	0 22	24 8	1 36	20 16	0 33	16 25	0 47	6 9	0 36	18 55
W 3	4 2	12 26	3 5	15 19	2 21	12 4	0 19	24 13	1 36	20 18	0 33	16 24	0 47	6 11	0 36	18 55
T 4	4 26	7 51	3 57	15 48	2 28	12 32	0 17	24 18	1 36	20 20	0 33	16 22	0 47	6 12	0 36	18 55
F 5	4 49	2 42	4 36	16 17	2 34	12 59	0 14	24 22	1 36	20 23	0 32	16 20	0 48	6 14	0 36	18 55
S 6	5 12	2s42	4 58	16 44	2 39	13 26	0 11	24 26	1 36	20 25	0 32	16 19	0 48	6 15	0 36	18 55
S 7	5 35	8 1	4 59	17 10	2 45	13 53	0 9	24 30	1 36	20 27	0 32	16 17	0 48	6 17	0 36	18 54
M 8	5 58	12 52	4 40	17 35	2 50	14 19	0 6	24 34	1 36	20 29	0 32	16 16	0 48	6 18	0 36	18 54
T 9	6 21	16 53	4 2	17 58	2 55	14 45	0 3	24 38	1 36	20 31	0 32	16 14	0 48	6 20	0 36	18 54
W10	6 44	19 46	3 9	18 20	2 59	15 11	0 1	24 41	1 36	20 33	0 32	16 13	0 48	6 21	0 36	18 54
T11	7 6	21 21	3 2	18 40	3 3	15 36	0s 2	24 44	1 36	20 36	0 32	16 12	0 49	6 22	0 36	18 53
F12	7 29	21 33	0 55	18 58	3 6	16 1	0 5	24 47	1 36	20 38	0 31	16 10	0 49	6 24	0 36	18 53
S13	7 51	20 29	0s16	19 15	3 9	16 26	0 8	24 50	1 36	20 40	0 31	16 9	0 49	6 25	0 36	18 53
S14	8 14	18 16	1 25	19 30	3 11	16 50	0 10	24 52	1 36	20 42	0 31	16 7	0 49	6 27	0 36	18 53
M15	8 36	15 10	2 29	19 42	3 12	17 14	0 13	24 54	1 36	20 44	0 31	16 6	0 49	6 28	0 36	18 52
T16	8 58	11 23	3 23	19 53	3 13	17 37	0 16	24 56	1 36	20 46	0 31	16 5	0 49	6 30	0 36	18 52
W17	9 20	7 9	4 6	20 1	3 13	18 0	0 19	24 58	1 36	20 48	0 31	16 4	0 50	6 31	0 36	18 52
T18	9 42	2 41	4 37	20 6	3 12	18 23	0 21	24 59	1 35	20 51	0 31	16 2	0 50	6 33	0 36	18 51
F19	10 4	1n50	4 55	20 8	3 10	18 45	0 24	25 0	1 35	20 53	0 30	16 1	0 50	6 34	0 36	18 51
S20	10 25	6 14	4 59	20 7	3 6	19 6	0 27	25 1	1 35	20 55	0 30	16 0	0 50	6 35	0 36	18 51
S21	10 47	10 21	4 50	20 3	3 2	19 27	0 30	25 2	1 35	20 57	0 30	15 59	0 50	6 37	0 36	18 51
M22	11 8	14 3	4 27	19 55	2 55	19 47	0 33	25 2	1 35	20 59	0 30	15 58	0 50	6 38	0 36	18 50
T23	11 29	17 10	3 54	19 44	2 48	20 7	0 35	25 2	1 35	21 1	0 30	15 56	0 51	6 40	0 36	18 50
W24	11 50	19 34	3 10	19 28	2 39	20 27	0 38	25 2	1 35	21 3	0 30	15 55	0 51	6 41	0 36	18 50
T25	12 11	21 8	2 18	19 8	2 28	20 46	0 41	25 1	1 35	21 6	0 30	15 54	0 51	6 43	0 36	18 49
F26	12 31	21 47	1 19	18 43	2 15	21 4	0 44	25 1	1 34	21 8	0 29	15 53	0 51	6 44	0 36	18 49
S27	12 52	21 25	0 16	18 14	2 1	21 21	0 46	25 0	1 34	21 10	0 29	15 52	0 51	6 45	0 36	18 49
S28	13 12	20 2	0n49	17 41	1 45	21 39	0 49	24 59	1 34	21 12	0 29	15 51	0 51	6 47	0 36	18 48
M29	13 32	17 38	1 53	17 4	1 27	21 55	0 52	24 57	1 34	21 14	0 29	15 50	0 52	6 48	0 36	18 48
T30	13 52	14 16	2 54	16 24	1 8	22 11	0 54	24 55	1 34	21 16	0 29	15 49	0 52	6 50	0 36	18 48
W31	14s11	10n 3	3n47	15s41	0s48	22s26	0s57	24s53	1s34	21s18	0n29	15n49	0n52	6s51	0n36	18n47

Julian Day Number = 2410911.5, Delta T = -3.90 sec

Ecliptic obliquity = 23°27'10, Nutation = - 0°00'16, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 23°11'12, Lahiri = 22°18'12

ASTRODIENST EPHEMERIS for the year 1888

geocentric

NOVEMBER 1888

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	2 42 50	9♉ 1'07	27♏22	9°R 0	8♌18	6♊20	8♌58	19♏32	18♏58	1°R30	5°R27	24°R37	25° 6	0♈11	11°R32	T 1
F 2	2 46 47	10° 1'15	11♏53	7♉43	9°32	7° 5	9°11	19°35	19° 2	1♈29	5♈26	24° 28	25° 3	0°18	11° 31	F 2
S 3	2 50 43	11° 1'25	26°49	6°28	10°46	7°50	9°24	19°38	19° 5	1°27	5°25	24°17	25° 0	0°24	11°30	S 3
S 4	2 54 40	12° 1'37	12♉ 0	5°20	11°59	8°35	9°36	19°41	19° 9	1°26	5°24	24° 6	24°56	0°31	11°29	S 4
M 5	2 58 37	13° 1'51	27°17	4°19	13°13	9°20	9°49	19°44	19°12	1°24	5°23	23°56	24°53	0°38	11°27	M 5
T 6	3 2 33	14° 2'07	12♏27	3°28	14°27	10° 5	10° 2	19°47	19°16	1°23	5°22	23°48	24°50	0°44	11°26	T 6
W 7	3 6 30	15° 2'24	27°22	2°47	15°41	10°50	10°15	19°49	19°19	1°21	5°21	23°43	24°47	0°51	11°25	W 7
T 8	3 10 26	16° 2'43	11♏54	2°17	16°54	11°36	10°28	19°52	19°23	1°19	5°20	23°41	24°44	0°58	11°23	T 8
F 9	3 14 23	17° 3'04	26° 1	2° 0	18° 8	12°21	10°40	19°54	19°26	1°18	5°19	23°D40	24°40	1° 5	11°21	F 9
S 10	3 18 19	18° 3'25	9♏42	1°D53	19°22	13° 6	10°53	19°57	19°30	1°16	5°18	23°41	24°37	1°11	11°20	S 10
S 11	3 22 16	19° 3'48	22°59	1°58	20°36	13°52	11° 6	19°59	19°33	1°14	5°16	23°R41	24°34	1°18	11°18	S 11
M12	3 26 12	20° 4'13	5♏55	2°14	21°49	14°37	11°19	20° 1	19°37	1°13	5°15	23°40	24°31	1°25	11°16	M12
T 13	3 30 9	21° 4'39	18°33	2°39	23° 3	15°23	11°33	20° 3	19°40	1°11	5°14	23°36	24°28	1°31	11°14	T 13
W14	3 34 6	22° 5'06	0♏58	3°14	24°17	16° 8	11°46	20° 5	19°43	1° 9	5°13	23°30	24°25	1°38	11°12	W14
T 15	3 38 2	23° 5'34	13°12	3°56	25°30	16°54	11°59	20° 7	19°47	1° 8	5°12	23°21	24°21	1°45	11°10	T 15
F 16	3 41 59	24° 6'04	25°18	4°46	26°44	17°40	12°12	20° 9	19°50	1° 6	5°11	23°11	24°18	1°51	11° 8	F 16
S 17	3 45 55	25° 6'35	7♏17	5°41	27°57	18°26	12°25	20°10	19°53	1° 4	5°10	22°59	24°15	1°58	11° 6	S 17
S 18	3 49 52	26° 7'08	19°13	6°43	29°11	19°11	12°38	20°12	19°57	1° 3	5° 9	22°47	24°12	2° 5	11° 4	S 18
M19	3 53 48	27° 7'43	1♈ 4	7°49	0♊24	19°57	12°52	20°13	20° 0	1° 1	5° 8	22°37	24° 9	2°12	11° 1	M19
T 20	3 57 45	28° 8'19	12°55	8°59	1°38	20°43	13° 5	20°14	20° 3	0°59	5° 6	22°28	24° 5	2°18	10°59	T 20
W21	4 1 41	29° 8'56	24°45	10°13	2°51	21°29	13°18	20°16	20° 6	0°58	5° 5	22°22	24° 2	2°25	10°56	W21
T 22	4 5 38	0♏9'35	6♏38	11°29	4° 5	22°15	13°32	20°17	20° 9	0°56	5° 4	22°18	23°59	2°32	10°54	T 22
F 23	4 9 35	1°10'15	18°35	12°49	5°18	23° 1	13°45	20°18	20°12	0°54	5° 3	22°D16	23°56	2°38	10°51	F 23
S 24	4 13 31	2°10'57	0♈42	14°10	6°31	23°47	13°59	20°18	20°15	0°53	5° 2	22°17	23°53	2°45	10°48	S 24
S 25	4 17 28	3°11'41	13° 1	15°34	7°45	24°33	14°12	20°19	20°19	0°51	5° 1	22°18	23°50	2°52	10°45	S 25
M26	4 21 24	4°12'26	25°37	16°59	8°58	25°19	14°25	20°20	20°22	0°49	5° 0	22°19	23°46	2°58	10°43	M26
T 27	4 25 21	5°13'13	8♏35	18°25	10°11	26° 5	14°39	20°20	20°24	0°47	4°59	22°R19	23°43	3° 5	10°40	T 27
W28	4 29 17	6°14'01	21°58	19°52	11°25	26°52	14°52	20°21	20°27	0°46	4°57	22°18	23°40	3°12	10°37	W28
T 29	4 33 14	7°14'51	5♏50	21°21	12°38	27°38	15° 6	20°21	20°30	0°44	4°56	22°15	23°37	3°18	10°33	T 29
F 30	4 37 10	8♌15'42	20♏10	22♉50	13♏51	28♏24	15♌19	20♈21	20♏33	0♈42	4♈55	22° 10	23° 34	3♈25	10° 30	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	decl	lat	decl	lat
T 1	14s31	5n 9	4n29	14s56	0s28	22s41	1s 0	24s51	1s33	21s20	0n29	15n48	0n52	6s52	0n36	18n47	1s43	9n 6	12s18	21n13	21n 8	16n 5	16n11	6s47					
F 2	14 50	0s11	4 54	14 12	0 7	22 55	1 2	24 49	1 33	21 22	0 29	15 47	0 52	6 54	0 36	18 47	1 43	9 6	12 18	21 14	21 8	16 7	16 11	6 48					
S 3	15 9	5 39	5 1	13 28	0n14	23 8	1 5	24 46	1 33	21 24	0 28	15 46	0 52	6 55	0 36	18 46	1 43	9 6	12 18	21 16	21 9	16 8	16 10	6 49					
S 4	15 27	10 53	4 47	12 47	0 33	23 21	1 7	24 43	1 33	21 26	0 28	15 45	0 53	6 56	0 36	18 46	1 43	9 6	12 18	21 18	21 9	16 10	16 10	6 49					
M 5	15 46	15 28	4 13	12 9	0 52	23 33	1 10	24 40	1 32	21 28	0 28	15 45	0 53	6 58	0 36	18 46	1 43	9 5	12 18	21 20	21 10	16 12	16 9	6 50					
T 6	16 4	18 59	3 20	11 36	1 9	23 45	1 12	24 36	1 32	21 30	0 28	15 44	0 53	6 59	0 36	18 45	1 44	9 5	12 18	21 21	21 10	16 14	16 9	6 50					
W 7	16 21	21 11	2 15	11 7	1 24	23 55	1 15	24 32	1 32	21 32	0 28	15 43	0 53	7 0	0 36	18 45	1 44	9 5	12 18	21 22	21 11	16 16	16 8	6 51					
T 8	16 39	21 53	1 2	10 44	1 38	24 5	1 17	24 28	1 32	21 34	0 28	15 43	0 53	7 2	0 36	18 45	1 44	9 5	12 19	21 23	21 12	16 18	16 8	6 52					
F 9	16 56	21 10	0s13	10 27	1 50	24 15	1 20	24 24	1 31	21 36	0 28	15 42	0 54	7 3	0 36	18 44	1 44	9 4	12 19	21 23	21 12	16 20	16 7	6 52					
S 10	17 13	19 11	1 24	10 16	2 0	24 23	1 22	24 19	1 31	21 38	0 28	15 41	0 54	7 4	0 36	18 44	1 44	9 4	12 19	21 23	21 13	16 21	16 7	6 53					
S 11	17 30	16 13	2 29	10 10	2 7	24 31	1 24	24 14	1 31	21 40	0 28	15 41	0 54	7 6	0 36	18 44	1 44	9 4	12 19	21 23	21 13	16 23	16 6	6 53					
M12	17 46	12 32	3 25	10 10	2 14	24 38	1 26	24 9	1 30	21 42	0 27	15 40	0 54	7 7	0 37	18 43	1 44	9 4	12 19	21 23	21 14	16 25	16 6	6 54					
T 13	18 2	8 21	4 9	10 14	2 18	24 45	1 29	24 3	1 30	21 44	0 27	15 40	0 54	7 8	0 37	18 43	1 44	9 4	12 19	21 23	21 14	16 27	16 5	6 55					
W14	18 18	3 55	4 41	10 23	2 21	24 50	1 31	23 58	1 30	21 46	0 27	15 39	0 55	7 9	0 37	18 43	1 44	9 3	12 19	21 24	21 15	16 29	16 5	6 55					
T 15	18 33	0n37	4 59	10 36	2 23	24 55	1 33	23 52	1 29	21 47	0 27	15 39	0 55	7 11	0 37	18 42	1 44	9 3	12 19	21 26	21 15	16 31	16 5	6 56					
F 16	18 48	5 5	5 4	10 52	2 23	25 0	1 35	23 46	1 29	21 49	0 27	15 39	0 55	7 12	0 37	18 42	1 44	9 3	12 19	21 28	21 16	16 33	16 4	6 56					
S 17	19 3	9 18	4 55	11 11	2 22	25 3	1 37	23 39	1 29	21 51	0 27	15 38	0 55	7 13	0 37	18 42	1 44	9 3	12 19	21 30	21 17	16 34	16 4	6 57					
S 18	19 18	13 10	4 33	11 33	2 20	25 6	1 39	23 32	1 28	21 53	0 27	15 38	0 55	7 14	0 37	18 41	1 44	9 3	12 19	21 32	21 17	16 36	16 4	6 57					
M19	19 32	16 29	3 59	11 57	2 18	25 8	1 41	23 25	1 28	21 55	0 27	15 38	0 55	7 15	0 37	18 41	1 44	9 2	12 19	21 33	21 18	16 38	16 3	6 58					
T 20	19 45	19 8	3 15	12 22	2 15	25 9	1 42	23 18	1 28	21 57	0 27	15 38	0 56	7 17	0 37	18 41	1 44	9 2	12 19	21 35	21 18	16 40	16 3	6 58					
W21	19 59	20 59	2 22	12 49	2 11	25 10	1 44	23 10	1 27	21 58	0 26	15 37	0 56	7 18	0 37	18 40	1 44	9 2	12 19	21 36	21 19	16 42	16 3	6 59					
T 22	20 12	21 54	1 23	13 17	2 6	25 9	1 46	23 3	1 27	22 0	0 26	15 37	0 56	7 19	0 37	18 40	1 44	9 2	12 19	21 36	21 19	16 44	16 2	6 59					
F 23	20 24	21 50	0 20	13 46	2 1	25 8	1 48	22 55	1 27	22 2	0 26	15 37	0 56	7 20	0 37	18 40	1 44	9 2	12 19	21 37	21 20	16 45	16 2	7 0					
S 24	20 37	20 45	0n45	14 16	1 55	25 6	1 49	22 46	1 26	22 3	0 26	15 37	0 56	7 21	0 37	18 39	1 44	9 2	12 19	21 37	21 20	16 47	16 2	7 0					
S 25	20 48	18 40	1 50	14 46	1 50	25 4	1 51	22 38	1 26	22 5	0 26	15 37	0 57	7 22	0 37	18 39	1 44	9 1	12 19	21 36	21 21	16 49	16 1	7 1					
M26	21 0	15 40	2 50	15 16	1 43	25 1	1 52	22 29	1 25	22 7	0 26	15 37	0 57	7 24	0 37	18 39	1 44	9 1	12 19	21 36	21 22	16 51	16 1	7 1					
T 27	21 11	11 49	3 44	15 46	1 37	24 57	1 53	22 20	1 25	22 8	0 26	15 37	0 57	7 25	0 37	18 38	1 44	9 1	12 19	21 36	21 22	16 53	16 1	7 2					
W28	21 22	7 17	4 27	16 16	1 30	24 52	1 55	22 11	1 25	22 10	0 26	15 37	0 57	7 26	0 37	18 38	1 44	9 1	12 19	21 36	21 23	16 54	16 1	7 2					
T 29	21 32	2 14	4 57	16 46	1 34	24 46	1 56	22 1	1 24	22 12	0 26	15 37	0 57	7 27	0 37	18 38	1 44	9 1	12 19	21 37	21 23	16 56	16 0	7 3					
F 30	21s42	3s 7	5n 9	17s15	1n17	24s40	1s57	21s51	1s24	22s13	0n26	15n37	0n58	7s28	0n37	18n37	1s44	9n 1	12s19	21n38	21n24	16n58	16n 0	7s					

ASTRODIENST EPHEMERIS for the year 1888
geocentric

DECEMBER 1888

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	4 41 7	9♂16'35	4♂56	24♂20	15♂4	29♂11	15♂33	20°R21	20♂36	0°R41	4°R54	22°R 3	23♂31	3♂32	10°R27	S 1
S 2	4 45 4	10°17'28	20° 2	25°50	16°17	29°57	15°47	20♂21	20°39	0♂39	4♂53	21♂57	23°27	3°39	10♂24	S 2
M 3	4 49 0	11°18'24	5♂18	27°21	17°31	0♂43	16° 0	20°21	20°42	0°37	4°52	21°50	23°24	3°45	10°21	M 3
T 4	4 52 57	12°19'20	20°34	28°52	18°44	1°30	16°14	20°20	20°44	0°36	4°51	21°46	23°21	3°52	10°17	T 4
W 5	4 56 53	13°20'17	5♂40	0♂23	19°57	2°16	16°27	20°20	20°47	0°34	4°49	21°43	23°18	3°59	10°14	W 5
T 6	5 0 50	14°21'16	20°26	1°55	21°10	3° 3	16°41	20°20	20°50	0°32	4°48	21°D42	23°15	4° 5	10°10	T 6
F 7	5 4 46	15°22'15	4♂47	3°27	22°23	3°49	16°54	20°19	20°52	0°31	4°47	21°42	23°11	4°12	10° 7	F 7
S 8	5 8 43	16°23'14	18°40	4°59	23°36	4°36	17° 8	20°18	20°55	0°29	4°46	21°44	23° 8	4°19	10° 3	S 8
S 9	5 12 39	17°24'15	2♂ 6	6°32	24°48	5°22	17°22	20°17	20°57	0°28	4°45	21°45	23° 5	4°25	10° 0	S 9
M10	5 16 36	18°25'15	15° 6	8° 4	26° 1	6° 9	17°35	20°16	21° 0	0°26	4°44	21°R46	23° 2	4°32	9°56	M10
T 11	5 20 33	19°26'16	27°46	9°37	27°14	6°56	17°49	20°15	21° 2	0°24	4°43	21°46	22°59	4°39	9°52	T 11
W12	5 24 29	20°27'18	10♂ 8	11°10	28°27	7°42	18° 2	20°14	21° 4	0°23	4°42	21°44	22°56	4°45	9°48	W12
T 13	5 28 26	21°28'20	22°17	12°43	29°39	8°29	18°16	20°13	21° 7	0°21	4°41	21°41	22°52	4°52	9°45	T 13
F 14	5 32 22	22°29'23	4♂16	14°16	0♂52	9°15	18°30	20°11	21° 9	0°20	4°40	21°36	22°49	4°59	9°41	F 14
S 15	5 36 19	23°30'26	16°10	15°49	2° 5	10° 2	18°43	20°10	21°11	0°18	4°38	21°31	22°46	5° 5	9°37	S 15
S 16	5 40 15	24°31'30	28° 1	17°22	3°17	10°49	18°57	20° 8	21°14	0°17	4°37	21°26	22°43	5°12	9°33	S 16
M17	5 44 12	25°32'34	9♂15	18°55	4°29	11°36	19°10	20° 6	21°16	0°15	4°36	21°21	22°40	5°19	9°29	M17
T 18	5 48 8	26°33'39	21°43	20°29	5°42	12°22	19°24	20° 5	21°18	0°14	4°35	21°18	22°37	5°26	9°25	T 18
W19	5 52 5	27°34'45	3♂38	22° 3	6°54	13° 9	19°38	20° 3	21°20	0°12	4°34	21°15	22°33	5°32	9°21	W19
T 20	5 56 2	28°35'50	15°39	23°37	8° 6	13°56	19°51	20° 1	21°22	0°11	4°33	21°D14	22°30	5°39	9°17	T 20
F 21	5 59 58	29°36'57	27°47	25°11	9°18	14°43	20° 5	19°59	21°24	0° 9	4°32	21°14	22°27	5°46	9°13	F 21
S 22	6 3 55	0♂38'04	10♂ 3	26°45	10°31	15°29	20°18	19°56	21°26	0° 8	4°31	21°15	22°24	5°52	9° 9	S 22
S 23	6 7 51	1°39'11	22°32	28°20	11°43	16°16	20°32	19°54	21°28	0° 6	4°30	21°16	22°21	5°59	9° 5	S 23
M24	6 11 48	2°40'19	5♂15	29°54	12°54	17° 3	20°45	19°52	21°29	0° 5	4°29	21°18	22°17	6° 6	9° 1	M24
T 25	6 15 44	3°41'28	18°15	1♂29	14° 6	17°50	20°59	19°49	21°31	0° 4	4°28	21°19	22°14	6°12	8°57	T 25
W26	6 19 41	4°42'37	1♂35	3° 5	15°18	18°37	21°12	19°46	21°33	0° 2	4°27	21°R20	22°11	6°19	8°53	W26
T 27	6 23 37	5°43'46	15°17	4°40	16°30	19°23	21°25	19°44	21°35	0° 1	4°26	21°20	22° 8	6°26	8°49	T 27
F 28	6 27 34	6°44'56	29°21	6°16	17°41	20°10	21°39	19°41	21°36	29♂59	4°25	21°19	22° 5	6°32	8°45	F 28
S 29	6 31 31	7°46'07	13♂48	7°52	18°53	20°57	21°52	19°38	21°38	29°58	4°24	21°17	22° 2	6°39	8°40	S 29
S 30	6 35 27	8°47'18	28°33	9°29	20° 4	21°44	22° 6	19°35	21°39	29°57	4°23	21°16	21°58	6°46	8°36	S 30
M31	6 39 24	9♂48'29	13♂30	11♂ 6	21♂16	22♂31	22♂19	19♂32	21♂41	29♂56	4♂23	21♂14	21♂55	6♂52	8♂32	M31

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	21s51	8s26	5n 2	17s44	1n10	24s33	1s58	21s41	1s23	22s15	0n26	15n38	0n58	7s29	0n37	18n37	1s44	9n 0	12s18	21n39	21n24	17n 0	16n 0	7s 4	
S 2	22 0	13 22	4 33	18 13	1 2	24 26	1 59	21 31	1 23	22 16	0 25	15 38	0 58	7 30	0 37	18 37	1 43	9 0	12 18	21 40	21 25	17 2	16 0	7 4	
M 3	22 9	17 30	3 45	18 41	0 55	24 17	2 0	21 21	1 22	22 18	0 25	15 38	0 58	7 31	0 37	18 36	1 43	9 0	12 18	21 41	21 25	17 3	16 0	7 5	
T 4	22 17	20 26	2 41	19 8	0 48	24 8	2 1	21 10	1 22	22 19	0 25	15 38	0 58	7 32	0 37	18 36	1 43	9 0	12 18	21 42	21 26	17 5	16 0	7 5	
W 5	22 25	21 54	1 26	19 35	0 41	23 58	2 1	20 59	1 21	22 21	0 25	15 39	0 59	7 33	0 37	18 36	1 43	9 0	12 18	21 42	21 26	17 7	15 59	7 5	
T 6	22 32	21 47	0 7	20 1	0 34	23 48	2 2	20 48	1 21	22 22	0 25	15 39	0 59	7 34	0 37	18 35	1 43	9 0	12 18	21 42	21 27	17 9	15 59	7 6	
F 7	22 39	20 14	1s11	20 26	0 26	23 37	2 3	20 37	1 20	22 24	0 25	15 39	0 59	7 35	0 37	18 35	1 43	9 0	12 18	21 42	21 28	17 11	15 59	7 6	
S 8	22 45	17 29	2 22	20 50	0 19	23 25	2 3	20 25	1 20	22 25	0 25	15 40	0 59	7 36	0 37	18 35	1 43	9 0	12 18	21 42	21 28	17 12	15 59	7 6	
S 9	22 51	13 53	3 23	21 13	0 12	23 12	2 4	20 13	1 19	22 26	0 25	15 40	0 59	7 37	0 37	18 34	1 43	9 0	12 18	21 42	21 29	17 14	15 59	7 7	
M10	22 57	9 44	4 11	21 35	0 5	22 59	2 4	20 1	1 19	22 28	0 25	15 41	1 0	7 38	0 37	18 34	1 43	8 59	12 18	21 42	21 29	17 16	15 59	7 7	
T 11	23 2	5 16	4 46	21 56	0s 2	22 45	2 4	19 49	1 18	22 29	0 25	15 41	1 0	7 38	0 37	18 34	1 43	8 59	12 18	21 42	21 30	17 18	15 59	7 7	
W12	23 7	0 41	5 6	22 17	0 9	22 31	2 4	19 36	1 18	22 30	0 25	15 42	1 0	7 39	0 37	18 33	1 43	8 59	12 18	21 42	21 30	17 19	15 59	7 8	
T 13	23 11	3n50	5 13	22 36	0 16	22 15	2 4	19 24	1 17	22 32	0 24	15 42	1 0	7 40	0 37	18 33	1 43	8 59	12 17	21 42	21 31	17 21	15 59	7 8	
F 14	23 14	8 9	5 5	22 54	0 23	22 0	2 4	19 11	1 17	22 33	0 24	15 43	1 0	7 41	0 37	18 33	1 43	8 59	12 17	21 43	21 31	17 23	15 59	7 8	
S 15	23 18	12 8	4 45	23 11	0 29	21 43	2 4	18 58	1 16	22 34	0 24	15 44	1 1	7 42	0 37	18 33	1 43	8 59	12 17	21 44	21 32	17 25	15 59	7 9	
S 16	23 20	15 38	4 12	23 27	0 36	21 26	2 4	18 45	1 16	22 35	0 24	15 44	1 1	7 43	0 37	18 32	1 43	8 59	12 17	21 45	21 32	17 26	15 59	7 9	
M17	23 23	18 31	3 28	23 41	0 42	21 9	2 3	18 31	1 15	22 37	0 24	15 45	1 1	7 43	0 37	18 32	1 43	8 59	12 17	21 45	21 33	17 28	15 59	7 9	
T 18	23 24	20 37	2 35	23 55	0 48	20 51	2 3	18 18	1 15	22 38	0 24	15 46	1 1	7 44	0 37	18 32	1 43	8 59	12 17	21 46	21 33	17 30	15 59	7 9	
W19	23 26	21 49	1 35	24 7	0 54	20 32	2 2	18 4	1 14	22 39	0 24	15 47	1 1	7 45	0 37	18 31	1 43	8 59	12 17	21 46	21 34	17 32	15 59	7 10	
T 20	23 27	22 2	0 31	24 18	1 0	20 12	2 2	17 50	1 13	22 40	0 24	15 47	1 2	7 46	0 37	18 31	1 43	8 59	12 17	21 47	21 34	17 33	15 59	7 10	
F 21	23 27	21 12	0n36	24 28	1 6	19 53	2 1	17 36	1 13	22 41	0 24	15 48	1 2	7 46	0 37	18 31	1 43	8 59	12 16	21 47	21 35	17 35	15 59	7 10	
S 22	23 27	19 22	1 42	24 36	1 11	19 32	2 0	17 21	1 12	22 42	0 24	15 49	1 2	7 47	0 37	18 31	1 43	8 59	12 16	21 46	21 35	17 37	15 59	7 10	
S 23	23 27	16 36	2 44	24 43	1 17	19 11	1 59	17 7	1 12	22 43	0 24	15 50	1 2	7 48	0 37	18 30	1 43	8 59	12 16	21 46	21 36	17 39	15 59	7 10	
M24	23 26	13 0	3 40	24 49	1 22	18 50	1 58	16 52	1 11	22 44	0 24	15 51	1 2	7 48	0 37	18 30	1 43	8 59	12 16	21 46	21 36	17 40	15 59	7 11	
T 25	23 24	8 43	4 25	24 53	1 27	18 28	1 57	16 37	1 11	22 45	0 24	15 52	1 2	7 49	0 37	18 30	1 43	8 59	12 16	21 46	21 37	17 42	15 59	7 11	
W26	23 22	3 56	4 58	24 56	1 31	18 6	1 56	16 22	1 10	22 46	0 23	15 53	1 3	7 50	0 37	18 30	1 43	8 59	12 16	21 46	21 37	17 44	15 59	7 11	
T 27	23 20	1s11	5 15	24 58	1 36	17 43	1 54	16 7	1 9	22 47	0 23	15 54	1 3	7 50	0 37	18 29	1 43	8 59	12 15	21 46	21 38	17 46	16 0	7 11	
F 28	23 17	6 22	5 13	24 58	1 40	17 20	1 53	15 51	1 9	22 48	0 23	15 55	1 3	7 51	0 37	18 29	1 43	8 59	12 15	21 46	21 39	17 47	16 0	7 11	
S 29	23 13	11 20	4 53	24 57	1 44	16 56	1 51	15 36	1 8	22 49	0 23	15 56	1 3	7 51	0 37	18 29	1 43	8 59	12 15	21 46	21 39	17 49	16 0	7 11	
S 30	23 10	15 45	4 12	24 54	1 48	16 32	1 50	15 20	1 8	22 50	0 23	15 57	1 3	7 52	0 38	18 29	1 43	8 59	12 15	21 46	21 40	17 51	16 0	7 11	
M31	23s 5	19s13	3n14	24s50	1s51	16s 7	1s48	15s 4	1s 7	22s51	0n23	15n59	1n 4	7s52	0n38	18n29	1s43	8n59	12s15	21n47	21n40	17n52	16n 0	7s11	