



Astrodienst Ephemeris Tables for the year 1880

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 1880
geocentric

JANUARY 1880

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	6 40 8	10 ³ 0'06	17 ¹² 42	17 ³⁵ 35	25 ¹¹ 9	14 ⁸ 32	9 ¹¹ 3	9 ¹⁹ 19	8 ¹⁵ 52	9 ¹⁹ 22	25 ¹⁵ 43	15 ³³ 33	15 ⁵⁹ 59	0 ¹¹ 42	8 ¹⁹ 20	T 1
F 2	6 44 5	11 ¹ 1'15	0 ¹⁰ 30	18 ⁴² 42	26 ¹⁷ 17	14 ⁴³ 43	9 ¹⁴ 14	9 ²¹ 21	8 ¹⁵ 51	9 ¹⁸ 21	25 ¹⁵ 42	15 ³³ 33	15 ⁵⁶ 56	0 ⁴⁹ 49	8 ¹⁹ 19	F 2
S 3	6 48 1	12 ² 2'24	13 ³² 32	19 ⁵² 52	27 ²⁶ 26	14 ⁵⁵ 55	9 ²⁵ 25	9 ²⁴ 24	8 ¹⁵ 50	9 ²¹ 21	25 ¹⁵ 41	15 ³⁴ 34	15 ⁵³ 53	0 ⁵⁵ 55	8 ¹⁸ 18	S 3
S 4	6 51 58	13 ³ 3'34	26 ⁵¹ 51	21 ⁴ 4	28 ³⁵ 35	15 ⁸ 8	9 ³⁶ 36	9 ²⁶ 26	8 ¹⁴ 49	9 ²⁰ 20	25 ¹⁵ 40	15 ³⁴ 34	15 ⁵⁰ 50	1 ² 2	8 ¹⁷ 17	S 4
M 5	6 55 54	14 ⁴ 4'43	10 ¹² 27	22 ¹⁸ 18	29 ⁴⁴ 44	15 ²¹ 21	9 ⁴⁷ 47	9 ²⁸ 28	8 ¹⁴ 48	9 ²⁰ 20	25 ¹⁵ 40	15 ³⁴ 34	15 ⁴⁷ 47	1 ⁹ 9	8 ¹⁷ 17	M 5
T 6	6 59 51	15 ⁵ 5'53	24 ²¹ 21	23 ³⁴ 34	0 ⁵³ 53	15 ³⁴ 34	9 ⁵⁸ 58	9 ³¹ 31	8 ¹⁴ 47	9 ¹⁹ 19	25 ¹⁵ 39	15 ³⁴ 34	15 ⁴³ 43	1 ¹⁵ 15	8 ¹⁶ 16	T 6
W 7	7 3 48	16 ⁶ 7'03	8 ¹¹ 34	24 ⁵¹ 51	2 ³ 3	15 ⁴⁸ 48	10 ⁹ 9	9 ³⁴ 34	8 ¹⁴ 46	9 ¹⁹ 19	25 ¹⁵ 38	15 ³⁴ 34	15 ⁴⁰ 40	1 ²² 22	8 ¹⁵ 15	W 7
T 8	7 7 44	17 ⁷ 8'13	23 ² 2	26 ¹⁰ 10	3 ¹² 12	16 ³ 3	10 ²¹ 21	9 ³⁷ 37	8 ¹⁴ 44	9 ¹⁸ 18	25 ¹⁵ 38	15 ³⁴ 34	15 ³⁷ 37	1 ²⁹ 29	8 ¹⁴ 14	T 8
F 9	7 11 41	18 ⁸ 9'23	7 ¹⁴ 43	27 ³⁰ 30	4 ²² 22	16 ¹⁸ 18	10 ³² 32	9 ³⁹ 39	8 ¹⁴ 43	9 ¹⁸ 18	25 ¹⁵ 37	15 ³⁴ 34	15 ³⁴ 34	1 ³⁵ 35	8 ¹⁴ 14	F 9
S 10	7 15 37	19 ⁹ 10'33	22 ³⁰ 30	28 ⁵¹ 51	5 ³² 32	16 ³⁴ 34	10 ⁴⁴ 44	9 ⁴² 42	8 ¹⁴ 42	9 ¹⁷ 17	25 ¹⁵ 36	15 ³⁵ 35	15 ³¹ 31	1 ⁴² 42	8 ¹³ 13	S 10
S 11	7 19 34	20 ¹⁰ 11'43	7 ¹⁸ 18	0 ¹³ 13	6 ⁴² 42	16 ⁵⁰ 50	10 ⁵⁵ 55	9 ⁴⁶ 46	8 ¹⁴ 40	9 ¹⁷ 17	25 ¹⁵ 36	15 ³⁵ 35	15 ²⁸ 28	1 ⁴⁹ 49	8 ¹³ 13	S 11
M 12	7 23 30	21 ¹¹ 12'53	21 ⁵⁸ 58	1 ³⁷ 37	7 ⁵² 52	17 ⁷ 7	11 ⁷ 7	9 ⁴⁹ 49	8 ¹³ 39	9 ¹⁷ 17	25 ¹⁵ 35	15 ³⁵ 35	15 ²⁴ 24	1 ⁵⁵ 55	8 ¹² 12	M 12
T 13	7 27 27	22 ¹² 14'02	6 ¹¹ 24	3 ¹ 1	9 ² 2	17 ²⁴ 24	11 ¹⁹ 19	9 ⁵² 52	8 ¹³ 37	9 ¹⁷ 17	25 ¹⁵ 35	15 ³⁵ 35	15 ²¹ 21	2 ² 2	8 ¹² 12	T 13
W 14	7 31 24	23 ¹³ 15'11	20 ³¹ 31	4 ²⁶ 26	10 ¹² 12	17 ⁴² 42	11 ³¹ 31	9 ⁵⁵ 55	8 ¹³ 36	9 ¹⁶ 16	25 ¹⁵ 34	15 ³⁴ 34	15 ¹⁸ 18	2 ⁹ 9	8 ¹² 12	W 14
T 15	7 35 20	24 ¹⁴ 16'19	4 ¹¹ 14	5 ⁵¹ 51	11 ²³ 23	18 ⁰ 0	11 ⁴³ 43	9 ⁵⁹ 59	8 ¹³ 34	9 ¹⁶ 16	25 ¹⁵ 34	15 ³³ 33	15 ¹⁵ 15	2 ¹⁵ 15	8 ¹² 12	T 15
F 16	7 39 17	25 ¹⁵ 17'26	17 ³³ 33	7 ¹⁸ 18	12 ³³ 33	18 ¹⁹ 19	11 ⁵⁵ 55	10 ³ 3	8 ¹³ 33	9 ¹⁶ 16	25 ¹⁵ 33	15 ³² 32	15 ¹² 12	2 ²² 22	8 ¹² 12	F 16
S 17	7 43 13	26 ¹⁶ 18'33	0 ¹⁹ 27	8 ⁴⁵ 45	13 ⁴⁴ 44	18 ³⁸ 38	12 ⁷ 7	10 ⁶ 6	8 ¹³ 31	9 ¹⁶ 16	25 ¹⁵ 33	15 ³⁰ 30	15 ⁹ 9	2 ²⁹ 29	8 ¹¹ 11	S 17
S 18	7 47 10	27 ¹⁷ 19'38	13 ⁰ 0	10 ¹³ 13	14 ⁵⁵ 55	18 ⁵⁷ 57	12 ¹⁹ 19	10 ¹⁰ 10	8 ¹² 29	9 ¹⁶ 16	25 ¹⁵ 32	15 ²⁹ 29	15 ⁵ 5	2 ³⁶ 36	8 ¹¹ 11	S 18
M 19	7 51 6	28 ¹⁸ 20'43	25 ¹⁶ 16	11 ⁴² 42	16 ⁵ 5	19 ¹⁷ 17	12 ³² 32	10 ¹⁴ 14	8 ¹² 27	9 ¹⁶ 16	25 ¹⁵ 32	15 ²⁹ 29	15 ² 2	2 ⁴² 42	8 ¹¹ 11	M 19
T 20	7 55 3	29 ¹⁹ 21'47	7 ¹⁸ 18	13 ¹¹ 11	17 ¹⁶ 16	19 ³⁷ 37	12 ⁴⁴ 44	10 ¹⁸ 18	8 ¹² 25	9 ¹⁶ 16	25 ¹⁵ 31	15 ²⁹ 29	14 ⁵⁹ 59	2 ⁴⁹ 49	8 ¹² 12	T 20
W 21	7 58 59	0 ²² 22'50	19 ¹¹ 11	14 ⁴¹ 41	18 ²⁷ 27	19 ⁵⁸ 58	12 ⁵⁷ 57	10 ²² 22	8 ¹² 24	9 ¹⁶ 16	25 ¹⁵ 31	15 ³⁰ 30	14 ⁵⁶ 56	2 ⁵⁶ 56	8 ¹² 12	W 21
T 22	8 2 56	1 ²³ 53	1 ¹¹ 11	16 ¹² 12	19 ³⁸ 38	20 ¹⁹ 19	13 ⁹ 9	10 ²⁶ 26	8 ¹² 22	9 ¹⁶ 16	25 ¹⁵ 31	15 ³¹ 31	14 ⁵³ 53	3 ² 2	8 ¹² 12	T 22
F 23	8 6 53	2 ²⁴ 54	12 ⁵¹ 51	17 ⁴³ 43	20 ⁵⁰ 50	20 ⁴⁰ 40	13 ²² 22	10 ³⁰ 30	8 ¹² 20	9 ¹⁶ 16	25 ¹⁵ 30	15 ³³ 33	14 ⁴⁹ 49	3 ⁹ 9	8 ¹² 12	F 23
S 24	8 10 49	3 ²⁵ 54	24 ⁴⁶ 46	19 ¹⁵ 15	22 ¹ 1	21 ² 2	13 ³⁵ 35	10 ³⁴ 34	8 ¹² 18	9 ¹⁶ 16	25 ¹⁵ 30	15 ³⁴ 34	14 ⁴⁶ 46	3 ¹⁶ 16	8 ¹³ 13	S 24
S 25	8 14 46	4 ²⁶ 53	6 ¹⁵ 50	20 ⁴⁷ 47	23 ¹² 12	21 ²⁴ 24	13 ⁴⁷ 47	10 ³⁹ 39	8 ¹² 16	9 ¹⁶ 16	25 ¹⁵ 29	15 ³⁵ 35	14 ⁴³ 43	3 ²² 22	8 ¹³ 13	S 25
M 26	8 18 42	5 ²⁷ 52	19 ⁵ 5	22 ²⁰ 20	24 ²³ 23	21 ⁴⁶ 46	14 ⁰ 0	10 ⁴³ 43	8 ¹² 14	9 ¹⁶ 16	25 ¹⁵ 29	15 ³⁵ 35	14 ⁴⁰ 40	3 ²⁹ 29	8 ¹⁴ 14	M 26
T 27	8 22 39	6 ²⁸ 49	1 ¹² 32	23 ⁵⁴ 54	25 ³⁵ 35	22 ⁹ 9	14 ¹³ 13	10 ⁴⁸ 48	8 ¹² 12	9 ¹⁷ 17	25 ¹⁵ 29	15 ³⁴ 34	14 ³⁷ 37	3 ³⁶ 36	8 ¹⁴ 14	T 27
W 28	8 26 35	7 ²⁹ 45	14 ¹⁵ 15	25 ²⁹ 29	26 ⁴⁶ 46	22 ³² 32	14 ²⁶ 26	10 ⁵³ 53	8 ¹² 10	9 ¹⁷ 17	25 ¹⁵ 29	15 ³² 32	14 ³⁴ 34	3 ⁴² 42	8 ¹⁵ 15	W 28
T 29	8 30 32	8 ³⁰ 41	27 ¹¹ 11	27 ⁴ 4	27 ⁵⁸ 58	22 ⁵⁶ 56	14 ³⁹ 39	10 ⁵⁷ 57	8 ⁷ 7	9 ¹⁷ 17	25 ¹⁵ 28	15 ²⁹ 29	14 ³⁰ 30	3 ⁴⁹ 49	8 ¹⁵ 15	T 29
F 30	8 34 28	9 ³¹ 35	10 ¹² 22	28 ³⁹ 39	29 ¹⁰ 10	23 ¹⁹ 19	14 ⁵² 52	11 ² 2	8 ⁵ 5	9 ¹⁸ 18	25 ¹⁵ 28	15 ²⁶ 26	14 ²⁷ 27	3 ⁵⁶ 56	8 ¹⁶ 16	F 30
S 31	8 38 25	10 ³² 32'28	23 ¹² 46	0 ¹⁶ 16	0 ¹³ 22	23 ¹⁸ 43	15 ¹¹ 6	11 ¹⁹ 7	8 ¹¹ 3	9 ¹⁸ 18	25 ¹⁵ 28	15 ²² 22	14 ²⁴ 24	4 ¹¹ 2	8 ¹⁷ 17	S 31

Day	☉	☽		♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat
T 1	23s 5	12n51	2s49	21s13	1n40	16s24	2n45	17n53	1n45	9s14	1s 8	1n25	2s29	8n59	0n47	12n54	1s49	5n41	13s53	22s33	22s30	23n53	12n49	1s34
F 2	23 0	7 48	3 45	21 28	1 31	16 41	2 44	17 57	1 46	9 10	1 8	1 26	2 29	8 59	0 47	12 54	1 49	5 41	13 53	22 33	22 30	23 54	12 48	1 34
S 3	22 55	2 20	4 30	21 42	1 23	16 57	2 43	18 1	1 47	9 5	1 8	1 27	2 28	9 0	0 47	12 54	1 49	5 41	13 53	22 33	22 31	23 55	12 48	1 34
S 4	22 49	3s21	5 1	21 56	1 14	17 14	2 42	18 6	1 47	9 1	1 7	1 28	2 28	9 0	0 47	12 54	1 49	5 41	13 53	22 33	22 31	23 56	12 48	1 34
M 5	22 43	8 59	5 16	22 9	1 5	17 30	2 40	18 10	1 48	8 57	1 7	1 29	2 28	9 1	0 48	12 54	1 48	5 41	13 53	22 33	22 31	23 57	12 48	1 34
T 6	22 36	14 18	5 14	22 21	0 57	17 45	2 39	18 14	1 48	8 52	1 7	1 31	2 28	9 1	0 48	12 54	1 48	5 41	13 52	22 33	22 32	23 57	12 47	1 34
W 7	22 29	18 59	4 53	22 33	0 48	18 1	2 38	18 19	1 49	8 48	1 7	1 32	2 27	9 2	0 48	12 54	1 48	5 41	13 52	22 33	22 32	23 58	12 47	1 34
T 8	22 21	22 37	4 12	22 44	0 40	18 16	2 36	18 24	1 49	8 44	1 7	1 33	2 27	9 2	0 48	12 53	1 48	5 41	13 52	22 33	22 32	23 59	12 47	1 34
F 9	22 13	24 49	3 15	22 55	0 31	18 30	2 34	18 29	1 50	8 39	1 7	1 35	2 27	9 3	0 48	12 53	1 48	5 42	13 51	22 33	22 33	24 0	12 47	1 34
S 10	22 5	25 19	2 5	23 4	0 23	18 44	2 33	18 34	1 50	8 35	1 7	1 36	2 27	9 3	0 48	12 53	1 48	5 42	13 51	22 33	22 33	24 0	12 46	1 34
S 11	21 56	24 1	0 46	23 13	0 15	18 58	2 31	18 39	1 51	8 30	1 7	1 38	2 26	9 4	0 48	12 53	1 48	5 42	13 51	22 33	22 34	24 1	12 46	1 34
M12	21 47	21 5	0n35	23 20	0 7	19 11	2 29	18 44	1 51	8 26	1 6	1 39	2 26	9 4	0 48	12 53	1 48	5 42	13 51	22 33	22 34	24 2	12 46	1 34
T 13	21 37	16 51	1 53	23 26	0s 1	19 24	2 27	18 49	1 52	8 21	1 6	1 41	2 26	9 5	0 48	12 53	1 48	5 42	13 50	22 33	22 34	24 3	12 46	1 34
W14	21 27	11 47	3 2	23 32	0 9	19 37	2 25	18 55	1 52	8 16	1 6	1 42	2 26	9 5	0 48	12 53	1 48	5 42	13 50	22 33	22 35	24 3	12 46	1 34
T 15	21 17	6 16	3 58	23 36	0 16	19 49	2 22	19 0	1 52	8 12	1 6	1 44	2 25	9 6	0 48	12 53	1 48	5 42	13 50	22 33	22 35	24 4	12 46	1 34
F 16	21 6	0 37	4 40	23 39	0 24	20 0	2 20	19 6	1 53	8 7	1 6	1 45	2 25	9 7	0 48	12 53	1 48	5 43	13 50	22 33	22 35	24 5	12 46	1 34
S 17	20 54	4n52	5 6	23 41	0 31	20 11	2 18	19 11	1 53	8 2	1 6	1 47	2 25	9 7	0 48	12 53	1 48	5 43	13 49	22 33	22 36	24 6	12 46	1 34
S 18	20 43	10 0	5 17	23 41	0 38	20 22	2 15	19 17	1 53	7 57	1 6	1 49	2 25	9 8	0 48	12 53	1 48	5 43	13 49	22 33	22 36	24 6	12 46	1 34
M19	20 30	14 37	5 12	23 41	0 45	20 32	2 13	19 23	1 53	7 53	1 6	1 50	2 24	9 9	0 48	12 53	1 48	5 43	13 49	22 33	22 36	24 7	12 46	1 34
T 20	20 18	18 35	4 54	23 39	0 51	20 41	2 10	19 28	1 54	7 48	1 6	1 52	2 24	9 10	0 48	12 53	1 48	5 43	13 48	22 33	22 37	24 8	12 46	1 34
W21	20 5	21 46	4 24	23 36	0 58	20 50	2 8	19 34	1 54	7 43	1 6	1 54	2 24	9 10	0 48	12 53	1 47	5 44	13 48	22 33	22 37	24 8	12 46	1 34
T 22	19 52	24 0	3 42	23 32	1 4	20 59	2 5	19 40	1 54	7 38	1 6	1 56	2 24	9 11	0 48	12 54	1 47	5 44	13 48	22 33	22 37	24 9	12 46	1 34
F 23	19 38	25 11	2 51	23 26	1 9	21 6	2 2	19 46	1 54	7 33	1 5	1 58	2 24	9 12	0 48	12 54	1 47	5 44	13 48	22 33	22 38	24 10	12 46	1 34
S 24	19 24	25 14	1 53	23 19	1 15	21 14	1 59	19 52	1 54	7 28	1 5	1 59	2 23	9 13	0 48	12 54	1 47	5 44	13 47	22 33	22 38	24 10	12 46	1 34
S 25	19 10	24 5	0 48	23 10	1 21	21 21	1 56	19 58	1 55	7 23	1 5	2 1	2 23	9 13	0 48	12 54	1 47	5 44	13 47	22 33	22 39	24 11	12 47	1 34
M26	18 55	21 47	0s19	23 1	1 26	21 27	1 54	20 4	1 55	7 18	1 5	2 3	2 23	9 14	0 48	12 54	1 47	5 45	13 47	22 33	22 39	24 12	12 47	1 34
T 27	18 40	18 25	1 27	22 50	1 30	21 32	1 51	20 10	1 55	7 13	1 5	2 5	2 23	9 15	0 48	12 54	1 47	5 45	13 46	22 33	22 39	24 12	12 47	1 34
W28	18 25	14 9	2 31	22 37	1 35	21 37	1 48	20 16	1 55	7 8	1 5	2 7	2 22	9 16	0 48	12 54	1 47	5 45	13 46	22 33	22 40	24 13	12 47	1 34
T 29	18 9	9 11	3 29	22 23	1 39	21 42	1 45	20 22	1 55	7 3	1 5	2 9	2 22	9 17	0 48	12 54	1 47	5 45	13 46	22 33	22 40	24 14	12 47	1 34
F 30	17 53	3 43	4 17	22 8	1 43	21 46	1 41	20 28	1 55	6 58	1 5	2 11	2 22	9 17	0 48	12 55	1 47	5 46	13 45	22 34	22 40	24 14	12 48	1 34
S 31	17s36	1s59	4s52	21s51	1s47	21s49	1n38	20n34	1n55	6s52	1s 5	2n14	2s22	9n18	0n48	12n55	1s47	5n46	13s45	22s34	22s41	24n15	12n48	1s34

ASTRODIENST EPHEMERIS for the year 1880

geocentric

FEBRUARY 1880

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	8 42 22	11 ³³ 21	7 ²²	1 ⁵³	1 ³³	24 ⁸ 7	15 ¹⁹	11 ¹²	8 ^R 1	9 ⁸ 18	25 ^R 28	15 ^R 18	14 ²¹	4 ^{II} 9	8 ⁸ 18	S 1
M 2	8 46 18	12 ³⁴ 13	21 [°] 9	3 [°] 31	2 [°] 45	24 ³²	15 [°] 32	11 [°] 17	7 ⁵⁹	9 [°] 19	25 ²⁸	15 ¹⁵	14 [°] 18	4 [°] 16	8 [°] 19	M 2
T 3	8 50 15	13 ³⁵ 04	5 ¹¹ 5	5 [°] 10	3 [°] 57	24 ⁵⁷	15 [°] 46	11 [°] 22	7 [°] 56	9 [°] 19	25 [°] 28	15 [°] 14	14 [°] 15	4 [°] 22	8 [°] 20	T 3
W 4	8 54 11	14 ³⁵ 54	19 [°] 5	6 [°] 49	5 [°] 9	25 ²²	15 [°] 59	11 [°] 27	7 [°] 54	9 [°] 20	25 [°] 27	15 [°] D14	14 [°] 11	4 [°] 29	8 [°] 21	W 4
T 5	8 58 8	15 ³⁶ 44	3 ²¹	8 [°] 29	6 [°] 21	25 ⁴⁷	16 [°] 13	11 [°] 32	7 [°] 52	9 [°] 20	25 [°] 27	15 [°] 15	14 [°] 8	4 [°] 36	8 [°] 22	T 5
F 6	9 2 4	16 ³⁷ 32	17 [°] 38	10 [°] 10	7 [°] 33	26 ¹³	16 [°] 26	11 [°] 38	7 [°] 49	9 [°] 21	25 [°] 27	15 [°] 16	14 [°] 5	4 [°] 42	8 [°] 23	F 6
S 7	9 6 1	17 ³⁸ 20	1 ⁵⁷	11 [°] 52	8 [°] 46	26 ³⁹	16 [°] 40	11 [°] 43	7 [°] 47	9 [°] 21	25 [°] 27	15 [°] 17	14 [°] 2	4 [°] 49	8 [°] 24	S 7
S 8	9 9 57	18 ³⁹ 06	16 [°] 16	13 [°] 34	9 [°] 58	27 [°] 5	16 [°] 53	11 [°] 49	7 [°] 44	9 [°] 22	25 [°] 27	15 [°] R18	13 [°] 59	4 [°] 56	8 [°] 26	S 8
M 9	9 13 54	19 ³⁹ 52	0 ³⁰	15 [°] 17	11 [°] 10	27 ³¹	17 [°] 7	11 [°] 54	7 [°] 42	9 [°] 23	25 [°] D27	15 [°] 17	13 [°] 55	5 [°] 2	8 [°] 27	M 9
T 10	9 17 51	20 ⁴⁰ 36	14 [°] 36	17 [°] 1	12 [°] 23	27 ⁵⁸	17 [°] 21	12 [°] 0	7 [°] 39	9 [°] 24	25 [°] 27	15 [°] 14	13 [°] 52	5 [°] 9	8 [°] 28	T 10
W11	9 21 47	21 ⁴¹ 19	28 [°] 28	18 [°] 46	13 [°] 35	28 [°] 25	17 [°] 35	12 [°] 5	7 [°] 37	9 [°] 24	25 [°] 27	15 [°] 10	13 [°] 49	5 [°] 16	8 [°] 30	W11
T 12	9 25 44	22 ⁴² 00	12 ³ 3	20 [°] 32	14 [°] 47	28 ⁵²	17 [°] 49	12 [°] 11	7 [°] 34	9 [°] 25	25 [°] 27	15 [°] 4	13 [°] 46	5 [°] 22	8 [°] 31	T 12
F 13	9 29 40	23 ⁴² 40	25 [°] 18	22 [°] 19	16 [°] 0	29 [°] 19	18 [°] 2	12 [°] 17	7 [°] 32	9 [°] 26	25 [°] 27	14 [°] 57	13 [°] 43	5 [°] 29	8 [°] 33	F 13
S 14	9 33 37	24 ⁴³ 18	8 ¹³	24 [°] 6	17 [°] 12	29 ⁴⁷	18 [°] 16	12 [°] 23	7 [°] 29	9 [°] 27	25 [°] 27	14 [°] 50	13 [°] 40	5 [°] 36	8 [°] 35	S 14
S 15	9 37 33	25 ⁴³ 54	20 [°] 48	25 [°] 54	18 [°] 25	0 ¹⁴	18 [°] 30	12 [°] 29	7 [°] 27	9 [°] 28	25 [°] 28	14 [°] 44	13 [°] 36	5 [°] 42	8 [°] 36	S 15
M16	9 41 30	26 ⁴⁴ 29	3 ⁶ 6	27 [°] 43	19 [°] 37	0 ⁴²	18 [°] 44	12 [°] 35	7 [°] 24	9 [°] 28	25 [°] 28	14 [°] 39	13 [°] 33	5 [°] 49	8 [°] 38	M16
T 17	9 45 26	27 ⁴⁵ 02	15 [°] 10	29 [°] 33	20 [°] 50	1 [°] 10	18 [°] 58	12 [°] 41	7 [°] 22	9 [°] 29	25 [°] 28	14 [°] 36	13 [°] 30	5 [°] 56	8 [°] 40	T 17
W18	9 49 23	28 ⁴⁵ 34	27 [°] 4	1 ²⁴ 3	22 [°] 3	1 ³⁹	19 [°] 12	12 [°] 47	7 [°] 19	9 [°] 30	25 [°] 28	14 [°] D35	13 [°] 27	6 [°] 3	8 [°] 42	W18
T 19	9 53 20	29 ⁴⁶ 03	8 ⁵³	3 [°] 15	23 [°] 15	2 [°] 7	19 [°] 27	12 [°] 53	7 [°] 17	9 [°] 31	25 [°] 28	14 [°] 36	13 [°] 24	6 [°] 9	8 [°] 44	T 19
F 20	9 57 16	0 ⁴⁶ 31	20 [°] 44	5 [°] 7	24 [°] 28	2 [°] 36	19 [°] 41	12 [°] 59	7 [°] 14	9 [°] 32	25 [°] 29	14 [°] 37	13 [°] 21	6 [°] 16	8 [°] 46	F 20
S 21	10 1 13	1 ⁴⁶ 57	2 ⁴⁰	6 [°] 59	25 [°] 41	3 [°] 5	19 [°] 55	13 [°] 6	7 [°] 11	9 [°] 34	25 [°] 29	14 [°] 39	13 [°] 17	6 [°] 23	8 [°] 48	S 21
S 22	10 5 9	2 ⁴⁷ 21	14 [°] 47	8 [°] 52	26 [°] 53	3 [°] 34	20 [°] 9	13 [°] 12	7 [°] 9	9 [°] 35	25 [°] 29	14 [°] R39	13 [°] 14	6 [°] 29	8 [°] 50	S 22
M23	10 9 6	3 ⁴⁷ 43	27 [°] 9	10 [°] 45	28 [°] 6	4 [°] 3	20 [°] 23	13 [°] 18	7 [°] 6	9 [°] 36	25 [°] 29	14 [°] 38	13 [°] 11	6 [°] 36	8 [°] 52	M23
T 24	10 13 2	4 ⁴⁸ 03	9 ²⁴	12 [°] 39	29 [°] 19	4 [°] 32	20 [°] 38	13 [°] 25	7 [°] 3	9 [°] 37	25 [°] 30	14 [°] 35	13 [°] 8	6 [°] 43	8 [°] 54	T 24
W25	10 16 59	5 ⁴⁸ 21	22 [°] 47	14 [°] 32	0 ³²	5 [°] 2	20 [°] 52	13 [°] 31	7 [°] 1	9 [°] 38	25 [°] 30	14 [°] 30	13 [°] 5	6 [°] 49	8 [°] 56	W25
T 26	10 20 55	6 ⁴⁸ 37	6 ¹¹ 6	16 [°] 25	1 [°] 45	5 [°] 31	21 [°] 6	13 [°] 38	6 [°] 58	9 [°] 39	25 [°] 30	14 [°] 23	13 [°] 1	6 [°] 56	8 [°] 59	T 26
F 27	10 24 52	7 ⁴⁸ 52	19 [°] 43	18 [°] 18	2 [°] 58	6 [°] 1	21 [°] 21	13 [°] 45	6 [°] 56	9 [°] 41	25 [°] 31	14 [°] 14	12 [°] 58	7 [°] 3	9 [°] 1	F 27
S 28	10 28 48	8 ⁴⁹ 05	3 ³⁵	20 [°] 10	4 [°] 11	6 [°] 31	21 [°] 35	13 [°] 51	6 [°] 53	9 [°] 42	25 [°] 31	14 [°] 4	12 [°] 55	7 [°] 9	9 [°] 3	S 28
S 29	10 32 45	9 ⁴⁹ 16	17 ³⁸	22 ³ 1	5 ²⁴	7 ¹¹ 1	21 ⁴⁹	13 ⁵⁸	6 ⁵⁰	9 ⁴³	25 ³²	13 ⁵⁵	12 ⁵²	7 ¹⁶	9 ⁸ 6	S 29

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	17s20	7s41	5s11	21s33	1s50	21s52	1n35	20n41	1n55	6s47	1s 5	2n16	2s22	9n19	0n48	12n55
M 2	17 3	13 4	5 12	21 13	1 54	21 54	1 32	20 47	1 55	6 42	1 5	2 18	2 21	9 20	0 48	12 55
T 3	16 45	17 51	4 55	20 52	1 56	21 55	1 29	20 53	1 55	6 37	1 5	2 20	2 21	9 21	0 48	12 55
W 4	16 28	21 42	4 21	20 30	1 59	21 56	1 25	20 59	1 55	6 31	1 5	2 22	2 21	9 22	0 48	12 56
T 5	16 10	24 16	3 30	20 6	2 1	21 56	1 22	21 5	1 55	6 26	1 4	2 24	2 21	9 23	0 48	12 56
F 6	15 52	25 18	2 26	19 40	2 2	21 56	1 19	21 11	1 55	6 21	1 4	2 27	2 21	9 24	0 48	12 56
S 7	15 33	24 39	1 12	19 13	2 4	21 55	1 15	21 17	1 55	6 15	1 4	2 29	2 20	9 24	0 48	12 56
S 8	15 15	22 23	0n 5	18 45	2 5	21 53	1 12	21 23	1 55	6 10	1 4	2 31	2 20	9 25	0 49	12 57
M 9	14 56	18 43	1 22	18 15	2 5	21 51	1 9	21 29	1 55	6 5	1 4	2 34	2 20	9 26	0 49	12 57
T 10	14 37	14 1	2 33	17 44	2 5	21 48	1 5	21 35	1 55	5 59	1 4	2 36	2 20	9 27	0 49	12 57
W11	14 17	8 41	3 34	17 11	2 5	21 44	1 2	21 41	1 55	5 54	1 4	2 38	2 20	9 28	0 49	12 57
T 12	13 57	3 2	4 21	16 37	2 4	21 40	0 59	21 47	1 55	5 48	1 4	2 41	2 20	9 29	0 49	12 58
F 13	13 38	2n36	4 52	16 1	2 3	21 35	0 55	21 53	1 55	5 43	1 4	2 43	2 19	9 30	0 49	12 58
S 14	13 17	7 59	5 8	15 24	2 1	21 30	0 52	21 59	1 55	5 37	1 4	2 46	2 19	9 31	0 49	12 58
S 15	12 57	12 53	5 8	14 45	1 59	21 23	0 48	22 5	1 55	5 32	1 4	2 48	2 19	9 32	0 49	12 59
M16	12 37	17 9	4 54	14 5	1 56	21 17	0 45	22 11	1 55	5 26	1 4	2 50	2 19	9 33	0 49	12 59
T 17	12 16	20 39	4 27	13 24	1 53	21 9	0 41	22 17	1 55	5 21	1 4	2 53	2 19	9 34	0 49	12 59
W18	11 55	23 14	3 49	12 41	1 49	21 1	0 38	22 22	1 55	5 15	1 4	2 56	2 19	9 35	0 49	13 0
T 19	11 34	24 47	3 1	11 57	1 45	20 53	0 35	22 28	1 54	5 10	1 4	2 58	2 18	9 36	0 49	13 0
F 20	11 12	25 13	2 6	11 11	1 40	20 44	0 31	22 34	1 54	5 4	1 4	3 1	2 18	9 37	0 49	13 1
S 21	10 51	24 30	1 4	10 25	1 34	20 34	0 28	22 39	1 54	4 58	1 4	3 3	2 18	9 38	0 49	13 1
S 22	10 29	22 37	0s 1	9 37	1 28	20 24	0 25	22 45	1 54	4 53	1 4	3 6	2 18	9 39	0 49	13 1
M23	10 7	19 39	1 7	8 48	1 21	20 13	0 21	22 50	1 54	4 47	1 4	3 8	2 18	9 40	0 49	13 2
T 24	9 45	15 42	2 11	7 58	1 14	20 1	0 18	22 56	1 54	4 42	1 4	3 11	2 18	9 41	0 49	13 2
W25	9 23	10 56	3 10	7 7	1 6	19 49	0 14	23 1	1 54	4 36	1 4	3 14	2 18	9 42	0 49	13 3
T 26	9 1	5 33	4 1	6 15	0 57	19 36	0 11	23 6	1 53	4 30	1 4	3 16	2 17	9 43	0 49	13 3
F 27	8 39	0s11	4 38	5 22	0 48	19 23	0 8	23 11	1 53	4 25	1 4	3 19	2 17	9 44	0 49	13 3
S 28	8 16	6 1	5 0	4 29	0 38	19 9	0 5	23 16	1 53	4 19	1 4	3 22	2 17	9 45	0 49	13 4
S 29	7s54	11s37	5s 5	3s36	0s28	18s55	0n 1	23n21	1n53	4s13	1s 4	3n24	2s17	9n46	0n49	13n 4

ASTRODIENST EPHEMERIS for the year 1880
geocentric

MARCH 1880

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	10 36 42	10♈49'26	1♏47	23♋50	6♊37	7♏31	22♈4	14♏5	6♏R48	9♏44	25♏32	13♏R48	12♏49	7♏23	9♏8	M 1
T 2	10 40 38	11°49'34	15°59	25°38	7°50	8°2	22°18	14°11	6♏45	9°46	25°33	13♏43	12°46	7°29	9°11	T 2
W 3	10 44 35	12°49'41	0♏10	27°23	9°3	8°32	22°33	14°18	6°42	9°47	25°33	13°40	12°42	7°36	9°13	W 3
T 4	10 48 31	13°49'46	14°19	29°6	10°16	9°3	22°47	14°25	6°40	9°49	25°34	13°D39	12°39	7°43	9°16	T 4
F 5	10 52 28	14°49'50	28°23	0♏45	11°29	9°34	23°2	14°32	6°37	9°50	25°34	13°40	12°36	7°49	9°19	F 5
S 6	10 56 24	15°49'52	12♏23	2°21	12°42	10°5	23°16	14°39	6°35	9°52	25°35	13°R40	12°33	7°56	9°21	S 6
S 7	11 0 21	16°49'53	26°16	3°52	13°55	10°36	23°31	14°46	6°32	9°53	25°35	13°40	12°30	8°3	9°24	S 7
M 8	11 4 17	17°49'52	10♏3	5°19	15°8	11°7	23°45	14°53	6°29	9°55	25°36	13°37	12°26	8°9	9°27	M 8
T 9	11 8 14	18°49'49	23°42	6°39	16°21	11°38	24°0	15°0	6°27	9°56	25°36	13°31	12°23	8°16	9°30	T 9
W10	11 12 11	19°49'44	7♏10	7°55	17°34	12°9	24°14	15°7	6°24	9°58	25°37	13°23	12°20	8°23	9°33	W10
T 11	11 16 7	20°49'37	20°26	9°3	18°48	12°41	24°29	15°14	6°22	9°59	25°38	13°12	12°17	8°29	9°36	T 11
F 12	11 20 4	21°49'28	3♏27	10°5	20°1	13°13	24°43	15°21	6°19	10°1	25°38	13°0	12°14	8°36	9°39	F 12
S 13	11 24 0	22°49'18	16°13	11°0	21°14	13°44	24°58	15°28	6°17	10°3	25°39	12°48	12°11	8°43	9°42	S 13
S 14	11 27 57	23°49'05	28°42	11°47	22°27	14°16	25°12	15°36	6°14	10°4	25°40	12°36	12°7	8°49	9°45	S 14
M15	11 31 53	24°48'50	10♏57	12°26	23°41	14°48	25°27	15°43	6°12	10°6	25°41	12°26	12°4	8°56	9°48	M15
T 16	11 35 50	25°48'33	22°59	12°57	24°54	15°20	25°41	15°50	6°9	10°8	25°41	12°19	12°1	9°3	9°51	T 16
W17	11 39 46	26°48'13	4♏53	13°20	26°7	15°52	25°56	15°57	6°7	10°9	25°42	12°15	11°58	9°9	9°54	W17
T 18	11 43 43	27°47'52	16°42	13°35	27°20	16°24	26°10	16°5	6°5	10°11	25°43	12°13	11°55	9°16	9°57	T 18
F 19	11 47 40	28°47'28	28°31	13°R41	28°34	16°57	26°25	16°12	6°2	10°13	25°44	12°D12	11°52	9°23	10°0	F 19
S 20	11 51 36	29°47'02	10♏26	13°39	29°47	17°29	26°39	16°19	6°0	10°15	25°44	12°R12	11°48	9°29	10°4	S 20
S 21	11 55 33	0♏46'34	22°33	13°30	1♏0	18°2	26°54	16°27	5°58	10°17	25°45	12°12	11°45	9°36	10°7	S 21
M22	11 59 29	1°46'03	4♏57	13°13	2°13	18°34	27°9	16°34	5°55	10°18	25°46	12°10	11°42	9°43	10°10	M22
T 23	12 3 26	2°45'30	17°42	12°50	3°27	19°7	27°23	16°42	5°53	10°20	25°47	12°6	11°39	9°49	10°14	T 23
W24	12 7 22	3°44'55	0♏50	12°19	4°40	19°40	27°38	16°49	5°51	10°22	25°48	11°59	11°36	9°56	10°17	W24
T 25	12 11 19	4°44'17	14°24	11°44	5°53	20°12	27°52	16°57	5°49	10°24	25°49	11°49	11°32	10°3	10°21	T 25
F 26	12 15 15	5°43'37	28°21	11°3	7°7	20°45	28°6	17°4	5°46	10°26	25°50	11°38	11°29	10°9	10°24	F 26
S 27	12 19 12	6°42'56	12♏37	10°19	8°20	21°18	28°21	17°11	5°44	10°28	25°51	11°26	11°26	10°16	10°28	S 27
S 28	12 23 9	7°42'12	27°8	9°31	9°33	21°51	28°35	17°19	5°42	10°30	25°52	11°15	11°23	10°23	10°31	S 28
M29	12 27 5	8°41'26	11♏45	8°42	10°47	22°24	28°50	17°26	5°40	10°32	25°52	11°5	11°20	10°29	10°35	M29
T 30	12 31 2	9°40'39	26°21	7°52	12°0	22°58	29°4	17°34	5°38	10°34	25°53	10°58	11°17	10°36	10°38	T 30
W31	12 34 58	10♏39'49	10♏51	7♏2	13♏13	23♏31	29♏19	17♏42	5♏36	10♏36	25♏54	10♏53	11♏13	10♏43	10♏42	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	decl lat	decl lat
M 1	7s31	16s38	4s51	2s42	0s17	18s40	0s2	23n26	1n53	4s7	1s4	3n27	2s17	9n47	0n49	13n5
T 2	7 8	20 45	4 19	1 49	0 5	18 24	0 5	23 31	1 53	4 2	1 4	3 30	2 17	9 48	0 49	13 5
W 3	6 45	23 38	3 31	0 56	0n7	18 8	0 8	23 36	1 52	3 56	1 4	3 33	2 17	9 49	0 49	13 6
T 4	6 22	25 1	2 30	0 4	0 19	17 52	0 11	23 40	1 52	3 50	1 4	3 35	2 17	9 50	0 49	13 6
F 5	5 59	24 48	1 21	0n48	0 32	17 35	0 14	23 45	1 52	3 45	1 4	3 38	2 16	9 50	0 49	13 7
S 6	5 35	23 0	0 7	1 38	0 45	17 17	0 17	23 49	1 52	3 39	1 4	3 41	2 16	9 51	0 49	13 7
S 7	5 12	19 49	1n7	2 26	0 59	16 59	0 20	23 53	1 52	3 33	1 4	3 44	2 16	9 52	0 49	13 8
M 8	4 49	15 34	2 16	3 13	1 12	16 41	0 23	23 58	1 51	3 27	1 4	3 46	2 16	9 53	0 49	13 8
T 9	4 25	10 33	3 16	3 58	1 26	16 22	0 26	24 2	1 51	3 22	1 4	3 49	2 16	9 54	0 49	13 9
W10	4 2	5 6	4 5	4 40	1 39	16 2	0 29	24 6	1 51	3 16	1 4	3 52	2 16	9 55	0 49	13 9
T 11	3 38	0n29	4 39	5 19	1 53	15 42	0 32	24 10	1 51	3 10	1 4	3 55	2 16	9 56	0 49	13 10
F 12	3 15	5 56	4 58	5 55	2 5	15 22	0 34	24 14	1 51	3 4	1 4	3 58	2 16	9 57	0 49	13 10
S 13	2 51	11 1	5 1	6 28	2 18	15 1	0 37	24 17	1 50	2 59	1 4	4 1	2 16	9 58	0 49	13 11
S 14	2 27	15 32	4 50	6 57	2 30	14 40	0 40	24 21	1 50	2 53	1 4	4 3	2 16	9 59	0 49	13 12
M15	2 4	19 20	4 26	7 23	2 41	14 18	0 42	24 24	1 50	2 47	1 4	4 6	2 16	10 0	0 49	13 12
T 16	1 40	22 14	3 50	7 45	2 51	13 56	0 45	24 28	1 50	2 41	1 4	4 9	2 15	10 1	0 49	13 13
W17	1 16	24 9	3 4	8 2	3 0	13 34	0 48	24 31	1 49	2 36	1 4	4 12	2 15	10 2	0 49	13 13
T 18	0 53	24 58	2 11	8 15	3 9	13 11	0 50	24 34	1 49	2 30	1 4	4 15	2 15	10 2	0 49	13 14
F 19	0 29	24 39	1 12	8 24	3 15	12 48	0 52	24 37	1 49	2 24	1 4	4 18	2 15	10 3	0 49	13 14
S 20	0 5	23 12	0 9	8 29	3 21	12 25	0 55	24 40	1 49	2 18	1 4	4 21	2 15	10 4	0 49	13 15
S 21	0n19	20 40	0s55	8 29	3 25	12 1	0 57	24 43	1 48	2 13	1 4	4 23	2 15	10 5	0 48	13 16
M22	0 42	17 8	1 57	8 24	3 27	11 37	0 59	24 45	1 48	2 7	1 4	4 26	2 15	10 6	0 48	13 16
T 23	1 6	12 45	2 56	8 16	3 28	11 12	1 1	24 48	1 48	2 1	1 4	4 29	2 15	10 7	0 48	13 17
W24	1 29	7 38	3 47	8 3	3 27	10 47	1 4	24 50	1 48	1 55	1 4	4 32	2 15	10 7	0 48	13 18
T 25	1 53	2 2	4 27	7 46	3 24	10 22	1 6	24 53	1 47	1 50	1 4	4 35	2 15	10 8	0 48	13 18
F 26	2 17	3s49	4 52	7 26	3 20	9 57	1 8	24 55	1 47	1 44	1 4	4 38	2 15	10 9	0 48	13 19
S 27	2 40	9 36	5 0	7 3	3 13	9 31	1 9	24 57	1 47	1 38	1 4	4 41	2 15	10 10	0 48	13 19
S 28	3 3	14 57	4 49	6 37	3 5	9 6	1 11	24 59	1 46	1 32	1 4	4 44	2 15	10 11	0 48	13 20
M29	3 27	19 28	4 19	6 9	2 56	8 39	1 13	25 0	1 46	1 27	1 4	4 47	2 15	10 11	0 48	13 21
T 30	3 50	22 47	3 32	5 39	2 45	8 13	1 15	25 2	1 46	1 21	1 4	4 49	2 15	10 12	0 48	13 21
W31	4n13	24s35	2s31	5n7	2n32	7s46	1s16	25n3	1n46	1s15	1s4	4n52	2s15	10n13	0n48	13n22

Julian Day Number = 2407775.5, Delta T = -3.30 sec
Ecliptic obliquity = 23°27'20", Nutation = 0°00'17", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 23°04'00", Lahiri = 22°11'01"

ASTRODIENST EPHEMERIS for the year 1880

geocentric

APRIL 1880

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	12 38 55	11°38'58"	25°10'	6°R13	14°27'	24°II 4	29°33'	17°49'	5°R34	10°8'38"	25°8'55"	10°R51	11°3'10"	10°II49	10°8'46"	T 1
F 2	12 42 51	12°38'06"	9°3'16"	5°Y26	15°40'	24°38'	29°47'	17°57'	5°32'	10°40'	25°56"	10°3'51"	11° 7'	10°56"	10°49'	F 2
S 3	12 46 48	13°37'11"	23° 9'	4°42'	16°54'	25°11'	0°Y 2	18° 4'	5°30'	10°42'	25°58"	10°51"	11° 4'	11° 3'	10°53'	S 3
S 4	12 50 44	14°36'15"	6°49'	4° 1'	18° 7'	25°45'	0°16'	18°12'	5°28'	10°44'	25°59"	10°50'	11° 1'	11° 9'	10°57'	S 4
M 5	12 54 41	15°35'17"	20°17'	3°25'	19°20'	26°18'	0°30'	18°19'	5°26'	10°46'	26° 0'	10°46'	10°58'	11°16'	11° 1'	M 5
T 6	12 58 38	16°34'17"	3°33'	2°53'	20°34'	26°52'	0°45'	18°27'	5°25'	10°48'	26° 1'	10°40'	10°54'	11°23'	11° 4'	T 6
W 7	13 2 34	17°33'15"	16°38'	2°26'	21°47'	27°26'	0°59'	18°34'	5°23'	10°50'	26° 2'	10°31'	10°51'	11°29'	11° 8'	W 7
T 8	13 6 31	18°32'11"	29°32'	2° 3'	23° 1'	27°59'	1°13'	18°42'	5°21'	10°52'	26° 3'	10°19'	10°48'	11°36'	11°12'	T 8
F 9	13 10 27	19°31'06"	12°Y14	1°47'	24°14'	28°33'	1°27'	18°50'	5°19'	10°54'	26° 4'	10° 6'	10°45'	11°43'	11°16'	F 9
S 10	13 14 24	20°29'58"	24°44'	1°35'	25°27'	29° 7'	1°41'	18°57'	5°18'	10°57'	26° 5'	9°53'	10°42'	11°49'	11°20'	S 10
S 11	13 18 20	21°28'49"	7°8' 2	1°29'	26°41'	29°41'	1°56'	19° 5'	5°16'	10°59'	26° 6'	9°40'	10°38'	11°56'	11°23'	S 11
M12	13 22 17	22°27'37"	19°10'	1°D28	27°54'	0°3'15	2°10'	19°12'	5°15'	11° 1'	26° 7'	9°29'	10°35'	12° 3'	11°27'	M12
T 13	13 26 13	23°26'23"	1°II 7	1°33'	29° 8'	0°49'	2°24'	19°20'	5°13'	11° 3'	26° 9'	9°21'	10°32'	12° 9'	11°31'	T 13
W14	13 30 10	24°25'07"	12°58'	1°42'	0°Y21	1°23'	2°38'	19°27'	5°12'	11° 5'	26°10'	9°15'	10°29'	12°16'	11°35'	W14
T 15	13 34 6	25°23'50"	24°45'	1°56'	1°35'	1°58'	2°52'	19°35'	5°10'	11° 7'	26°11'	9°12'	10°26'	12°23'	11°39'	T 15
F 16	13 38 3	26°22'29"	6°34'	2°16'	2°48'	2°32'	3° 6'	19°43'	5° 9'	11°10'	26°12'	9°D11	10°23'	12°29'	11°43'	F 16
S 17	13 42 0	27°21'07"	18°28'	2°39'	4° 1'	3° 6'	3°20'	19°50'	5° 8'	11°12'	26°13'	9°11'	10°19'	12°36'	11°47'	S 17
S 18	13 45 56	28°19'42"	0°33'	3° 8'	5°15'	3°40'	3°33'	19°58'	5° 6'	11°14'	26°14'	9°R12	10°16'	12°43'	11°51'	S 18
M19	13 49 53	29°18'16"	12°55'	3°40'	6°28'	4°15'	3°47'	20° 5'	5° 5'	11°16'	26°16'	9°11'	10°13'	12°49'	11°55'	M19
T 20	13 53 49	0°8'16'47"	25°39'	4°16'	7°42'	4°49'	4° 1'	20°13'	5° 4'	11°18'	26°17'	9° 8'	10°10'	12°56'	11°59'	T 20
W21	13 57 46	1°15'15"	8°48'	4°57'	8°55'	5°24'	4°15'	20°20'	5° 3'	11°21'	26°18'	9° 3'	10° 7'	13° 3'	12° 3'	W21
T 22	14 1 42	2°13'42"	22°25'	5°41'	10° 8'	5°58'	4°28'	20°28'	5° 2'	11°23'	26°19'	8°56'	10° 3'	13° 9'	12° 7'	T 22
F 23	14 5 39	3°12'07"	6°31'	6°28'	11°22'	6°33'	4°42'	20°35'	5° 1'	11°25'	26°21'	8°47'	10° 0'	13°16'	12°11'	F 23
S 24	14 9 35	4°10'29"	21° 1'	7°19'	12°35'	7° 7'	4°56'	20°43'	5° 0'	11°27'	26°22'	8°37'	9°57'	13°22'	12°15'	S 24
S 25	14 13 32	5° 8'50"	5°48'	8°13'	13°49'	7°42'	5° 9'	20°50'	4°59'	11°30'	26°23'	8°27'	9°54'	13°29'	12°19'	S 25
M26	14 17 29	6° 7'09"	20°48'	9°10'	15° 2'	8°17'	5°23'	20°57'	4°58'	11°32'	26°24'	8°19'	9°51'	13°36'	12°23'	M26
T 27	14 21 25	7° 5'26"	5°48'	10°10'	16°16'	8°51'	5°36'	21° 5'	4°57'	11°34'	26°26'	8°13'	9°48'	13°42'	12°27'	T 27
W28	14 25 22	8° 3'42"	20°40'	11°13'	17°29'	9°26'	5°50'	21°12'	4°57'	11°36'	26°27'	8° 9'	9°44'	13°49'	12°31'	W28
T 29	14 29 18	9° 1'56"	5°31'	12°19'	18°42'	10° 1'	6° 3'	21°20'	4°56'	11°39'	26°28'	8°D 8	9°41'	13°56'	12°35'	T 29
F 30	14 33 15	10° 0'08"	19°37'	13°Y27	19°Y56	10°3'36	6°Y16	21°Y27	4°55'	11°41'	26°30'	8°3' 9	9°38'	14°II 2	12°39'	F 30

Day	☉	☽		♊		♋		♌		♍		♎		♏		♐		♑	♒	♓	♈	♉		
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat		
T 1	4n37	24s44	1s22	4n36	2n19	7s20	1s18	25n 5	1n45	1s10	1s 4	4n55	2s15	10n13	0n48	13n23	1s44	6n 9	13s27	23s 1	22s59	24n40	13n34	1s34
F 2	5 0	23 16	0 8	4 4	2 4	6 52	1 19	25 6	1 45	1 4	1 4	4 58	2 15	10 14	0 48	13 23	1 44	6 10	13 27	23 1	22 59	24 40	13 35	1 34
S 3	5 23	20 24	1n 5	3 32	1 49	6 25	1 21	25 7	1 45	0 58	1 4	5 1	2 15	10 15	0 48	13 24	1 44	6 10	13 27	23 1	23 0	24 40	13 36	1 34
S 4	5 46	16 26	2 13	3 2	1 33	5 58	1 22	25 8	1 44	0 53	1 4	5 4	2 15	10 15	0 48	13 25	1 44	6 10	13 27	23 1	23 0	24 40	13 38	1 34
M 5	6 8	11 42	3 12	2 32	1 17	5 30	1 24	25 8	1 44	0 47	1 5	5 7	2 15	10 16	0 48	13 25	1 44	6 11	13 27	23 1	23 0	24 40	13 39	1 34
T 6	6 31	6 28	4 0	2 5	1 1	5 2	1 25	25 9	1 44	0 41	1 5	5 10	2 15	10 17	0 48	13 26	1 44	6 11	13 26	23 2	23 0	24 41	13 40	1 34
W 7	6 54	1 3	4 35	1 39	0 45	4 35	1 26	25 9	1 44	0 36	1 5	5 12	2 15	10 17	0 48	13 27	1 44	6 12	13 26	23 2	23 1	24 41	13 41	1 34
T 8	7 16	4n19	4 55	1 15	0 29	4 6	1 27	25 10	1 43	0 30	1 5	5 15	2 15	10 18	0 48	13 27	1 44	6 12	13 26	23 3	23 1	24 41	13 42	1 34
F 9	7 39	9 26	5 0	0 54	0 13	3 38	1 28	25 10	1 43	0 25	1 5	5 18	2 15	10 19	0 48	13 28	1 44	6 13	13 26	23 4	23 1	24 41	13 43	1 35
S 10	8 1	14 5	4 50	0 35	0s 3	3 10	1 29	25 10	1 43	0 19	1 5	5 21	2 15	10 19	0 48	13 29	1 44	6 13	13 26	23 5	23 1	24 41	13 44	1 35
S 11	8 23	18 5	4 27	0 19	0 18	2 42	1 30	25 10	1 42	0 14	1 5	5 24	2 15	10 20	0 48	13 29	1 44	6 13	13 25	23 6	23 2	24 41	13 46	1 35
M12	8 45	21 15	3 52	0 5	0 32	2 13	1 31	25 9	1 42	0 8	1 5	5 27	2 15	10 20	0 48	13 30	1 44	6 14	13 25	23 7	23 2	24 41	13 47	1 35
T 13	9 7	23 27	3 7	0s 6	0 46	1 45	1 31	25 9	1 42	0 3	1 5	5 30	2 15	10 21	0 48	13 31	1 44	6 14	13 25	23 8	23 2	24 42	13 48	1 35
W14	9 28	24 36	2 14	0 14	1 0	1 16	1 32	25 8	1 41	0n 3	1 5	5 32	2 15	10 21	0 48	13 31	1 44	6 15	13 25	23 8	23 2	24 42	13 49	1 35
T 15	9 50	24 37	1 16	0 20	1 12	0 47	1 33	25 8	1 41	0 8	1 5	5 35	2 15	10 22	0 48	13 32	1 44	6 15	13 25	23 8	23 3	24 42	13 50	1 35
F 16	10 11	23 32	0 14	0 23	1 24	0 19	1 33	25 7	1 41	0 14	1 5	5 38	2 15	10 22	0 48	13 33	1 43	6 16	13 24	23 8	23 3	24 42	13 51	1 35
S 17	10 32	21 22	0s49	0 24	1 35	0n10	1 34	25 6	1 41	0 19	1 5	5 41	2 15	10 23	0 48	13 34	1 43	6 16	13 24	23 8	23 3	24 42	13 52	1 35
S 18	10 53	18 14	1 51	0 22	1 46	0 39	1 34	25 4	1 40	0 25	1 6	5 44	2 15	10 23	0 48	13 34	1 43	6 16	13 24	23 8	23 3	24 42	13 54	1 35
M19	11 14	14 14	2 49	0 19	1 56	1 8	1 34	25 3	1 40	0 30	1 6	5 46	2 15	10 23	0 48	13 35	1 43	6 17	13 24	23 8	23 4	24 42	13 55	1 35
T 20	11 35	9 31	3 41	0 12	2 5	1 36	1 34	25 2	1 40	0 36	1 6	5 49	2 15	10 24	0 48	13 36	1 43	6 17	13 24	23 8	23 4	24 42	13 56	1 35
W21	11 55	4 13	4 23	0 4	2 13	2 5	1 35	25 0	1 39	0 41	1 6	5 52	2 15	10 24	0 48	13 36	1 43	6 18	13 24	23 9	23 4	24 42	13 57	1 35
T 22	12 15	1s27	4 51	0n 6	2 20	2 34	1 35	24 58	1 39	0 46	1 6	5 55	2 15	10 25	0 48	13 37	1 43	6 18	13 23	23 9	23 4	24 42	13 58	1 35
F 23	12 35	7 13	5 3	0 19	2 27	3 3	1 35	24 56	1 39	0 52	1 6	5 58	2 15	10 25	0 48	13 38	1 43	6 19	13 23	23 10	23 5	24 43	13 59	1 35
S 24	12 55	12 47	4 56	0 33	2 33	3 31	1 35	24 54	1 38	0 57	1 6	6 0	2 15	10 25	0 48	13 38	1 43	6 19	13 23	23 11	23 5	24 43	14 1	1 35
S 25	13 15	17 43	4 30	0 50	2 39	4 0	1 35	24 52	1 38	1 2	1 6	6 3	2 15	10 26	0 47	13 39	1 43	6 19	13 23	23 11	23 5	24 43	14 2	1 35
M26	13 34	21 34	3 45	1 8	2 44	4 29	1 34	24 49	1 38	1 7	1 6	6 6	2 15	10 26	0 47	13 40	1 43	6 20	13 23	23 12	23 5	24 43	14 3	1 36
T 27	13 53	23 58	2 44	1 28	2 48	4 57	1 34	24 47	1 37	1 13	1 6	6 8	2 15	10 26	0 47	13 40	1 43	6 20	13 23	23 12	23 6	24 43	14 4	1 36
W28	14 12	24 39	1 32	1 49	2 51	5 25	1 34	24 44	1 37	1 18	1 7	6 11	2 15	10 26	0 47	13 41	1 43	6 21	13 23	23 12	23 6	24 43	14 5	1 36
T 29	14 31	23 36	0 15	2 12	2 54	5 54	1 33	24 41	1 37	1 23	1 7	6 14	2 15	10 27	0 47	13 42	1 43	6 21	13 23	23 12	23 6	24 43	14 6	1 36
F 30	14n49	21s 1	1n 1	2n37	2s56	6n22	1s33	24n38	1n36	1n28	1s 7	6n16	2s15	10n27	0n47	13n43	1s43	6n21	13s22	23s12	23s 6	24n43	14n 8	1s36

ASTRODIENST EPHEMERIS for the year 1880
geocentric

MAY 1880

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Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
S 1	14 37 11	10♌58'19	3♊36	14♋38	21♋9	11♌11	6♋29	21♋34	4°R55	11♌43	26♌31	8♌9	9♌35	14♌9	12♌44	S 1
S 2	14 41 8	11°56'29	17°15	15°51	22°23	11°46	6°43	21°41	4♎54	11°45	26°32	8°R 9	9°32	14°16	12°48	S 2
M 3	14 45 4	12°54'37	0♊35	17° 7	23°36	12°21	6°56	21°49	4°53	11°48	26°34	8° 8	9°29	14°22	12°52	M 3
T 4	14 49 1	13°52'44	13°39	18°25	24°49	12°56	7° 9	21°56	4°53	11°50	26°35	8° 4	9°25	14°29	12°56	T 4
W 5	14 52 58	14°50'49	26°28	19°46	26° 3	13°31	7°22	22° 3	4°53	11°52	26°36	7°58	9°22	14°36	13° 0	W 5
T 6	14 56 54	15°48'53	9♋4	21° 9	27°16	14° 6	7°35	22°10	4°52	11°54	26°38	7°50	9°19	14°42	13° 4	T 6
F 7	15 0 51	16°46'55	21°29	22°33	28°30	14°41	7°48	22°18	4°52	11°57	26°39	7°41	9°16	14°49	13° 8	F 7
S 8	15 4 47	17°44'56	3♌44	24° 0	29°43	15°16	8° 0	22°25	4°52	11°59	26°40	7°32	9°13	14°56	13°12	S 8
S 9	15 8 44	18°42'55	15°50	25°30	0♌57	15°51	8°13	22°32	4°51	12° 1	26°42	7°23	9° 9	15° 2	13°16	S 9
M10	15 12 40	19°40'53	27°48	27° 1	2°10	16°27	8°26	22°39	4°51	12° 3	26°43	7°15	9° 6	15° 9	13°20	M10
T 11	15 16 37	20°38'49	9♌40	28°35	3°23	17° 2	8°38	22°46	4°51	12° 6	26°44	7°10	9° 3	15°16	13°24	T 11
W12	15 20 33	21°36'44	21°28	0♌10	4°37	17°37	8°51	22°53	4°D51	12° 8	26°46	7° 6	9° 0	15°22	13°28	W12
T 13	15 24 30	22°34'37	3♌14	1°48	5°50	18°12	9° 3	23° 0	4°51	12°10	26°47	7°D 5	8°57	15°29	13°32	T 13
F 14	15 28 27	23°32'28	15° 3	3°27	7° 4	18°48	9°16	23° 7	4°51	12°12	26°48	7° 5	8°54	15°36	13°36	F 14
S 15	15 32 23	24°30'18	26°58	5° 9	8°17	19°23	9°28	23°14	4°51	12°15	26°50	7° 6	8°50	15°42	13°41	S 15
S 16	15 36 20	25°28'06	9♌3	6°53	9°31	19°59	9°40	23°20	4°52	12°17	26°51	7° 8	8°47	15°49	13°45	S 16
M17	15 40 16	26°25'52	21°24	8°39	10°44	20°34	9°52	23°27	4°52	12°19	26°52	7°R 9	8°44	15°56	13°49	M17
T 18	15 44 13	27°23'37	4♎5	10°27	11°57	21°10	10° 4	23°34	4°52	12°21	26°54	7° 9	8°41	16° 2	13°53	T 18
W19	15 48 9	28°21'20	17°10	12°17	13°11	21°45	10°16	23°41	4°53	12°23	26°55	7° 7	8°38	16° 9	13°57	W19
T 20	15 52 6	29°19'01	0♌43	14°10	14°24	22°21	10°28	23°47	4°53	12°26	26°56	7° 4	8°35	16°16	14° 1	T 20
F 21	15 56 2	0♌16'41	14°45	16° 4	15°38	22°56	10°40	23°54	4°53	12°28	26°58	7° 0	8°31	16°22	14° 5	F 21
S 22	15 59 59	1°14'19	29°14	18° 0	16°51	23°32	10°52	24° 1	4°54	12°30	26°59	6°54	8°28	16°29	14° 8	S 22
S 23	16 3 56	2°11'56	14♎6	19°59	18° 5	24° 8	11° 3	24° 7	4°54	12°32	27° 1	6°49	8°25	16°36	14°12	S 23
M24	16 7 52	3° 9'31	29°13	21°59	19°18	24°43	11°15	24°14	4°55	12°34	27° 2	6°45	8°22	16°42	14°16	M24
T 25	16 11 49	4° 7'06	14♌25	24° 1	20°31	25°19	11°26	24°20	4°56	12°36	27° 3	6°42	8°19	16°49	14°20	T 25
W26	16 15 45	5° 4'39	29°33	26° 5	21°45	25°55	11°38	24°26	4°56	12°39	27° 5	6°D41	8°15	16°56	14°24	W26
T 27	16 19 42	6° 2'11	14♌28	28°11	22°58	26°30	11°49	24°33	4°57	12°41	27° 6	6°41	8°12	17° 2	14°28	T 27
F 28	16 23 38	6°59'43	29° 4	0♌18	24°12	27° 6	12° 0	24°39	4°58	12°43	27° 7	6°42	8° 9	17° 9	14°32	F 28
S 29	16 27 35	7°57'13	13♌16	2°26	25°25	27°42	12°11	24°45	4°59	12°45	27° 9	6°43	8° 6	17°16	14°36	S 29
S 30	16 31 32	8°54'43	27° 3	4°36	26°39	28°18	12°22	24°51	5° 0	12°47	27°10	6°44	8° 3	17°22	14°40	S 30
M31	16 35 28	9♌52'12	10♌26	6♌47	27♌52	28♌54	12♋33	24♋58	5♎1	12♌49	27♌11	6°R45	8♌0	17♌29	14♌43	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	15n 8	17s13	2n12	3n 3	2s57	6n50	1s32	24n35	1n36	1n33	1 s 7	6n19	2s16	10n27	0n47	13n43	1s43	6n22	13s22	23s12	23s 7	24n43	14n 9	1s36	
S 2	15 26	12 36	3 14	3 30	2 58	7 18	1 32	24 31	1 36	1 38	1 7	6 22	2 16	10 27	0 47	13 44	1 43	6 22	13 22	23 12	23 7	24 43	14 10	1 36	
M 3	15 43	7 28	4 3	3 59	2 58	7 46	1 31	24 28	1 35	1 44	1 7	6 24	2 16	10 27	0 47	13 45	1 43	6 22	13 22	23 12	23 7	24 43	14 11	1 36	
T 4	16 1	2 8	4 39	4 29	2 58	8 13	1 30	24 24	1 35	1 49	1 7	6 27	2 16	10 27	0 47	13 45	1 43	6 23	13 22	23 13	23 7	24 43	14 12	1 36	
W 5	16 18	3n11	5 0	5 0	2 57	8 41	1 30	24 20	1 35	1 54	1 7	6 30	2 16	10 28	0 47	13 46	1 43	6 23	13 22	23 13	23 7	24 43	14 13	1 36	
T 6	16 35	8 17	5 6	5 33	2 55	9 8	1 29	24 16	1 34	1 59	1 7	6 32	2 16	10 28	0 47	13 47	1 43	6 24	13 22	23 13	23 8	24 43	14 14	1 36	
F 7	16 52	12 59	4 58	6 6	2 53	9 35	1 28	24 12	1 34	2 4	1 8	6 35	2 16	10 28	0 47	13 47	1 43	6 24	13 22	23 14	23 8	24 43	14 16	1 36	
S 8	17 8	17 5	4 35	6 41	2 50	10 2	1 27	24 8	1 34	2 8	1 8	6 37	2 16	10 28	0 47	13 48	1 43	6 24	13 22	23 14	23 8	24 43	14 17	1 37	
S 9	17 24	20 26	4 1	7 16	2 47	10 28	1 26	24 3	1 33	2 13	1 8	6 40	2 16	10 28	0 47	13 49	1 43	6 25	13 22	23 15	23 8	24 43	14 18	1 37	
M10	17 40	22 52	3 16	7 53	2 43	10 55	1 25	23 59	1 33	2 18	1 8	6 42	2 16	10 28	0 47	13 49	1 43	6 25	13 22	23 15	23 9	24 42	14 19	1 37	
T 11	17 56	24 16	2 23	8 30	2 39	11 21	1 23	23 54	1 33	2 23	1 8	6 45	2 16	10 28	0 47	13 50	1 43	6 25	13 22	23 16	23 9	24 42	14 20	1 37	
W12	18 11	24 34	1 24	9 8	2 34	11 47	1 22	23 49	1 32	2 28	1 8	6 47	2 16	10 28	0 47	13 51	1 43	6 26	13 21	23 16	23 9	24 42	14 21	1 37	
T 13	18 26	23 46	0 21	9 47	2 28	12 12	1 21	23 44	1 32	2 33	1 8	6 50	2 17	10 28	0 47	13 51	1 43	6 26	13 21	23 16	23 9	24 42	14 22	1 37	
F 14	18 40	21 53	0s43	10 27	2 22	12 38	1 20	23 39	1 32	2 37	1 9	6 52	2 17	10 28	0 47	13 52	1 43	6 26	13 21	23 16	23 9	24 42	14 23	1 37	
S 15	18 55	19 3	1 46	11 7	2 15	13 3	1 18	23 33	1 31	2 42	1 9	6 55	2 17	10 28	0 47	13 53	1 43	6 27	13 21	23 16	23 10	24 42	14 25	1 37	
S 16	19 8	15 21	2 45	11 48	2 8	13 27	1 17	23 28	1 31	2 47	1 9	6 57	2 17	10 27	0 47	13 53	1 43	6 27	13 21	23 16	23 10	24 42	14 26	1 37	
M17	19 22	10 56	3 38	12 29	2 1	13 52	1 15	23 22	1 31	2 51	1 9	6 59	2 17	10 27	0 47	13 54	1 43	6 27	13 21	23 16	23 10	24 42	14 27	1 37	
T 18	19 35	5 58	4 21	13 11	1 53	14 16	1 14	23 16	1 30	2 56	1 9	7 2	2 17	10 27	0 47	13 55	1 43	6 28	13 21	23 16	23 10	24 42	14 28	1 37	
W19	19 48	0 34	4 53	13 52	1 45	14 39	1 12	23 10	1 30	3 0	1 9	7 4	2 17	10 27	0 47	13 55	1 43	6 28	13 21	23 16	23 10	24 42	14 29	1 38	
T 20	20 1	5s 1	5 10	14 34	1 36	15 3	1 11	23 4	1 29	3 5	1 9	7 7	2 17	10 27	0 46	13 56	1 43	6 28	13 21	23 16	23 11	24 42	14 30	1 38	
F 21	20 13	10 33	5 9	15 16	1 27	15 26	1 9	22 58	1 29	3 9	1 10	7 9	2 18	10 27	0 46	13 57	1 43	6 29	13 21	23 16	23 11	24 41	14 31	1 38	
S 22	20 25	15 42	4 48	15 58	1 17	15 49	1 7	22 52	1 29	3 14	1 10	7 11	2 18	10 26	0 46	13 57	1 44	6 29	13 21	23 16	23 11	24 41	14 32	1 38	
S 23	20 37	20 2	4 8	16 40	1 7	16 11	1 5	22 45	1 28	3 18	1 10	7 13	2 18	10 26	0 46	13 58	1 44	6 29	13 21	23 17	23 11	24 41	14 33	1 38	
M24	20 48	23 6	3 11	17 21	0 57	16 33	1 4	22 38	1 28	3 23	1 10	7 16	2 18	10 26	0 46	13 59	1 44	6 29	13 21	23 17	23 11	24 41	14 34	1 38	
T 25	20 59	24 31	1 59	18 2	0 47	16 54	1 2	22 31	1 28	3 27	1 10	7 18	2 18	10 26	0 46	13 59	1 44	6 30	13 21	23 17	23 12	24 41	14 35	1 38	
W26	21 10	24 6	0 39	18 42	0 36	17 15	1 0	22 24	1 27	3 31	1 10	7 20	2 18	10 25	0 46	14 0	1 44	6 30	13 21	23 17	23 12	24 41	14 36	1 38	
T 27	21 20	21 58	0n43	19 21	0 26	17 36	0 58	22 17	1 27	3 36	1 11	7 22	2 18	10 25	0 46	14 0	1 44	6 30	13 21	23 17	23 12	24 41	14 37	1 38	
F 28	21 30	18 24	2 0	19 59	0 15	17 56	0 56	22 10	1 27	3 40	1 11	7 24	2 19	10 25	0 46	14 1	1 44	6 31	13 21	23 17	23 12	24 40	14 38	1 39	
S 29	21 39	13 51	3 7	20 35	0 4	18 15	0 54	22 3	1 26	3 44	1 11	7 27	2 19	10 24	0 46	14 2	1 44	6 31	13 21	23 17	23 12	24 40	14 39	1 39	
S 30	21 48	8 42	4 2	21 11	0n 6	18 35	0 52	21 55	1 26	3 48	1 11	7 29	2 19	10 24	0 46	14 2	1 44	6 31	13 21	23 17	23 13	24 40	14 40	1 39	
M31	21n57	3s18	4n42	21n44	0n17	18n53	0s50	21n47	1n25	3n52	1s11	7n31	2s19	10n24	0n46	14n 3	1s44	6n31	13s21	23s17	23s13	24n40	14n41	1s39	

ASTRODIENST EPHEMERIS for the year 1880

geocentric

JUNE 1880

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	16 39 25	10 ^{II} 49'40	23 [♂] 27	8 ^{II} 58	29 [♂] 6	29 [♂] 30	12 [♂] 44	25 [♂] 4	5 [♂] 2	12 [♂] 51	27 [♂] 13	6 [♂] R44	7 [♂] 56	17 ^{II} 35	14 [♂] 47	T 1
W 2	16 43 21	11°47'07	6 [♂] 10	11°10	0 ^{II} 19	0 [♂] 6	12°55	25°10	5°3	12°53	27°14	6 [♂] 42	7°53	17°42	14°51	W 2
T 3	16 47 18	12°44'33	18°36	13°22	1°33	0°42	13°5	25°16	5°4	12°55	27°15	6°40	7°50	17°49	14°55	T 3
F 4	16 51 14	13°41'59	0 [♂] 49	15°34	2°46	1°18	13°16	25°22	5°5	12°57	27°17	6°36	7°47	17°55	14°58	F 4
S 5	16 55 11	14°39'25	12°53	17°46	4°0	1°54	13°26	25°27	5°6	12°59	27°18	6°33	7°44	18°2	15°2	S 5
S 6	16 59 7	15°36'49	24°49	19°57	5°13	2°30	13°36	25°33	5°8	13°1	27°19	6°29	7°41	18°9	15°6	S 6
M 7	17 3 4	16°34'13	6 ^{II} 40	22°7	6°27	3°6	13°47	25°39	5°9	13°3	27°20	6°26	7°37	18°15	15°9	M 7
T 8	17 7 1	17°31'36	18°28	24°16	7°40	3°42	13°57	25°45	5°10	13°5	27°22	6°25	7°34	18°22	15°13	T 8
W 9	17 10 57	18°28'59	0 [♂] 15	26°24	8°54	4°18	14°6	25°50	5°12	13°7	27°23	6°24	7°31	18°29	15°17	W 9
T 10	17 14 54	19°26'20	12°4	28°30	10°7	4°54	14°16	25°56	5°13	13°9	27°24	6°D24	7°28	18°35	15°20	T 10
F 11	17 18 50	20°23'41	23°57	0 [♂] 35	11°21	5°30	14°26	26°1	5°15	13°11	27°26	6°24	7°25	18°42	15°24	F 11
S 12	17 22 47	21°21'01	5 [♂] 57	2°38	12°34	6°7	14°36	26°7	5°17	13°13	27°27	6°25	7°21	18°49	15°27	S 12
S 13	17 26 43	22°18'19	18°7	4°39	13°48	6°43	14°45	26°12	5°18	13°14	27°28	6°27	7°18	18°55	15°31	S 13
M14	17 30 40	23°15'38	0 [♂] 13	6°38	15°1	7°19	14°54	26°17	5°20	13°16	27°29	6°28	7°15	19°2	15°34	M14
T 15	17 34 36	24°12'55	13°13	8°34	16°15	7°55	15°4	26°22	5°22	13°18	27°31	6°29	7°12	19°9	15°38	T 15
W16	17 38 33	25°10'11	26°16	10°29	17°28	8°32	15°13	26°27	5°23	13°20	27°32	6°R29	7°9	19°15	15°41	W16
T 17	17 42 30	26°7'26	9 [♂] 43	12°21	18°42	9°8	15°22	26°33	5°25	13°22	27°33	6°29	7°6	19°22	15°44	T 17
F 18	17 46 26	27°4'41	23°35	14°11	19°55	9°44	15°30	26°37	5°27	13°23	27°34	6°28	7°2	19°29	15°48	F 18
S 19	17 50 23	28°1'55	7 ^{II} 54	15°59	21°9	10°21	15°39	26°42	5°29	13°25	27°35	6°27	6°59	19°35	15°51	S 19
S 20	17 54 19	28°59'09	22°35	17°44	22°23	10°57	15°48	26°47	5°31	13°27	27°37	6°26	6°56	19°42	15°54	S 20
M21	17 58 16	29°56'22	7 [♂] 34	19°28	23°36	11°34	15°56	26°52	5°33	13°29	27°38	6°25	6°53	19°49	15°57	M21
T 22	18 2 12	0 [♂] 53'34	22°44	21°8	24°50	12°10	16°4	26°57	5°35	13°30	27°39	6°25	6°50	19°55	16°1	T 22
W23	18 6 9	1°50'46	7 [♂] 34	22°47	26°3	12°47	16°13	27°1	5°37	13°32	27°40	6°D25	6°47	20°2	16°4	W23
T 24	18 10 5	2°47'58	22°56	24°23	27°17	13°23	16°21	27°6	5°39	13°34	27°41	6°25	6°43	20°9	16°7	T 24
F 25	18 14 2	3°45'09	7 [♂] 42	25°57	28°31	14°0	16°29	27°10	5°41	13°35	27°42	6°25	6°40	20°15	16°10	F 25
S 26	18 17 59	4°42'21	22°6	27°28	29°44	14°36	16°36	27°15	5°44	13°37	27°44	6°25	6°37	20°22	16°13	S 26
S 27	18 21 55	5°39'32	6 [♂] 3	28°57	0 [♂] 58	15°13	16°44	27°19	5°46	13°38	27°45	6°26	6°34	20°28	16°16	S 27
M28	18 25 52	6°36'43	19°34	0 [♂] 24	2°11	15°50	16°51	27°23	5°48	13°40	27°46	6°R26	6°31	20°35	16°19	M28
T 29	18 29 48	7°33'55	2 [♂] 39	1°48	3°25	16°26	16°59	27°27	5°51	13°41	27°47	6°D26	6°27	20°42	16°22	T 29
W30	18 33 45	8 [♂] 31'06	15°21	3 [♂] 10	4 [♂] 39	17°1	17°6	27°31	5 [♂] 53	13°43	27°48	6°36	6°32	20°48	16°25	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	decl	lat
T 1	22n 5	2n 5	5n 6	22n15	0n27	19n12	0s48	21n39	1n25	3n56	1s12	7n33	2s19	10n23	0n46	14n 3	1s44	6n32	13s21	23s17	23s13	24n40	14n42	1s39			
W 2	22 13	7 15	5 14	22 45	0 37	19 29	0 46	21 31	1 25	4 0	1 12	7 35	2 19	10 23	0 46	14 4	1 44	6 32	13 21	23 17	23 13	24 39	14 43	1 39			
T 3	22 20	12 2	5 8	23 12	0 47	19 46	0 43	21 23	1 24	4 4	1 12	7 37	2 20	10 22	0 46	14 5	1 44	6 32	13 21	23 17	23 13	24 39	14 44	1 39			
F 4	22 28	16 15	4 47	23 36	0 56	20 3	0 41	21 15	1 24	4 8	1 12	7 39	2 20	10 22	0 46	14 5	1 44	6 32	13 21	23 17	23 14	24 39	14 45	1 39			
S 5	22 34	19 44	4 14	23 58	1 5	20 19	0 39	21 7	1 24	4 12	1 12	7 41	2 20	10 21	0 46	14 6	1 44	6 33	13 21	23 18	23 14	24 39	14 46	1 40			
S 6	22 41	22 22	3 30	24 17	1 13	20 35	0 37	20 58	1 23	4 16	1 12	7 43	2 20	10 21	0 46	14 6	1 44	6 33	13 21	23 18	23 14	24 39	14 47	1 40			
M 7	22 47	24 1	2 37	24 34	1 21	20 50	0 35	20 49	1 23	4 19	1 13	7 45	2 20	10 20	0 46	14 7	1 44	6 33	13 22	23 18	23 14	24 38	14 48	1 40			
T 8	22 52	24 34	1 38	24 48	1 28	21 4	0 32	20 41	1 23	4 23	1 13	7 46	2 20	10 20	0 46	14 7	1 44	6 33	13 22	23 18	23 14	24 38	14 49	1 40			
W 9	22 57	24 1	0 34	24 59	1 34	21 18	0 30	20 32	1 22	4 27	1 13	7 48	2 21	10 19	0 46	14 8	1 44	6 33	13 22	23 18	23 14	24 38	14 50	1 40			
T 10	23 2	22 23	0s31	25 7	1 40	21 32	0 28	20 22	1 22	4 30	1 13	7 50	2 21	10 19	0 46	14 9	1 44	6 34	13 22	23 18	23 15	24 38	14 51	1 40			
F 11	23 6	19 46	1 36	25 12	1 45	21 44	0 25	20 13	1 21	4 34	1 13	7 52	2 21	10 18	0 46	14 9	1 44	6 34	13 22	23 18	23 15	24 37	14 52	1 40			
S 12	23 10	16 16	2 37	25 15	1 49	21 56	0 23	20 4	1 21	4 37	1 14	7 54	2 21	10 17	0 46	14 10	1 44	6 34	13 22	23 18	23 15	24 37	14 53	1 41			
S 13	23 14	12 3	3 31	25 15	1 53	22 8	0 21	19 54	1 21	4 41	1 14	7 55	2 21	10 17	0 45	14 10	1 44	6 34	13 22	23 18	23 15	24 37	14 53	1 41			
M14	23 17	7 17	4 17	25 13	1 56	22 19	0 18	19 45	1 20	4 44	1 14	7 57	2 22	10 16	0 45	14 11	1 44	6 34	13 22	23 18	23 15	24 37	14 54	1 41			
T 15	23 20	2 7	4 52	25 8	1 58	22 29	0 16	19 35	1 20	4 48	1 14	7 59	2 22	10 15	0 45	14 11	1 44	6 35	13 22	23 18	23 16	24 36	14 55	1 41			
W16	23 22	3s17	5 12	25 1	1 59	22 38	0 13	19 25	1 19	4 51	1 15	8 0	2 22	10 15	0 45	14 12	1 44	6 35	13 22	23 18	23 16	24 36	14 56	1 41			
T 17	23 24	8 42	5 17	24 52	2 0	22 47	0 11	19 15	1 19	4 54	1 15	8 2	2 22	10 14	0 45	14 12	1 44	6 35	13 22	23 18	23 16	24 36	14 57	1 41			
F 18	23 25	13 51	5 3	24 41	1 59	22 56	0 9	19 5	1 19	4 57	1 15	8 4	2 22	10 13	0 45	14 13	1 44	6 35	13 22	23 18	23 16	24 35	14 58	1 41			
S 19	23 26	18 25	4 31	24 27	1 58	23 3	0 6	18 55	1 18	5 1	1 15	8 5	2 23	10 13	0 45	14 13	1 44	6 35	13 23	23 18	23 16	24 35	14 58	1 42			
S 20	23 27	21 59	3 40	24 13	1 57	23 10	0 4	18 45	1 18	5 4	1 15	8 7	2 23	10 12	0 45	14 14	1 44	6 35	13 23	23 18	23 16	24 35	14 59	1 42			
M21	23 27	24 7	2 34	23 56	1 55	23 17	0 1	18 34	1 18	5 7	1 16	8 8	2 23	10 11	0 45	14 14	1 44	6 35	13 23	23 18	23 17	24 34	15 0	1 42			
T 22	23 27	24 31	1 15	23 38	1 52	23 22	0n 1	18 24	1 17	5 10	1 16	8 10	2 23	10 10	0 45	14 15	1 44	6 36	13 23	23 18	23 17	24 34	15 1	1 42			
W23	23 27	23 5	0n 8	23 18	1 48	23 27	0 3	18 13	1 17	5 13	1 16	8 11	2 23	10 9	0 45	14 15	1 44	6 36	13 23	23 18	23 17	24 34	15 1	1 42			
T 24	23 26	20 1	1 31	22 57	1 44	23 31	0 6	18 2	1 16	5 15	1 16	8 13	2 24	10 9	0 45	14 15	1 45	6 36	13 23	23 18	23 17	24 33	15 2	1 42			
F 25	23 24	15 41	2 45	22 35	1 39	23 35	0 8	17 51	1 16	5 18	1 17	8 14	2 24	10 8	0 45	14 16	1 45	6 36	13 23	23 18	23 17	24 33	15 3	1 43			
S 26	23 22	10 34	3 48	22 12	1 33	23 38	0 11	17 40	1 16	5 21	1 17	8 15	2 24	10 7	0 45	14 16	1 45	6 36	13 23	23 18	23 17	24 33	15 4	1 43			
S 27	23 20	5 3	4 34	21 48	1 27	23 40	0 13	17 29	1 15	5 24	1 17	8 17	2 24	10 6	0 45	14 17	1 45	6 36	13 24	23 18	23 18	24 32	15 4	1 43			
M28	23 17	0n32	5 4	21 23	1 21	23 41	0 15	17 18	1 15	5 26	1 17	8 18	2 25	10 5	0 45	14 17	1 45	6 36	13 24	23 18	23 18	24 32	15 5	1 43			
T 29	23 14	5 54	5 17	20 58	1 13	23 42	0 18	17 6	1 14	5 29	1 17	8 19	2 25	10 4	0 45	14 18	1 45	6 36	13 24	23 18	23 18	24 32	15 6	1 43			
W30	23n11	10n52	5n14	20n32	1n 6	23n42	0n20	16n55	1n14	5n31	1s18	8n21	2s25	10n 3	0n45	14n18	1s45	6n36	13s24	23s18	23s18	24n31	15n 6	1s42			

ASTRODIENST EPHEMERIS for the year 1880

geocentric

JULY 1880

00:00 UT

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

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	23n 7	15n17	4n56	20n 5	0n57	23n42	0n22	16n43	1n14	5n34	1 s18	8n22	2s25	10n 2	0n45	14n18	1s45	6n36	13s24	23s18	23s18	24n31	15n 7	1s43							
F 2	23 3	18 59	4 25	19 38	0 49	23 40	0 24	16 31	1 13	5 36	1 18	8 23	2 25	10 1	0 45	14 19	1 45	6 37	13 24	23 18	23 18	24 30	15 8	1 44							
S 3	22 58	21 50	3 43	19 10	0 39	23 38	0 27	16 20	1 13	5 39	1 18	8 24	2 26	10 0	0 45	14 19	1 45	6 37	13 24	23 18	23 18	24 30	15 8	1 44							
S 4	22 53	23 43	2 52	18 42	0 30	23 36	0 29	16 8	1 12	5 41	1 19	8 25	2 26	10 0	0 45	14 19	1 45	6 37	13 25	23 18	23 19	24 30	15 9	1 44							
M 5	22 47	24 33	1 54	18 14	0 19	23 32	0 31	15 56	1 12	5 43	1 19	8 26	2 26	9 59	0 45	14 20	1 45	6 37	13 25	23 18	23 19	24 29	15 9	1 44							
T 6	22 42	24 16	0 51	17 46	0 9	23 28	0 33	15 43	1 12	5 45	1 19	8 27	2 26	9 58	0 45	14 20	1 45	6 37	13 25	23 18	23 19	24 29	15 10	1 44							
W 7	22 35	22 54	0s15	17 19	0s 2	23 23	0 36	15 31	1 11	5 47	1 19	8 28	2 27	9 57	0 45	14 20	1 45	6 37	13 25	23 18	23 19	24 28	15 11	1 45							
T 8	22 29	20 30	1 20	16 51	0 14	23 18	0 38	15 19	1 11	5 49	1 20	8 29	2 27	9 55	0 45	14 21	1 45	6 37	13 25	23 18	23 19	24 28	15 11	1 45							
F 9	22 22	17 11	2 22	16 23	0 26	23 11	0 40	15 7	1 10	5 51	1 20	8 30	2 27	9 54	0 45	14 21	1 45	6 37	13 25	23 18	23 19	24 27	15 12	1 45							
S 10	22 14	13 7	3 19	15 56	0 38	23 4	0 42	14 54	1 10	5 53	1 20	8 31	2 27	9 53	0 45	14 21	1 45	6 37	13 26	23 18	23 19	24 27	15 12	1 45							
S 11	22 6	8 27	4 7	15 29	0 50	22 57	0 44	14 41	1 10	5 55	1 21	8 32	2 28	9 52	0 45	14 22	1 45	6 37	13 26	23 18	23 20	24 27	15 13	1 45							
M12	21 58	3 23	4 44	15 3	1 3	22 49	0 46	14 29	1 9	5 57	1 21	8 33	2 28	9 51	0 45	14 22	1 45	6 37	13 26	23 18	23 20	24 26	15 13	1 45							
T 13	21 50	1s56	5 8	14 38	1 16	22 40	0 48	14 16	1 9	5 58	1 21	8 33	2 28	9 50	0 44	14 22	1 45	6 37	13 26	23 18	23 20	24 26	15 14	1 46							
W14	21 41	7 16	5 16	14 13	1 30	22 30	0 50	14 3	1 8	6 0	1 21	8 34	2 28	9 49	0 44	14 23	1 46	6 37	13 26	23 18	23 20	24 25	15 14	1 46							
T 15	21 31	12 23	5 8	13 49	1 43	22 20	0 52	13 50	1 8	6 2	1 22	8 35	2 29	9 48	0 44	14 23	1 46	6 37	13 27	23 18	23 20	24 25	15 15	1 46							
F 16	21 22	17 2	4 42	13 26	1 57	22 9	0 54	13 37	1 8	6 3	1 22	8 36	2 29	9 47	0 44	14 23	1 46	6 37	13 27	23 18	23 20	24 24	15 15	1 46							
S 17	21 12	20 50	3 59	13 5	2 11	21 57	0 55	13 24	1 7	6 4	1 22	8 36	2 29	9 46	0 44	14 23	1 46	6 37	13 27	23 18	23 20	24 24	15 15	1 46							
S 18	21 1	23 28	3 0	12 44	2 25	21 45	0 57	13 10	1 7	6 6	1 22	8 37	2 29	9 45	0 44	14 24	1 46	6 37	13 27	23 18	23 21	24 23	15 16	1 47							
M19	20 50	24 33	1 48	12 25	2 38	21 32	0 59	12 57	1 6	6 7	1 23	8 37	2 30	9 43	0 44	14 24	1 46	6 37	13 27	23 18	23 21	24 23	15 16	1 47							
T 20	20 39	23 55	0 28	12 8	2 52	21 19	1 1	12 44	1 6	6 8	1 23	8 38	2 30	9 42	0 44	14 24	1 46	6 37	13 28	23 18	23 21	24 22	15 17	1 47							
W21	20 28	21 33	0n54	11 52	3 6	21 5	1 2	12 30	1 5	6 9	1 23	8 39	2 30	9 41	0 44	14 24	1 46	6 37	13 28	23 18	23 21	24 22	15 17	1 47							
T 22	20 16	17 45	2 13	11 38	3 19	20 50	1 4	12 17	1 5	6 11	1 23	8 39	2 31	9 40	0 44	14 24	1 46	6 37	13 28	23 18	23 21	24 21	15 17	1 47							
F 23	20 4	12 52	3 21	11 26	3 32	20 35	1 6	12 3	1 5	6 12	1 24	8 39	2 31	9 39	0 44	14 25	1 46	6 37	13 28	23 18	23 21	24 21	15 18	1 47							
S 24	19 52	7 22	4 15	11 15	3 44	20 19	1 7	11 49	1 4	6 12	1 24	8 40	2 31	9 37	0 44	14 25	1 46	6 36	13 28	23 18	23 21	24 20	15 18	1 48							
S 25	19 39	1 39	4 52	11 7	3 56	20 2	1 9	11 35	1 4	6 13	1 24	8 40	2 31	9 36	0 44	14 25	1 46	6 36	13 29	23 19	23 21	24 20	15 18	1 48							
M26	19 26	3n58	5 11	11 1	4 8	19 45	1 10	11 21	1 3	6 14	1 25	8 41	2 32	9 35	0 44	14 25	1 46	6 36	13 29	23 19	23 22	24 19	15 18	1 48							
T 27	19 12	9 13	5 13	10 58	4 18	19 28	1 11	11 7	1 3	6 15	1 25	8 41	2 32	9 34	0 44	14 25	1 46	6 36	13 29	23 19	23 22	24 19	15 19	1 48							
W28	18 58	13 55	4 59	10 56	4 27	19 9	1 13	10 53	1 2	6 15	1 25	8 41	2 32	9 32	0 44	14 25	1 46	6 36	13 29	23 19	23 22	24 18	15 19	1 48							
T 29	18 44	17 54	4 31	10 58	4 35	18 51	1 14	10 39	1 2	6 16	1 25	8 41	2 32	9 31	0 44	14 26	1 46	6 36	13 30	23 19	23 22	24 17	15 19	1 49							
F 30	18 30	21 3	3 52	11 1	4 42	18 32	1 15	10 25	1 2	6 17	1 26	8 41	2 33	9 30	0 44	14 26	1 46	6 36	13 30	23 19	23 22	24 17	15 19	1 49							
S 31	18n15	23n14	3n 3	11n 7	4s48	18n12	1n16	10n11	1n 1	6n17	1s26	8n42	2s33	9n29	0n44	14n26	1s46	6n36	13s30	23s19	23s22	24n16	15n19	1s49							

ASTRODIENST EPHEMERIS for the year 1880

geocentric

AUGUST 1880

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	20 39 55	9♂ 3'38	12♂14	16°R31	14♂ 2	6♂51	19°V27	28°V53	7♂28	14♂16	28♂14	6♂ 7	4♂43	24♂21	17♂32	S 1
M 2	20 43 51	10° 1'05	24° 1	15♂47	15°16	7°29	19°29	28°54	7°31	14°16	28°15	6° 9	4°39	24°28	17°33	M 2
T 3	20 47 48	10°58'33	5♂50	15° 2	16°30	8° 7	19°30	28°55	7°35	14°17	28°15	6°R 9	4°36	24°34	17°35	T 3
W 4	20 51 44	11°56'02	17°45	14°15	17°44	8°44	19°31	28°55	7°38	14°17	28°16	6° 9	4°33	24°41	17°36	W 4
T 5	20 55 41	12°53'32	29°49	13°28	18°58	9°22	19°32	28°56	7°42	14°17	28°16	6° 6	4°30	24°48	17°37	T 5
F 6	20 59 37	13°51'03	12♂ 3	12°42	20°12	10° 0	19°32	28°57	7°45	14°18	28°17	6° 2	4°27	24°54	17°38	F 6
S 7	21 3 34	14°48'36	24°29	11°56	21°27	10°38	19°33	28°57	7°49	14°18	28°17	5°57	4°24	25° 1	17°39	S 7
S 8	21 7 31	15°46'09	7♂ 8	11°13	22°41	11°15	19°33	28°57	7°52	14°18	28°18	5°50	4°20	25° 8	17°40	S 8
M 9	21 11 27	16°43'43	20° 1	10°33	23°55	11°53	19°R33	28°57	7°56	14°19	28°18	5°43	4°17	25°14	17°40	M 9
T 10	21 15 24	17°41'18	3♂ 6	9°57	25° 9	12°31	19°33	28°R57	8° 0	14°19	28°19	5°36	4°14	25°21	17°41	T 10
W11	21 19 20	18°38'55	16°25	9°26	26°23	13° 9	19°32	28°57	8° 3	14°19	28°19	5°31	4°11	25°28	17°42	W11
T 12	21 23 17	19°36'32	29°57	9° 0	27°37	13°47	19°32	28°57	8° 7	14°19	28°19	5°28	4° 8	25°34	17°43	T 12
F 13	21 27 13	20°34'10	13♂42	8°40	28°51	14°25	19°31	28°57	8°10	14°20	28°20	5°26	4° 5	25°41	17°43	F 13
S 14	21 31 10	21°31'50	27°40	8°26	0♂ 5	15° 3	19°30	28°57	8°14	14°20	28°20	5°D26	4° 1	25°48	17°44	S 14
S 15	21 35 6	22°29'30	11♂51	8°D19	1°19	15°41	19°29	28°56	8°18	14°20	28°20	5°27	3°58	25°54	17°44	S 15
M16	21 39 3	23°27'11	26°13	8°19	2°34	16°19	19°28	28°56	8°21	14°20	28°20	5°28	3°55	26° 1	17°45	M16
T 17	21 43 0	24°24'54	10♂43	8°27	3°48	16°57	19°26	28°55	8°25	14°R20	28°21	5°R28	3°52	26° 8	17°45	T 17
W18	21 46 56	25°22'37	25°18	8°42	5° 2	17°35	19°24	28°54	8°29	14°20	28°21	5°26	3°49	26°14	17°45	W18
T 19	21 50 53	26°20'22	9♂53	9° 5	6°16	18°13	19°22	28°54	8°32	14°20	28°21	5°23	3°45	26°21	17°46	T 19
F 20	21 54 49	27°18'08	24°20	9°35	7°30	18°52	19°20	28°53	8°36	14°20	28°21	5°17	3°42	26°27	17°46	F 20
S 21	21 58 46	28°15'55	8♂35	10°13	8°44	19°30	19°18	28°52	8°40	14°20	28°21	5° 9	3°39	26°34	17°46	S 21
S 22	22 2 42	29°13'44	22°31	10°59	9°59	20° 8	19°15	28°50	8°44	14°19	28°22	5° 0	3°36	26°41	17°R46	S 22
M23	22 6 39	0♂11'34	6°V 5	11°51	11°13	20°46	19°13	28°49	8°47	14°19	28°22	4°51	3°33	26°47	17°46	M23
T 24	22 10 35	1° 9'26	19°15	12°51	12°27	21°25	19°10	28°48	8°51	14°19	28°22	4°44	3°30	26°54	17°46	T 24
W25	22 14 32	2° 7'20	2♂ 2	13°57	13°41	22° 3	19° 6	28°46	8°55	14°19	28°22	4°38	3°26	27° 1	17°46	W25
T 26	22 18 28	3° 5'16	14°28	15° 9	14°55	22°41	19° 3	28°45	8°59	14°19	28°22	4°34	3°23	27° 7	17°45	T 26
F 27	22 22 25	4° 3'14	26°36	16°28	16° 9	23°20	19° 0	28°43	9° 2	14°18	28°22	4°32	3°20	27°14	17°45	F 27
S 28	22 26 22	5° 1'13	8♂33	17°52	17°24	23°58	18°56	28°41	9° 6	14°18	28°R22	4°D32	3°17	27°21	17°45	S 28
S 29	22 30 18	5°59'14	20°22	19°21	18°38	24°37	18°52	28°40	9°10	14°18	28°22	4°32	3°14	27°27	17°44	S 29
M30	22 34 15	6°57'18	2♂10	20°55	19°52	25°15	18°48	28°38	9°14	14°17	28°22	4°R33	3°10	27°34	17°44	M30
T 31	22 38 11	7♂55'23	14♂ 2	22♂33	21♂ 6	25♂54	18°V44	28°V36	9♂17	14♂17	28♂22	4♂32	3♂ 7	27♂41	17♂44	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	18n 0	24n23	2n 7	11n15	4s52	17n52	1n17	9n56	1n 1	6n17	1s26	8n42	2s33	9n27	0n44	14n26
M 2	17 45	24 25	1 6	11 25	4 54	17 31	1 18	9 42	1 0	6 18	1 26	8 42	2 33	9 26	0 44	14 26
T 3	17 29	23 21	0 2	11 38	4 55	17 10	1 19	9 28	1 0	6 18	1 27	8 42	2 34	9 25	0 44	14 26
W 4	17 13	21 14	1 s 3	11 52	4 54	16 48	1 20	9 13	0 59	6 18	1 27	8 42	2 34	9 23	0 44	14 26
T 5	16 57	18 10	2 5	12 8	4 51	16 26	1 21	8 58	0 59	6 18	1 27	8 42	2 34	9 22	0 44	14 26
F 6	16 41	14 16	3 3	12 26	4 46	16 3	1 22	8 44	0 59	6 18	1 28	8 42	2 35	9 21	0 44	14 26
S 7	16 24	9 43	3 53	12 45	4 39	15 40	1 22	8 29	0 58	6 18	1 28	8 42	2 35	9 19	0 44	14 26
S 8	16 7	4 41	4 32	13 5	4 31	15 16	1 23	8 14	0 58	6 18	1 28	8 41	2 35	9 18	0 44	14 26
M 9	15 50	0s37	4 58	13 25	4 21	14 53	1 24	7 59	0 57	6 17	1 28	8 41	2 35	9 17	0 44	14 26
T 10	15 32	5 58	5 9	13 46	4 9	14 28	1 24	7 45	0 57	6 17	1 29	8 41	2 36	9 15	0 44	14 26
W11	15 15	11 8	5 4	14 6	3 56	14 3	1 25	7 30	0 56	6 17	1 29	8 41	2 36	9 14	0 44	14 26
T 12	14 57	15 51	4 42	14 27	3 42	13 38	1 25	7 15	0 56	6 16	1 29	8 41	2 36	9 13	0 44	14 26
F 13	14 39	19 50	4 3	14 47	3 27	13 13	1 25	6 59	0 55	6 16	1 29	8 40	2 36	9 11	0 44	14 26
S 14	14 20	22 44	3 10	15 6	3 11	12 47	1 26	6 44	0 55	6 15	1 30	8 40	2 37	9 10	0 44	14 26
S 15	14 2	24 16	2 4	15 23	2 54	12 21	1 26	6 29	0 55	6 14	1 30	8 39	2 37	9 9	0 44	14 26
M16	13 43	24 14	0 50	15 40	2 37	11 54	1 26	6 14	0 54	6 14	1 30	8 39	2 37	9 7	0 44	14 26
T 17	13 24	22 33	0n28	15 55	2 20	11 28	1 26	5 59	0 54	6 13	1 31	8 39	2 37	9 6	0 44	14 26
W18	13 4	19 22	1 45	16 8	2 2	11 1	1 26	5 43	0 53	6 12	1 31	8 38	2 38	9 4	0 44	14 26
T 19	12 45	14 59	2 54	16 19	1 44	10 33	1 26	5 28	0 53	6 11	1 31	8 38	2 38	9 3	0 44	14 26
F 20	12 25	9 46	3 52	16 28	1 27	10 5	1 26	5 13	0 52	6 10	1 31	8 37	2 38	9 2	0 44	14 26
S 21	12 5	4 7	4 34	16 35	1 9	9 37	1 26	4 57	0 52	6 9	1 32	8 36	2 39	9 0	0 44	14 26
S 22	11 45	1n36	4 59	16 39	0 53	9 9	1 26	4 42	0 51	6 8	1 32	8 36	2 39	8 59	0 44	14 26
M23	11 25	7 6	5 6	16 40	0 36	8 41	1 25	4 26	0 51	6 6	1 32	8 35	2 39	8 57	0 44	14 26
T 24	11 4	12 6	4 56	16 38	0 21	8 12	1 25	4 11	0 50	6 5	1 32	8 34	2 39	8 56	0 44	14 26
W25	10 44	16 26	4 32	16 34	0 5	7 43	1 24	3 55	0 50	6 4	1 33	8 34	2 40	8 55	0 44	14 26
T 26	10 23	19 56	3 55	16 26	0n 9	7 14	1 24	3 40	0 50	6 2	1 33	8 33	2 40	8 53	0 44	14 25
F 27	10 2	22 28	3 9	16 16	0 22	6 45	1 23	3 24	0 49	6 1	1 33	8 32	2 40	8 52	0 44	14 25
S 28	9 41	23 58	2 15	16 2	0 35	6 15	1 23	3 8	0 49	5 59	1 33	8 31	2 40	8 50	0 44	14 25
S 29	9 19	24 21	1 15	15 45	0 46	5 46	1 22	2 53	0 48	5 57	1 34	8 30	2 40	8 49	0 44	14 25
M30	8 58	23 39	0 13	15 26	0 57	5 16	1 21	2 37	0 48	5 55	1 34	8 29	2 41	8 48	0 44	14 25
T 31	8n36	21n53	0s51	15n 3	1n 6	4n46	1n20	2n21	0n47	5n54	1s34	8n28	2s41	8n46	0n44	14n25

Julian Day Number = 2407928.5, Delta T = -3.45 sec
 Ecliptic obliquity = 23°27'18", Nutation = 0°00'18", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 23°04'21", Lahiri = 22°11'22"

ASTRODIENST EPHEMERIS for the year 1880
geocentric

SEPTEMBER 1880

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	22 42 8	8♉53'30	26♊1	24♊14	22♉20	26♉32	18°R39	28°R33	9♉21	14°R16	28°R22	4°R30	3♊4	27♉47	17°R43	W 1
T 2	22 46 4	9°51'38	8♊13	25°59	23°35	27°11	18°Y35	28°Y31	9°25	14°R16	28°R22	4°R25	3°1	27°54	17°R42	T 2
F 3	22 50 1	10°49'49	20°40	27°47	24°49	27°50	18°30	28°29	9°29	14°15	28°22	4°18	2°58	28°0	17°42	F 3
S 4	22 53 57	11°48'01	3♉23	29°36	26°3	28°28	18°25	28°26	9°32	14°15	28°21	4°8	2°55	28°7	17°41	S 4
S 5	22 57 54	12°46'16	16°22	1♉27	27°17	29°7	18°20	28°24	9°36	14°14	28°21	3°57	2°51	28°14	17°40	S 5
M 6	23 1 51	13°44'32	29°37	3°20	28°32	29°46	18°15	28°21	9°40	14°13	28°21	3°46	2°48	28°20	17°39	M 6
T 7	23 5 47	14°42'49	13♊6	5°14	29°46	0♊25	18°9	28°19	9°44	14°13	28°21	3°35	2°45	28°27	17°38	T 7
W 8	23 9 44	15°41'09	26°47	7°8	1♊0	1°4	18°4	28°16	9°47	14°12	28°21	3°25	2°42	28°34	17°37	W 8
T 9	23 13 40	16°39'30	10♊36	9°2	2°14	1°43	17°58	28°13	9°51	14°11	28°20	3°18	2°39	28°40	17°36	T 9
F 10	23 17 37	17°37'52	24°32	10°57	3°28	2°21	17°52	28°10	9°55	14°11	28°20	3°14	2°36	28°47	17°35	F 10
S 11	23 21 33	18°36'16	8♉33	12°52	4°43	3°0	17°46	28°7	9°59	14°10	28°20	3°12	2°32	28°54	17°34	S 11
S 12	23 25 30	19°34'42	22°38	14°46	5°57	3°39	17°40	28°4	10°2	14°9	28°20	3°D12	2°29	29°0	17°33	S 12
M13	23 29 26	20°33'10	6♊46	16°40	7°11	4°18	17°34	28°1	10°6	14°8	28°19	3°R12	2°26	29°7	17°32	M13
T 14	23 33 23	21°31'39	20°57	18°33	8°25	4°58	17°27	27°57	10°10	14°7	28°19	3°11	2°23	29°14	17°30	T 14
W15	23 37 20	22°30'09	5♊8	20°25	9°40	5°37	17°21	27°54	10°14	14°7	28°19	3°8	2°20	29°20	17°29	W15
T 16	23 41 16	23°28'41	19°17	22°17	10°54	6°16	17°14	27°51	10°17	14°6	28°18	3°3	2°16	29°27	17°28	T 16
F 17	23 45 13	24°27'15	3♉20	24°8	12°8	6°55	17°7	27°47	10°21	14°5	28°18	2°54	2°13	29°34	17°26	F 17
S 18	23 49 9	25°25'51	17°13	25°58	13°22	7°34	17°0	27°43	10°25	14°4	28°17	2°43	2°10	29°40	17°25	S 18
S 19	23 53 6	26°24'28	0♉52	27°47	14°36	8°13	16°53	27°40	10°28	14°3	28°17	2°31	2°7	29°47	17°23	S 19
M20	23 57 2	27°23'08	14°14	29°35	15°50	8°53	16°46	27°36	10°32	14°2	28°17	2°18	2°4	29°53	17°21	M20
T 21	0 0 59	28°21'49	27°16	1♊22	17°5	9°32	16°39	27°32	10°36	14°1	28°16	2°7	2°1	00°0	17°20	T 21
W22	0 4 55	29°20'33	9♊58	3°8	18°19	10°11	16°32	27°28	10°39	14°0	28°16	1°57	1°57	0°7	17°18	W22
T 23	0 8 52	0♊19'19	22°21	4°54	19°33	10°51	16°24	27°24	10°43	13°59	28°15	1°50	1°54	0°13	17°16	T 23
F 24	0 12 49	1°18'07	4♉29	6°38	20°47	11°30	16°17	27°20	10°47	13°57	28°15	1°46	1°51	0°20	17°14	F 24
S 25	0 16 45	2°16'58	16°25	8°21	22°1	12°10	16°9	27°16	10°50	13°56	28°14	1°44	1°48	0°27	17°12	S 25
S 26	0 20 42	3°15'51	28°14	10°4	23°15	12°49	16°1	27°12	10°54	13°55	28°13	1°44	1°45	0°33	17°10	S 26
M27	0 24 38	4°14'46	10♊3	11°46	24°30	13°29	15°54	27°8	10°57	13°54	28°13	1°44	1°42	0°40	17°8	M27
T 28	0 28 35	5°13'43	21°55	13°26	25°44	14°9	15°46	27°4	11°1	13°53	28°12	1°43	1°38	0°47	17°6	T 28
W29	0 32 31	6°12'43	3♊57	15°6	26°58	14°48	15°38	27°0	11°4	13°51	28°12	1°41	1°35	0°53	17°4	W29
T 30	0 36 28	7♊11'44	16♊13	16♊45	28♊12	15♊28	15°Y30	26°Y55	11♉8	13°R50	28°R11	1°R36	1°R32	1°R0	17°R2	T 30

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑	♒	♓	♈	♉		
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	decl	lat	
W 1	8n14	19n 7	1s52	14n38	1n15	4n16	1n20	2n 5	0n47	5n52	1s34	8n27	2s41	8n45	0n44	14n24	1s48	6n30	13s38	23s23	23s25	23n55	15n17	1s56
T 2	7 53	15 30	2 49	14 9	1 22	3 45	1 19	1 50	0 46	5 50	1 34	8 26	2 41	8 43	0 44	14 24	1 48	6 29	13 38	23 23	23 25	23 54	15 16	1 56
F 3	7 31	11 8	3 40	13 39	1 29	3 15	1 18	1 34	0 46	5 48	1 35	8 25	2 42	8 42	0 44	14 24	1 48	6 29	13 38	23 23	23 25	23 53	15 16	1 56
S 4	7 8	6 14	4 20	13 5	1 34	2 44	1 16	1 18	0 45	5 46	1 35	8 24	2 42	8 40	0 44	14 24	1 49	6 29	13 39	23 23	23 25	23 52	15 15	1 56
S 5	6 46	0 57	4 48	12 30	1 39	2 14	1 15	1 2	0 45	5 44	1 35	8 23	2 42	8 39	0 44	14 24	1 49	6 29	13 39	23 24	23 25	23 52	15 15	1 56
M 6	6 24	4s27	5 1	11 53	1 42	1 43	1 14	0 46	0 44	5 42	1 35	8 22	2 42	8 38	0 44	14 23	1 49	6 28	13 39	23 24	23 26	23 51	15 15	1 57
T 7	6 1	9 45	4 58	11 14	1 45	1 12	1 13	0 30	0 44	5 39	1 35	8 21	2 43	8 36	0 44	14 23	1 49	6 28	13 39	23 24	23 26	23 50	15 14	1 57
W 8	5 39	14 39	4 38	10 33	1 47	0 42	1 11	0 14	0 43	5 37	1 36	8 20	2 43	8 35	0 44	14 23	1 49	6 28	13 40	23 25	23 26	23 49	15 14	1 57
T 9	5 16	18 49	4 1	9 51	1 48	0 11	1 10	0s 1	0 43	5 35	1 36	8 19	2 43	8 33	0 44	14 23	1 49	6 28	13 40	23 25	23 26	23 48	15 13	1 57
F 10	4 53	21 59	3 10	9 8	1 48	0s20	1 9	0 17	0 42	5 32	1 36	8 17	2 43	8 32	0 44	14 22	1 49	6 27	13 40	23 25	23 26	23 48	15 13	1 57
S 11	4 31	23 50	2 7	8 24	1 48	0 51	1 7	0 33	0 42	5 30	1 36	8 16	2 43	8 31	0 44	14 22	1 49	6 27	13 40	23 25	23 26	23 47	15 12	1 58
S 12	4 8	24 11	0 56	7 39	1 47	1 22	1 6	0 49	0 41	5 27	1 36	8 15	2 44	8 29	0 44	14 22	1 49	6 27	13 41	23 25	23 26	23 46	15 12	1 58
M13	3 45	22 58	0n19	6 53	1 45	1 53	1 4	1 5	0 41	5 25	1 36	8 13	2 44	8 28	0 44	14 21	1 49	6 26	13 41	23 25	23 26	23 45	15 11	1 58
T 14	3 22	20 18	1 33	6 7	1 43	2 23	1 2	1 21	0 40	5 22	1 37	8 12	2 44	8 26	0 44	14 21	1 49	6 26	13 41	23 25	23 26	23 44	15 11	1 58
W15	2 59	16 24	2 40	5 20	1 40	2 54	1 1	1 37	0 40	5 20	1 37	8 11	2 44	8 25	0 44	14 21	1 49	6 26	13 41	23 25	23 26	23 43	15 10	1 58
T 16	2 35	11 36	3 38	4 33	1 37	3 25	0 59	1 53	0 40	5 17	1 37	8 9	2 44	8 24	0 44	14 21	1 49	6 25	13 42	23 25	23 26	23 43	15 9	1 59
F 17	2 12	6 13	4 22	3 46	1 33	3 56	0 57	2 9	0 39	5 14	1 37	8 8	2 44	8 22	0 44	14 20	1 49	6 25	13 42	23 25	23 26	23 42	15 9	1 59
S 18	1 49	0 36	4 50	2 58	1 29	4 26	0 55	2 25	0 39	5 11	1 37	8 7	2 45	8 21	0 44	14 20	1 49	6 25	13 42	23 26	23 26	23 41	15 8	1 59
S 19	1 26	4n56	5 0	2 11	1 25	4 57	0 53	2 41	0 38	5 9	1 37	8 5	2 45	8 19	0 44	14 20	1 49	6 25	13 42	23 26	23 26	23 40	15 8	1 59
M20	1 2	10 8	4 54	1 23	1 20	5 27	0 51	2 57	0 38	5 6	1 37	8 4	2 45	8 18	0 44	14 19	1 49	6 24	13 42	23 26	23 26	23 39	15 7	1 59
T 21	0 39	14 44	4 33	0 36	1 15	5 57	0 49	3 13	0 37	5 3	1 37	8 2	2 45	8 17	0 44	14 19	1 49	6 24	13 43	23 26	23 26	23 38	15 6	2 0
W22	0 16	18 34	3 58	0s11	1 9	6 28	0 47	3 29	0 37	5 0	1 38	8 1	2 45	8 15	0 44	14 18	1 49	6 24	13 43	23 26	23 26	23 37	15 6	2 0
T 23	0s 8	21 28	3 12	0 58	1 4	6 58	0 45	3 45	0 36	4 57	1 38	7 59	2 45	8 14	0 44	14 18	1 49	6 23	13 43	23 27	23 26	23 36	15 5	2 0
F 24	0 31	23 20	2 19	1 45	0 58	7 28	0 43	4 1	0 36	4 54	1 38	7 58	2 45	8 13	0 44	14 18	1 50	6 23	13 43	23 27	23 27	23 35	15 4	2 0
S 25	0 54	24 6	1 20	2 31	0 52	7 57	0 40	4 16	0 35	4 51	1 38	7 56	2 46	8 11	0 44	14 17	1 50	6 23	13 43	23 27	23 27	23 35	15 3	2 0
S 26	1 18	23 45	0 19	3 18	0 45	8 27	0 38	4 32	0 34	4 48	1 38	7 54	2 46	8 10	0 44	14 17	1 50	6 22	13 44	23 27	23 27	23 34	15 3	2 1
M27	1 41	22 21	0s44	4 3	0 39	8 57	0 36	4 48	0 34	4 45	1 38	7 53	2 46	8 9	0 44	14 17	1 50	6 22	13 44	23 27	23 27	23 33	15 2	2 1
T 28	2 5	19 57	1 45	4 48	0 32	9 26	0 34	5 4	0 33	4 42	1 38	7 51	2 46	8 7	0 44	14 16	1 50	6 22	13 44	23 27	23 27	23 32	15 1	2 1
W29	2 28	16 39	2 42	5 33	0 26	9 55	0 31	5 20	0 33	4 39	1 38	7 50	2 46	8 6	0 44	14 16	1 50	6 21	13 44	23 27	23 27	23 31	15 0	2 1
T 30	2s51	12n36	3s32	6s18	0n19	10s24	0n29	5s36	0n32	4n36	1s38	7n48	2s46	8n 5	0n44	14n15	1s50	6n21	13s45	23s27	23s27	23n30	15n 0	2s 1

ASTRODIENST EPHEMERIS for the year 1880
geocentric

OCTOBER 1880

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	0 40 24	8♂10'48	28♂48	18♂23	29♂26	16♂ 8	15°R22	26°R51	11♂11	13°R49	28°R10	1°R28	1♂29	1♂ 7	17°R 0	F 1
S 2	0 44 21	9° 9'55	11♂43	20° 0	0♂40	16°47	15°Y14	26°Y47	11°15	13♂48	28♂10	1♂18	1°26	1°13	16♂58	S 2
S 3	0 48 17	10° 9'03	25° 0	21°37	1°55	17°27	15° 6	26°42	11°18	13°46	28° 9	1° 6	1°22	1°20	16°55	S 3
M 4	0 52 14	11° 8'14	8♂37	23°12	3° 9	18° 7	14°58	26°38	11°22	13°45	28° 8	0°54	1°19	1°26	16°53	M 4
T 5	0 56 11	12° 7'26	22°31	24°47	4°23	18°47	14°50	26°33	11°25	13°44	28° 8	0°42	1°16	1°33	16°51	T 5
W 6	1 0 7	13° 6'41	6♂37	26°21	5°37	19°27	14°42	26°29	11°28	13°42	28° 7	0°32	1°13	1°40	16°48	W 6
T 7	1 4 4	14° 5'57	20°52	27°54	6°51	20° 7	14°34	26°24	11°32	13°41	28° 6	0°24	1°10	1°46	16°46	T 7
F 8	1 8 0	15° 5'16	5♂ 9	29°27	8° 5	20°47	14°26	26°19	11°35	13°39	28° 5	0°19	1° 7	1°53	16°43	F 8
S 9	1 11 57	16° 4'36	19°25	0♂59	9°19	21°27	14°18	26°15	11°38	13°38	28° 4	0°17	1° 3	2° 0	16°41	S 9
S 10	1 15 53	17° 3'58	3♂37	2°30	10°33	22° 7	14° 9	26°10	11°42	13°36	28° 4	0°D17	1° 0	2° 6	16°38	S 10
M 11	1 19 50	18° 3'22	17°44	4° 0	11°48	22°47	14° 1	26° 5	11°45	13°35	28° 3	0°R17	0°57	2°13	16°36	M 11
T 12	1 23 46	19° 2'48	1♂45	5°30	13° 2	23°28	13°53	26° 1	11°48	13°33	28° 2	0°17	0°54	2°20	16°33	T 12
W 13	1 27 43	20° 2'15	15°39	6°59	14°16	24° 8	13°45	25°56	11°51	13°32	28° 1	0°14	0°51	2°26	16°30	W 13
T 14	1 31 40	21° 1'44	29°25	8°27	15°30	24°48	13°37	25°51	11°54	13°30	28° 0	0° 9	0°47	2°33	16°28	T 14
F 15	1 35 36	22° 1'15	13♂ 3	9°54	16°44	25°28	13°29	25°46	11°57	13°29	27°59	0° 1	0°44	2°40	16°25	F 15
S 16	1 39 33	23° 0'47	26°31	11°21	17°58	26° 9	13°22	25°42	12° 0	13°27	27°59	29♂51	0°41	2°46	16°22	S 16
S 17	1 43 29	24° 0'22	9°Y46	12°47	19°12	26°49	13°14	25°37	12° 4	13°26	27°58	29°40	0°38	2°53	16°19	S 17
M 18	1 47 26	24°59'58	22°48	14°12	20°26	27°30	13° 6	25°32	12° 7	13°24	27°57	29°29	0°35	2°59	16°16	M 18
T 19	1 51 22	25°59'37	5♂34	15°36	21°40	28°10	12°58	25°27	12°10	13°23	27°56	29°18	0°32	3° 6	16°14	T 19
W 20	1 55 19	26°59'17	18° 5	16°59	22°54	28°51	12°51	25°22	12°12	13°21	27°55	29° 9	0°28	3°13	16°11	W 20
T 21	1 59 15	27°59'00	0♂22	18°22	24° 8	29°31	12°43	25°18	12°15	13°19	27°54	29° 3	0°25	3°19	16° 8	T 21
F 22	2 3 12	28°58'45	12°25	19°43	25°22	0♂12	12°36	25°13	12°18	13°18	27°53	28°59	0°22	3°26	16° 5	F 22
S 23	2 7 9	29°58'32	24°19	21° 4	26°36	0°52	12°28	25° 8	12°21	13°16	27°52	28°D57	0°19	3°33	16° 2	S 23
S 24	2 11 5	0♂58'21	6♂ 8	22°23	27°50	1°33	12°21	25° 3	12°24	13°15	27°51	28°57	0°16	3°39	15°59	S 24
M 25	2 15 2	1°58'12	17°55	23°42	29° 4	2°14	12°14	24°59	12°27	13°13	27°50	28°58	0°13	3°46	15°56	M 25
T 26	2 18 58	2°58'06	29°46	24°59	0♂18	2°55	12° 7	24°54	12°29	13°11	27°49	28°R59	0° 9	3°53	15°53	T 26
W 27	2 22 55	3°58'01	11♂47	26°14	1°32	3°36	12° 0	24°49	12°32	13°10	27°48	28°59	0° 6	3°59	15°50	W 27
T 28	2 26 51	4°57'59	24° 3	27°29	2°46	4°16	11°53	24°45	12°35	13° 8	27°47	28°57	0° 3	4° 6	15°47	T 28
F 29	2 30 48	5°57'59	6♂39	28°41	3°59	4°57	11°46	24°40	12°37	13° 6	27°46	28°52	29♂59	4°13	15°44	F 29
S 30	2 34 44	6°58'01	19°38	29°52	5°13	5°38	11°40	24°35	12°40	13° 5	27°45	28°46	29°57	4°19	15°41	S 30
S 31	2 38 41	7♂58'06	3♂ 2	1♂ 1	6♂27	6♂19	11°Y33	24°Y31	12♂43	13♂ 3	27♂44	28♂38	29♂53	4♂26	15♂38	S 31

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	3s15	7n56	4s14	7s 1	0n12	10s52	0n26	5s51	0n32	4n33	1s38	7n46	2s46	8n 3	0n44	14n15	1s50	6n21	13s45	23s27	23s27	23n29	14n59	2s 1			
S 2	3 38	2 48	4 44	7 45	0 5	11 21	0 24	6 7	0 31	4 30	1 38	7 45	2 46	8 2	0 44	14 15	1 50	6 20	13 45	23 27	23 27	23 28	14 58	2 2			
S 3	4 1	2s35	4 59	8 27	0s 2	11 49	0 21	6 23	0 31	4 27	1 38	7 43	2 46	8 1	0 44	14 14	1 50	6 20	13 45	23 27	23 27	23 27	14 57	2 2			
M 4	4 25	7 59	4 58	9 9	0 9	12 16	0 19	6 39	0 30	4 23	1 38	7 41	2 47	7 59	0 44	14 14	1 50	6 20	13 45	23 27	23 27	23 26	14 56	2 2			
T 5	4 48	13 5	4 40	9 51	0 16	12 44	0 16	6 54	0 30	4 20	1 38	7 40	2 47	7 58	0 44	14 13	1 50	6 19	13 45	23 27	23 27	23 25	14 56	2 2			
W 6	5 11	17 34	4 4	10 32	0 23	13 11	0 14	7 10	0 29	4 17	1 38	7 38	2 47	7 57	0 44	14 13	1 50	6 19	13 46	23 27	23 27	23 24	14 55	2 2			
T 7	5 34	21 5	3 13	11 12	0 30	13 38	0 11	7 25	0 29	4 14	1 38	7 36	2 47	7 56	0 44	14 12	1 50	6 19	13 46	23 27	23 27	23 23	14 54	2 2			
F 8	5 57	23 17	2 9	11 52	0 37	14 5	0 8	7 41	0 28	4 11	1 38	7 34	2 47	7 54	0 44	14 12	1 50	6 18	13 46	23 27	23 27	23 22	14 53	2 3			
S 9	6 20	23 59	0 57	12 30	0 44	14 31	0 6	7 56	0 28	4 8	1 38	7 33	2 47	7 53	0 44	14 11	1 50	6 18	13 46	23 27	23 27	23 21	14 52	2 3			
S 10	6 42	23 7	0n18	13 9	0 51	14 57	0 3	8 12	0 27	4 5	1 38	7 31	2 47	7 52	0 44	14 11	1 50	6 18	13 46	23 27	23 27	23 20	14 51	2 3			
M11	7 5	20 46	1 31	13 46	0 58	15 23	0 0	8 27	0 27	4 2	1 38	7 29	2 47	7 51	0 44	14 10	1 50	6 17	13 46	23 27	23 27	23 19	14 50	2 3			
T 12	7 28	17 12	2 39	14 23	1 5	15 48	0s 2	8 43	0 26	3 59	1 38	7 27	2 47	7 49	0 44	14 10	1 50	6 17	13 47	23 27	23 27	23 18	14 50	2 3			
W13	7 50	12 42	3 36	14 59	1 12	16 13	0 5	8 58	0 26	3 56	1 38	7 26	2 47	7 48	0 44	14 10	1 50	6 17	13 47	23 27	23 27	23 17	14 49	2 3			
T 14	8 13	7 36	4 21	15 34	1 18	16 37	0 8	9 13	0 25	3 53	1 38	7 24	2 47	7 47	0 44	14 9	1 50	6 17	13 47	23 27	23 27	23 16	14 48	2 4			
F 15	8 35	2 12	4 50	16 8	1 25	17 1	0 10	9 29	0 25	3 50	1 38	7 22	2 47	7 46	0 44	14 9	1 50	6 16	13 47	23 27	23 27	23 15	14 47	2 4			
S 16	8 57	3n14	5 2	16 41	1 31	17 24	0 13	9 44	0 24	3 47	1 38	7 21	2 47	7 45	0 44	14 8	1 50	6 16	13 47	23 27	23 27	23 14	14 46	2 4			
S 17	9 19	8 26	4 58	17 14	1 38	17 48	0 16	9 59	0 23	3 44	1 38	7 19	2 47	7 44	0 44	14 8	1 50	6 16	13 47	23 27	23 27	23 13	14 45	2 4			
M18	9 41	13 11	4 38	17 46	1 44	18 10	0 19	10 14	0 23	3 41	1 37	7 17	2 47	7 43	0 45	14 7	1 50	6 15	13 47	23 27	23 27	23 12	14 44	2 4			
T 19	10 3	17 14	4 5	18 16	1 50	18 32	0 22	10 29	0 22	3 38	1 37	7 15	2 47	7 41	0 45	14 7	1 50	6 15	13 48	23 27	23 27	23 11	14 43	2 4			
W 20	10 24	20 26	3 20	18 46	1 56	18 54	0 24	10 44	0 22	3 35	1 37	7 14	2 47	7 40	0 45	14 6	1 50	6 15	13 48	23 27	23 27	23 10	14 42	2 4			
T 21	10 46	22 38	2 27	19 15	2 2	19 15	0 27	10 59	0 21	3 32	1 37	7 12	2 47	7 39	0 45	14 6	1 50	6 14	13 48	23 27	23 27	23 9	14 41	2 5			
F 22	11 7	23 45	1 27	19 43	2 7	19 36	0 30	11 13	0 21	3 29	1 37	7 10	2 47	7 38	0 45	14 5	1 50	6 14	13 48	23 27	23 27	23 8	14 40	2 5			
S 23	11 28	23 45	0 25	20 10	2 12	19 56	0 33	11 28	0 20	3 27	1 37	7 9	2 47	7 37	0 45	14 5	1 50	6 14	13 48	23 27	23 27	23 7	14 39	2 5			
S 24	11 49	22 40	0s38	20 35	2 17	20 16	0 35	11 43	0 20	3 24	1 37	7 7	2 47	7 36	0 45	14 4	1 50	6 13	13 48	23 27	23 27	23 6	14 38	2 5			
M25	12 10	20 36	1 40	21 0	2 22	20 35	0 38	11 57	0 19	3 21	1 37	7 5	2 47	7 35	0 45	14 4	1 50	6 13	13 48	23 27	23 27	23 5	14 37	2 5			
T 26	12 31	17 38	2 38	21 24	2 27	20 53	0 41	12 12	0 19	3 19	1 36	7 4	2 47	7 34	0 45	14 3	1 50	6 13	13 48	23 27	23 27	23 4	14 36	2 5			
W27	12 51	13 54	3 29	21 46	2 31	21 11	0 44	12 26	0 18	3 16	1 36	7 2	2 47	7 33	0 45	14 3	1 50	6 12	13 48	23 27	23 27	23 3	14 35	2 5			
T 28	13 11	9 32	4 13	22 7	2 35	21 29	0 46	12 41	0 17	3 14	1 36	7 0	2 47	7 32	0 45	14 2	1 50	6 12	13 49	23 27	23 27	23 2	14 34	2 5			
F 29	13 31	4 40	4 45	22 27	2 38	21 46	0 49	12 55	0 17	3 11	1 36	6 59	2 47	7 31	0 45	14 2	1 50	6 12	13 49	23 27	23 27	23 1	14 33	2 6			
S 30	13 51	0s33	5 3	22 45	2 41	22 2	0 52	13 9	0 16	3 9	1 36	6 57	2 47	7 30	0 45	14 1	1 50	6 12	13 49	23 27	23 27	22 59	14 32	2 6			
S 31	14s10	5s53	5s 6	23s 2	2s44	22s18	0s54	13s23	0n16	3n 6	1s36	6n55	2s46	7n29	0n45	14n 1	1s50	6n11	13s49	23s27	23s27	22n58	14n31	2s 6			

ASTRODIENST EPHEMERIS for the year 1880
geocentric

NOVEMBER 1880

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	2 42 38	8♌58'12	16♊51	2♈ 7	7♋41	7♌ 0	11°R27	24°R26	12♍45	13°R 1	27°R43	28°R30	29♌50	4♉32	15°R35	M 1
T 2	2 46 34	9°58'20	1♌ 3	3°12	8°55	7°42	11°Y21	24°Y22	12°48	13♌ 0	27♌42	28♌21	29°47	4°39	15♌32	T 2
W 3	2 50 31	10°58'30	15°32	4°13	10° 9	8°23	11°15	24°17	12°50	12°58	27°41	28°14	29°44	4°46	15°28	W 3
T 4	2 54 27	11°58'42	0♈13	5°11	11°23	9° 4	11° 9	24°13	12°52	12°56	27°40	28° 9	29°41	4°52	15°25	T 4
F 5	2 58 24	12°58'56	14°56	6° 6	12°37	9°45	11° 3	24° 8	12°55	12°54	27°39	28° 7	29°38	4°59	15°22	F 5
S 6	3 2 20	13°59'12	29°36	6°57	13°51	10°26	10°57	24° 4	12°57	12°53	27°37	28°D 6	29°34	5° 6	15°19	S 6
S 7	3 6 17	14°59'29	14♌ 8	7°44	15° 4	11° 8	10°52	24° 0	12°59	12°51	27°36	28° 7	29°31	5°12	15°16	S 7
M 8	3 10 13	15°59'47	28°27	8°26	16°18	11°49	10°47	23°55	13° 1	12°49	27°35	28° 8	29°28	5°19	15°13	M 8
T 9	3 14 10	17° 0'07	12♌31	9° 2	17°32	12°31	10°42	23°51	13° 4	12°48	27°34	28°R 9	29°25	5°26	15°10	T 9
W10	3 18 7	18° 0'28	26°20	9°33	18°46	13°12	10°37	23°47	13° 6	12°46	27°33	28° 9	29°22	5°32	15° 7	W10
T11	3 22 3	19° 0'50	9♋54	9°57	19°59	13°54	10°32	23°43	13° 8	12°44	27°32	28° 7	29°19	5°39	15° 3	T11
F12	3 26 0	20° 1'14	23°14	10°13	21°13	14°35	10°27	23°39	13°10	12°43	27°31	28° 3	29°15	5°46	15° 0	F12
S13	3 29 56	21° 1'39	6°Y20	10°R21	22°27	15°17	10°23	23°35	13°12	12°41	27°30	27°58	29°12	5°52	14°57	S13
S14	3 33 53	22° 2'06	19°13	10°20	23°41	15°58	10°19	23°31	13°14	12°39	27°29	27°51	29° 9	5°59	14°54	S14
M15	3 37 49	23° 2'34	1♌53	10°10	24°54	16°40	10°15	23°27	13°15	12°38	27°27	27°45	29° 6	6° 6	14°51	M15
T16	3 41 46	24° 3'03	14°21	9°50	26° 8	17°22	10°11	23°23	13°17	12°36	27°26	27°39	29° 3	6°12	14°48	T16
W17	3 45 42	25° 3'34	26°37	9°19	27°22	18° 3	10° 7	23°20	13°19	12°34	27°25	27°34	28°59	6°19	14°45	W17
T18	3 49 39	26° 4'07	8♌43	8°38	28°35	18°45	10° 4	23°16	13°21	12°33	27°24	27°31	28°56	6°25	14°42	T18
F19	3 53 36	27° 4'41	20°40	7°46	29°49	19°27	10° 1	23°13	13°22	12°31	27°23	27°29	28°53	6°32	14°39	F19
S20	3 57 32	28° 5'17	2♉31	6°45	1♌ 2	20° 9	9°58	23° 9	13°24	12°29	27°22	27°D29	28°50	6°39	14°36	S20
S21	4 1 29	29° 5'54	14°18	5°36	2°16	20°51	9°55	23° 6	13°26	12°28	27°21	27°30	28°47	6°45	14°33	S21
M22	4 5 25	0♈6'33	26° 5	4°20	3°29	21°33	9°52	23° 2	13°27	12°26	27°20	27°32	28°44	6°52	14°30	M22
T23	4 9 22	1° 7'14	7♌56	3° 0	4°43	22°15	9°50	22°59	13°29	12°25	27°18	27°34	28°40	6°59	14°27	T23
W24	4 13 18	2° 7'56	19°56	1°37	5°56	22°57	9°47	22°56	13°30	12°23	27°17	27°35	28°37	7° 5	14°24	W24
T25	4 17 15	3° 8'40	2♌ 9	0°16	7°10	23°39	9°45	22°53	13°31	12°22	27°16	27°R36	28°34	7°12	14°21	T25
F26	4 21 11	4° 9'25	14°41	28♌59	8°23	24°21	9°43	22°50	13°33	12°20	27°15	27°36	28°31	7°19	14°18	F26
S27	4 25 8	5°10'12	27°35	27°47	9°37	25° 4	9°42	22°47	13°34	12°18	27°14	27°34	28°28	7°25	14°15	S27
S28	4 29 5	6°11'00	10♌55	26°44	10°50	25°46	9°40	22°44	13°35	12°17	27°13	27°32	28°25	7°32	14°12	S28
M29	4 33 1	7°11'50	24°43	25°51	12° 3	26°28	9°39	22°41	13°36	12°15	27°12	27°29	28°21	7°39	14°10	M29
T30	4 36 58	8♌12'41	8♌58	25♌ 8	13♌17	27♌11	9°Y38	22°Y39	13♌37	12♌14	27♌11	27♌26	28♌18	7♌45	14♌ 7	T30

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	14s30	11s 7	4s52	23s18	2s46	22s33	0s57	13s37	0n15	3n 4	1s35	6n54	2s46	7n28	0n45	14n 0	1s50	6n11	13s49	23s27	23s27	22n57	14n30	2s 6	
T 2	14 49	15 54	4 19	23 33	2 47	22 47	1 0	13 51	0 15	3 2	1 35	6 52	2 46	7 27	0 45	14 0	1 50	6 11	13 49	23 27	23 27	22 56	14 29	2 6	
W 3	15 8	19 50	3 29	23 45	2 48	23 1	1 2	14 5	0 14	3 0	1 35	6 51	2 46	7 26	0 45	13 59	1 50	6 10	13 49	23 27	23 27	22 55	14 28	2 6	
T 4	15 26	22 34	2 25	23 56	2 48	23 14	1 5	14 19	0 13	2 58	1 35	6 49	2 46	7 26	0 45	13 59	1 50	6 10	13 49	23 27	23 27	22 54	14 27	2 6	
F 5	15 45	23 46	1 11	24 6	2 48	23 26	1 7	14 32	0 13	2 56	1 35	6 48	2 46	7 25	0 45	13 58	1 50	6 10	13 49	23 26	23 27	22 53	14 26	2 6	
S 6	16 3	23 19	0n 8	24 14	2 47	23 38	1 10	14 46	0 12	2 54	1 34	6 46	2 46	7 24	0 45	13 58	1 50	6 10	13 49	23 26	23 27	22 52	14 25	2 6	
S 7	16 21	21 17	1 26	24 20	2 45	23 49	1 12	14 59	0 12	2 52	1 34	6 45	2 46	7 23	0 45	13 57	1 50	6 9	13 49	23 26	23 27	22 50	14 24	2 7	
M 8	16 38	17 55	2 37	24 24	2 42	23 59	1 15	15 13	0 11	2 50	1 34	6 43	2 46	7 22	0 45	13 57	1 50	6 9	13 49	23 26	23 27	22 49	14 23	2 7	
T 9	16 55	13 34	3 38	24 25	2 38	24 9	1 17	15 26	0 11	2 48	1 34	6 42	2 45	7 21	0 45	13 56	1 50	6 9	13 49	23 27	23 27	22 48	14 22	2 7	
W10	17 12	8 36	4 25	24 25	2 33	24 18	1 19	15 39	0 10	2 46	1 33	6 41	2 45	7 21	0 45	13 56	1 50	6 9	13 49	23 27	23 27	22 47	14 21	2 7	
T11	17 29	3 18	4 55	24 23	2 27	24 26	1 22	15 52	0 9	2 45	1 33	6 39	2 45	7 20	0 45	13 55	1 50	6 8	13 49	23 26	23 27	22 46	14 20	2 7	
F12	17 45	2n 3	5 10	24 18	2 20	24 33	1 24	16 5	0 9	2 43	1 33	6 38	2 45	7 19	0 45	13 55	1 50	6 8	13 49	23 26	23 27	22 45	14 19	2 7	
S13	18 2	7 13	5 8	24 10	2 11	24 40	1 26	16 18	0 8	2 42	1 33	6 37	2 45	7 18	0 45	13 54	1 50	6 8	13 49	23 26	23 27	22 44	14 18	2 7	
S14	18 17	11 59	4 50	24 0	2 1	24 46	1 28	16 30	0 8	2 40	1 32	6 35	2 45	7 18	0 45	13 54	1 50	6 8	13 49	23 26	23 27	22 42	14 17	2 7	
M15	18 33	16 10	4 18	23 47	1 49	24 52	1 30	16 43	0 7	2 39	1 32	6 34	2 44	7 17	0 45	13 53	1 50	6 7	13 49	23 26	23 27	22 41	14 16	2 7	
T16	18 48	19 34	3 34	23 31	1 35	24 56	1 32	16 55	0 7	2 38	1 32	6 33	2 44	7 16	0 46	13 53	1 50	6 7	13 49	23 26	23 27	22 40	14 16	2 7	
W17	19 3	22 1	2 41	23 11	1 20	25 0	1 34	17 8	0 6	2 36	1 32	6 32	2 44	7 16	0 46	13 52	1 50	6 7	13 49	23 26	23 27	22 39	14 15	2 7	
T18	19 17	23 26	1 41	22 49	1 4	25 3	1 36	17 20	0 5	2 35	1 31	6 30	2 44	7 15	0 46	13 52	1 50	6 7	13 49	23 26	23 27	22 38	14 14	2 7	
F19	19 31	23 45	0 37	22 23	0 46	25 6	1 38	17 32	0 5	2 34	1 31	6 29	2 44	7 15	0 46	13 51	1 50	6 7	13 49	23 26	23 27	22 36	14 13	2 8	
S20	19 45	22 58	0s28	21 54	0 27	25 7	1 40	17 44	0 4	2 33	1 31	6 28	2 44	7 14	0 46	13 51	1 50	6 6	13 49	23 26	23 27	22 35	14 12	2 8	
S21	19 58	21 10	1 31	21 22	0 7	25 8	1 42	17 55	0 4	2 33	1 30	6 27	2 43	7 13	0 46	13 50	1 50	6 6	13 49	23 26	23 27	22 34	14 11	2 8	
M22	20 11	18 28	2 31	20 48	0n13	25 8	1 44	18 7	0 3	2 32	1 30	6 26	2 43	7 13	0 46	13 50	1 50	6 6	13 49	23 26	23 27	22 33	14 10	2 8	
T23	20 24	15 0	3 25	20 13	0 34	25 8	1 45	18 18	0 2	2 31	1 30	6 25	2 43	7 12	0 46	13 49	1 50	6 6	13 49	23 26	23 27	22 32	14 9	2 8	
W24	20 36	10 53	4 10	19 37	0 54	25 6	1 47	18 30	0 2	2 30	1 30	6 24	2 43	7 12	0 46	13 49	1 50	6 6	13 49	23 26	23 27	22 30	14 8	2 8	
T25	20 48	6 16	4 45	19 2	1 13	25 4	1 48	18 41	0 1	2 30	1 29	6 23	2 43	7 11	0 46	13 48	1 50	6 5	13 49	23 26	23 27	22 29	14 7	2 8	
F26	20 59	1 18	5 8	18 28	1 31	25 1	1 50	18 52	0 1	2 29	1 29	6 22	2 42	7 11	0 46	13 48	1 50	6 5	13 49	23 26	23 27	22 28	14 6	2 8	
S27	21 11	3s52	5 16	17 56	1 47	24 57	1 51	19 3	0s 0	2 29	1 29	6 21	2 42	7 10	0 46	13 48	1 50	6 5	13 49	23 26	23 27	22 27	14 5	2 8	
S28	21 21	9 2	5 7	17 28	2 1	24 53	1 53	19 13	0 1	2 29	1 28	6 21	2 42	7 10	0 46	13 47	1 50	6 5	13 49	23 26	23 27	22 25	14 4	2 8	
M29	21 32	13 56	4 41	17 4	2 13	24 48	1 54	19 24	0 1	2 29	1 28	6 20	2 42	7 10	0 46	13 47	1 50	6 5	13 49	23 26	23 27	22 24	14 4	2 8	
T30	21s41	18s14	3s57	16s45	2n23	24s42	1s55	19s34	0s 2	2n28	1s28	6n19	2s41	7n 9	0n46	13n46	1s50	6n 5	13s48	23s26	23s27	22n23	14n 3	2s 8	

ASTRODIENST EPHEMERIS for the year 1880
geocentric

DECEMBER 1880

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	4 40 54	9°13'34	23°36	24°R37	14°30	27°53	9°R37	22°R36	13°38	12°R12	27°R 9	27°R23	28°15	7°52	14°R 4	W 1
T 2	4 44 51	10°14'28	8°31	24°18	15°43	28°36	9°Y37	22°Y34	13°39	12°11	27°8	27°22	28°12	7°59	14°1	T 2
F 3	4 48 47	11°15'23	23°36	24°D10	16°56	29°18	9°36	22°32	13°40	12°10	27°7	27°D21	28°9	8°5	13°59	F 3
S 4	4 52 44	12°16'19	8°340	24°12	18°10	0°1	9°D36	22°29	13°41	12°8	27°6	27°21	28°5	8°12	13°56	S 4
S 5	4 56 40	13°17'16	23°35	24°24	19°23	0°43	9°36	22°27	13°42	12°7	27°5	27°22	28°2	8°18	13°53	S 5
M 6	5 0 37	14°18'13	8°16	24°46	20°36	1°26	9°36	22°25	13°43	12°5	27°4	27°23	27°59	8°25	13°51	M 6
T 7	5 4 34	15°19'11	22°35	25°15	21°49	2°8	9°37	22°23	13°43	12°4	27°3	27°24	27°56	8°32	13°48	T 7
W 8	5 8 30	16°20'10	6°33	25°53	23°2	2°51	9°38	22°21	13°44	12°3	27°2	27°25	27°53	8°38	13°46	W 8
T 9	5 12 27	17°21'10	20°7	26°36	24°15	3°34	9°38	22°20	13°45	12°1	27°1	27°R25	27°50	8°45	13°43	T 9
F 10	5 16 23	18°22'09	3°Y20	27°26	25°28	4°17	9°40	22°18	13°45	12°0	27°0	27°25	27°46	8°52	13°41	F 10
S 11	5 20 20	19°23'10	16°14	28°20	26°41	5°0	9°41	22°16	13°46	11°59	26°59	27°24	27°43	8°58	13°38	S 11
S 12	5 24 16	20°24'11	28°51	29°20	27°54	5°43	9°42	22°15	13°46	11°58	26°58	27°23	27°40	9°5	13°36	S 12
M13	5 28 13	21°25'12	11°15	0°23	29°6	6°25	9°44	22°14	13°46	11°56	26°57	27°22	27°37	9°12	13°34	M13
T14	5 32 9	22°26'15	23°26	1°29	0°19	7°8	9°46	22°13	13°47	11°55	26°56	27°21	27°34	9°18	13°31	T14
W15	5 36 6	23°27'17	5°II29	2°39	1°32	7°51	9°48	22°11	13°47	11°54	26°55	27°21	27°31	9°25	13°29	W15
T16	5 40 3	24°28'21	17°25	3°51	2°45	8°35	9°50	22°10	13°47	11°53	26°54	27°21	27°27	9°32	13°27	T16
F17	5 43 59	25°29'24	29°16	5°6	3°57	9°18	9°53	22°10	13°47	11°52	26°53	27°D21	27°24	9°38	13°25	F17
S18	5 47 56	26°30'29	11°5	6°22	5°10	10°1	9°56	22°9	13°47	11°51	26°52	27°21	27°21	9°45	13°23	S18
S19	5 51 52	27°31'34	22°52	7°40	6°22	10°44	9°59	22°8	13°R47	11°50	26°51	27°R21	27°18	9°52	13°21	S19
M20	5 55 49	28°32'40	4°12	9°0	7°34	11°27	10°2	22°8	13°47	11°48	26°50	27°21	27°15	9°58	13°19	M20
T21	5 59 45	29°33'46	16°36	10°21	8°47	12°11	10°5	22°7	13°47	11°47	26°49	27°20	27°11	10°5	13°17	T21
W22	6 3 42	0°34'53	28°38	11°44	9°59	12°54	10°8	22°7	13°47	11°46	26°48	27°20	27°8	10°11	13°15	W22
T23	6 7 39	1°36'00	10°52	13°7	11°11	13°37	10°12	22°7	13°47	11°45	26°47	27°20	27°5	10°18	13°13	T23
F24	6 11 35	2°37'08	23°21	14°31	12°23	14°21	10°16	22°7	13°47	11°45	26°46	27°19	27°2	10°25	13°11	F24
S25	6 15 32	3°38'16	6°9	15°57	13°35	15°4	10°20	22°D 7	13°46	11°44	26°45	27°D19	26°59	10°31	13°10	S25
S26	6 19 28	4°39'26	19°20	17°23	14°47	15°48	10°24	22°7	13°46	11°43	26°45	27°19	26°56	10°38	13°8	S26
M27	6 23 25	5°40'35	2°57	18°49	15°59	16°31	10°29	22°7	13°45	11°42	26°44	27°20	26°52	10°45	13°6	M27
T28	6 27 21	6°41'46	17°0	20°17	17°11	17°15	10°34	22°7	13°45	11°41	26°43	27°21	26°49	10°51	13°5	T28
W29	6 31 18	7°42'56	1°30	21°44	18°23	17°59	10°38	22°8	13°44	11°40	26°42	27°22	26°46	10°58	13°3	W29
T30	6 35 14	8°44'07	16°22	23°13	19°34	18°42	10°43	22°8	13°44	11°40	26°41	27°22	26°43	11°5	13°2	T30
F31	6 39 11	9°45'19	1°30	24°42	20°46	19°26	10°Y49	22°Y 9	13°43	11°39	26°40	27°R23	26°40	11°11	13°1	F31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
W 1	21s51	21s32	2s56	16s30	2n31	24s35	1s56	19s44	0s 2	2n28	1s28	6n18	2s41	7n 9	0n46	13n46
T 2	22 0	23 26	1 42	16 20	2 36	24 28	1 57	19 54	0 3	2 28	1 27	6 18	2 41	7 9	0 46	13 45
F 3	22 9	23 39	0 21	16 15	2 40	24 20	1 58	20 4	0 4	2 29	1 27	6 17	2 41	7 8	0 46	13 45
S 4	22 17	22 8	1n 2	16 13	2 42	24 11	1 59	20 14	0 4	2 29	1 27	6 16	2 40	7 8	0 46	13 45
S 5	22 25	19 5	2 21	16 16	2 42	24 2	2 0	20 24	0 5	2 29	1 26	6 16	2 40	7 8	0 46	13 44
M 6	22 32	14 52	3 28	16 22	2 41	23 52	2 1	20 33	0 5	2 29	1 26	6 15	2 40	7 7	0 46	13 44
T 7	22 39	9 53	4 21	16 31	2 39	23 41	2 1	20 42	0 6	2 30	1 26	6 15	2 40	7 7	0 46	13 43
W 8	22 45	4 31	4 57	16 43	2 35	23 29	2 2	20 51	0 7	2 30	1 25	6 14	2 39	7 7	0 46	13 43
T 9	22 51	0n55	5 15	16 57	2 31	23 17	2 2	21 0	0 7	2 31	1 25	6 14	2 39	7 7	0 47	13 43
F 10	22 57	6 9	5 16	17 13	2 26	23 4	2 3	21 9	0 8	2 32	1 25	6 14	2 39	7 7	0 47	13 42
S 11	23 2	11 1	5 1	17 31	2 21	22 50	2 3	21 17	0 9	2 33	1 24	6 13	2 39	7 6	0 47	13 42
S 12	23 6	15 18	4 31	17 50	2 15	22 36	2 3	21 25	0 9	2 33	1 24	6 13	2 38	7 6	0 47	13 42
M13	23 11	18 51	3 49	18 9	2 8	22 21	2 3	21 33	0 10	2 34	1 24	6 13	2 38	7 6	0 47	13 41
T14	23 14	21 31	2 58	18 29	2 1	22 6	2 3	21 41	0 10	2 35	1 24	6 13	2 38	7 6	0 47	13 41
W15	23 18	23 11	1 59	18 50	1 54	21 50	2 3	21 49	0 11	2 37	1 23	6 12	2 38	7 6	0 47	13 41
T16	23 20	23 46	0 55	19 11	1 47	21 33	2 3	21 56	0 12	2 38	1 23	6 12	2 37	7 6	0 47	13 40
F17	23 23	23 16	0s11	19 32	1 39	21 16	2 3	22 4	0 12	2 39	1 23	6 12	2 37	7 6	0 47	13 40
S18	23 24	21 44	1 16	19 53	1 31	20 58	2 2	22 11	0 13	2 40	1 22	6 12	2 37	7 6	0 47	13 40
S19	23 26	19 15	2 17	20 14	1 24	20 39	2 2	22 18	0 14	2 42	1 22	6 12	2 36	7 6	0 47	13 39
M20	23 27	15 58	3 13	20 34	1 16	20 20	2 1	22 24	0 14	2 43	1 22	6 12	2 36	7 6	0 47	13 39
T21	23 27	12 2	4 1	20 54	1 8	20 1	2 1	22 31	0 15	2 45	1 21	6 12	2 36	7 6	0 47	13 39
W22	23 27	7 35	4 39	21 13	1 0	19 41	2 0	22 37	0 16	2 46	1 21	6 13	2 36	7 6	0 47	13 39
T23	23 27	2 47	5 5	21 32	0 52	19 20	1 59	22 43	0 16	2 48	1 21	6 13	2 35	7 7	0 47	13 38
F24	23 26	2s13	5 17	21 50	0 44	18 59	1 58	22 49	0 17	2 50	1 21	6 13	2 35	7 7	0 47	13 38
S25	23 24	7 15	5 14	22 7	0 36	18 37	1 57	22 54	0 17	2 52	1 20	6 13	2 35	7 7	0 47	13 38
S26	23 22	12 7	4 55	22 23	0 28	18 15	1 56	23 0	0 18	2 54	1 20	6 14	2 34	7 7	0 47	13 38
M27	23 20	16 33	4 19	22 39	0 21	17 52	1 54	23 5	0 19	2 56	1 20	6 14	2 34	7 7	0 47	13 38
T28	23 17	20 13	3 26	22 53	0 13	17 29	1 53	23 10	0 19	2 58	1 19	6 14	2 34	7 7	0 47	13 37
W29	23 14	22 44	2 19	23 6	0 5	17 6	1 52	23 14	0 20	3 0	1 19	6 15	2 34	7 8	0 47	13 37
T30	23 10	23 46	1 1	23 19	0s 2	16 42	1 50	23 19	0 21	3 2	1 19	6 15	2 33	7 8	0 47	13 37
F31	23s 6	23s 4	0n23	23s30	0s 9	16s17	1s48	23s23	0s21	3n 5	1s18	6n16	2s33	7n 8	0n47	13n37

Julian Day Number = 2408050.5, Delta T = -3.57 sec
Ecliptic obliquity = 23°27'17, Nutation = 0°00'16, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 23°04'38, Lahiri = 22°11'39