



Astrodienst Ephemeris Tables for the year 1782

tropical geocentric zodiac

contains Sun, Moon, Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto, True Node, Moon's Node, Lilith, Chiron

Programming
Dieter Koch and Alois Treindl
based on Swiss Ephemeris
Code D5EPH

ASTRODIENST EPHEMERIS for the year 1782
geocentric

JANUARY 1782

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	6 43 1	10 ³ 48'26	25 ⁵ 47	23 ⁷ 9	27 ² 48	26 ¹ 5	15 ² 23	24 ¹ 25	0 ⁰ R27	8 ² 2	5 ² 38	21 ⁰ R51	21 ⁰ Y22	3 ⁸ 2	5 ⁰ R55	T 1
W 2	6 46 58	11 ⁰ 49'35	9 ⁰ 2	24 ⁰ 36	28 ⁰ 52	26 ⁰ 47	15 ⁰ 36	24 ⁰ 32	0 ⁰ 25	8 ⁰ 2	5 ⁰ 40	21 ⁰ Y39	21 ⁰ 19	3 ⁰ 8	5 ⁰ R54	W 2
T 3	6 50 54	12 ⁰ 50'45	22 ⁰ 27	26 ⁰ 3	29 ⁰ 55	27 ⁰ 28	15 ⁰ 49	24 ⁰ 39	0 ⁰ 22	8 ⁰ 3	5 ⁰ 41	21 ⁰ 29	21 ⁰ 15	3 ⁰ 15	5 ⁰ 53	T 3
F 4	6 54 51	13 ⁰ 51'54	6 ⁰ 3	27 ⁰ 31	0 ⁰ X58	28 ⁰ 9	16 ⁰ 1	24 ⁰ 46	0 ⁰ 20	8 ⁰ 3	5 ⁰ 43	21 ⁰ 21	21 ⁰ 12	3 ⁰ 22	5 ⁰ 53	F 4
S 5	6 58 47	14 ⁰ 53'03	19 ⁰ 46	28 ⁰ 59	2 ⁰ 0	28 ⁰ 51	16 ⁰ 14	24 ⁰ 53	0 ⁰ 17	8 ⁰ 3	5 ⁰ 45	21 ⁰ 17	21 ⁰ 9	3 ⁰ 28	5 ⁰ 52	S 5
S 6	7 2 44	15 ⁰ 54'12	3 ⁰ 37	0 ⁰ Z28	3 ⁰ 2	29 ⁰ 32	16 ⁰ 27	24 ⁰ 59	0 ⁰ 15	8 ⁰ 3	5 ⁰ 47	21 ⁰ 15	21 ⁰ 6	3 ⁰ 35	5 ⁰ 51	S 6
M 7	7 6 40	16 ⁰ 55'21	17 ⁰ 35	1 ⁰ 58	4 ⁰ 4	0 ⁰ Y13	16 ⁰ 39	25 ⁰ 6	0 ⁰ 12	8 ⁰ 3	5 ⁰ 48	21 ⁰ 15	21 ⁰ 3	3 ⁰ 42	5 ⁰ 51	M 7
T 8	7 10 37	17 ⁰ 56'30	1 ⁰ 41	3 ⁰ 28	5 ⁰ 6	0 ⁰ 55	16 ⁰ 52	25 ⁰ 13	0 ⁰ 10	8 ⁰ 3	5 ⁰ 50	21 ⁰ 15	21 ⁰ 0	3 ⁰ 48	5 ⁰ 50	T 8
W 9	7 14 33	18 ⁰ 57'40	15 ⁰ 53	4 ⁰ 59	6 ⁰ 7	1 ⁰ 36	17 ⁰ 5	25 ⁰ 20	0 ⁰ 7	8 ⁰ R3	5 ⁰ 52	21 ⁰ 13	20 ⁰ 56	3 ⁰ 55	5 ⁰ 50	W 9
T 10	7 18 30	19 ⁰ 58'49	0 ⁰ X10	6 ⁰ 30	7 ⁰ 7	2 ⁰ 18	17 ⁰ 17	25 ⁰ 26	0 ⁰ 5	8 ⁰ 3	5 ⁰ 54	21 ⁰ 9	20 ⁰ 53	4 ⁰ 2	5 ⁰ 50	T 10
F 11	7 22 27	20 ⁰ 59'58	14 ⁰ 29	8 ⁰ 1	8 ⁰ 8	2 ⁰ 59	17 ⁰ 29	25 ⁰ 33	0 ⁰ 3	8 ⁰ 3	5 ⁰ 56	21 ⁰ 3	20 ⁰ 50	4 ⁰ 8	5 ⁰ 49	F 11
S 12	7 26 23	22 ⁰ 1'07	28 ⁰ 45	9 ⁰ 33	9 ⁰ 7	3 ⁰ 40	17 ⁰ 42	25 ⁰ 40	0 ⁰ 0	8 ⁰ 3	5 ⁰ 57	20 ⁰ 53	20 ⁰ 47	4 ⁰ 15	5 ⁰ 49	S 12
S 13	7 30 20	23 ⁰ 2'16	12 ⁰ 35	11 ⁰ 6	10 ⁰ 7	4 ⁰ 22	17 ⁰ 54	25 ⁰ 46	29 ⁰ II58	8 ⁰ 3	5 ⁰ 59	20 ⁰ 41	20 ⁰ 44	4 ⁰ 22	5 ⁰ 49	S 13
M14	7 34 16	24 ⁰ 3'24	26 ⁰ 50	12 ⁰ 39	11 ⁰ 5	5 ⁰ 3	18 ⁰ 6	25 ⁰ 53	29 ⁰ 56	8 ⁰ 3	6 ⁰ 1	20 ⁰ 28	20 ⁰ 41	4 ⁰ 28	5 ⁰ 49	M14
T 15	7 38 13	25 ⁰ 4'31	10 ⁰ 28	14 ⁰ 13	12 ⁰ 4	5 ⁰ 44	18 ⁰ 19	25 ⁰ 59	29 ⁰ 53	8 ⁰ 2	6 ⁰ 3	20 ⁰ 15	20 ⁰ 37	4 ⁰ 35	5 ⁰ D49	T 15
W16	7 42 9	26 ⁰ 5'38	23 ⁰ 45	15 ⁰ 47	13 ⁰ 1	6 ⁰ 26	18 ⁰ 31	26 ⁰ 6	29 ⁰ 51	8 ⁰ 2	6 ⁰ 5	20 ⁰ 3	20 ⁰ 34	4 ⁰ 42	5 ⁰ 49	W16
T 17	7 46 6	27 ⁰ 6'44	6 ⁰ X40	17 ⁰ 22	13 ⁰ 59	7 ⁰ 7	18 ⁰ 43	26 ⁰ 12	29 ⁰ 49	8 ⁰ 2	6 ⁰ 7	19 ⁰ 54	20 ⁰ 31	4 ⁰ 48	5 ⁰ 49	T 17
F 18	7 50 2	28 ⁰ 7'49	19 ⁰ 14	18 ⁰ 57	14 ⁰ 55	7 ⁰ 49	18 ⁰ 55	26 ⁰ 18	29 ⁰ 47	8 ⁰ 2	6 ⁰ 9	19 ⁰ 48	20 ⁰ 28	4 ⁰ 55	5 ⁰ 49	F 18
S 19	7 53 59	29 ⁰ 8'53	1 ⁰ Y29	20 ⁰ 33	15 ⁰ 52	8 ⁰ 30	19 ⁰ 7	26 ⁰ 25	29 ⁰ 45	8 ⁰ 1	6 ⁰ 10	19 ⁰ 45	20 ⁰ 25	5 ⁰ 2	5 ⁰ 50	S 19
S 20	7 57 56	0 ⁰ 9'56	13 ⁰ 30	22 ⁰ 9	16 ⁰ 47	9 ⁰ 11	19 ⁰ 18	26 ⁰ 31	29 ⁰ 42	8 ⁰ 1	6 ⁰ 12	19 ⁰ 44	20 ⁰ 21	5 ⁰ 8	5 ⁰ 50	S 20
M21	8 1 52	1 ⁰ 10'58	25 ⁰ 21	23 ⁰ 46	17 ⁰ 42	9 ⁰ 53	19 ⁰ 30	26 ⁰ 37	29 ⁰ 40	8 ⁰ 1	6 ⁰ 14	19 ⁰ 44	20 ⁰ 18	5 ⁰ 15	5 ⁰ 50	M21
T 22	8 5 49	2 ⁰ 11'59	7 ⁰ 9	25 ⁰ 24	18 ⁰ 36	10 ⁰ 34	19 ⁰ 42	26 ⁰ 44	29 ⁰ 38	8 ⁰ 0	6 ⁰ 16	19 ⁰ 44	20 ⁰ 15	5 ⁰ 21	5 ⁰ 51	T 22
W23	8 9 45	3 ⁰ 12'59	18 ⁰ 58	27 ⁰ 2	19 ⁰ 30	11 ⁰ 16	19 ⁰ 54	26 ⁰ 50	29 ⁰ 36	8 ⁰ 0	6 ⁰ 18	19 ⁰ 43	20 ⁰ 12	5 ⁰ 28	5 ⁰ 51	W23
T 24	8 13 42	4 ⁰ 13'58	0 ⁰ II55	28 ⁰ 41	20 ⁰ 22	11 ⁰ 57	20 ⁰ 5	26 ⁰ 56	29 ⁰ 34	7 ⁰ 59	6 ⁰ 20	19 ⁰ 39	20 ⁰ 9	5 ⁰ 35	5 ⁰ 52	T 24
F 25	8 17 38	5 ⁰ 14'55	13 ⁰ 4	0 ⁰ 21	21 ⁰ 15	12 ⁰ 38	20 ⁰ 17	27 ⁰ 2	29 ⁰ 32	7 ⁰ 59	6 ⁰ 22	19 ⁰ 34	20 ⁰ 6	5 ⁰ 41	5 ⁰ 52	F 25
S 26	8 21 35	6 ⁰ 15'52	25 ⁰ 28	2 ⁰ 1	22 ⁰ 6	13 ⁰ 20	20 ⁰ 28	27 ⁰ 8	29 ⁰ 30	7 ⁰ 58	6 ⁰ 23	19 ⁰ 25	20 ⁰ 2	5 ⁰ 48	5 ⁰ 53	S 26
S 27	8 25 31	7 ⁰ 16'47	8 ⁰ 11	3 ⁰ 42	22 ⁰ 56	14 ⁰ 1	20 ⁰ 39	27 ⁰ 14	29 ⁰ 28	7 ⁰ 58	6 ⁰ 25	19 ⁰ 15	19 ⁰ 59	5 ⁰ 55	5 ⁰ 54	S 27
M28	8 29 28	8 ⁰ 17'42	21 ⁰ 14	5 ⁰ 23	23 ⁰ 46	14 ⁰ 42	20 ⁰ 50	27 ⁰ 20	29 ⁰ 27	7 ⁰ 57	6 ⁰ 27	19 ⁰ 3	19 ⁰ 56	6 ⁰ 1	5 ⁰ 55	M28
T 29	8 33 25	9 ⁰ 18'35	4 ⁰ 13	7 ⁰ 6	24 ⁰ 35	15 ⁰ 24	21 ⁰ 2	27 ⁰ 26	29 ⁰ 25	7 ⁰ 56	6 ⁰ 29	18 ⁰ 50	19 ⁰ 53	6 ⁰ 8	5 ⁰ 55	T 29
W30	8 37 21	10 ⁰ 19'27	18 ⁰ 14	8 ⁰ 49	25 ⁰ 23	16 ⁰ 5	21 ⁰ 13	27 ⁰ 32	29 ⁰ 23	7 ⁰ 56	6 ⁰ 31	18 ⁰ 39	19 ⁰ 50	6 ⁰ 15	5 ⁰ 56	W30
T 31	8 41 18	11 ⁰ 20'17	2 ⁰ 6	10 ⁰ 32	26 ⁰ X10	16 ⁰ Y46	21 ⁰ X24	27 ⁰ X37	29 ⁰ II21	7 ⁰ 55	6 ⁰ 33	18 ⁰ Y29	19 ⁰ Y47	6 ⁰ 21	5 ⁰ X57	T 31

Delta T = 22.31 sec

Greg. Calendar

FEBRUARY 1782

00:00 UT

Day	Sid.t	☉	☽	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	8 45 14	12 ⁰ 21'07	16 ⁰ 7	12 ⁰ 17	26 ⁰ X56	17 ⁰ Y27	21 ⁰ X35	27 ⁰ X43	29 ⁰ R20	7 ⁰ R54	6 ⁰ X35	18 ⁰ R23	19 ⁰ Y43	6 ⁰ X28	5 ⁰ X58	F 1
S 2	8 49 11	13 ⁰ 21'56	0 ⁰ 14	14 ⁰ 2	27 ⁰ 41	18 ⁰ 9	21 ⁰ 45	27 ⁰ 49	29 ⁰ II18	7 ⁰ 53	6 ⁰ 37	18 ⁰ Y19	19 ⁰ 40	6 ⁰ 35	5 ⁰ 59	S 2
S 3	8 53 7	14 ⁰ 22'43	14 ⁰ 24	15 ⁰ 48	28 ⁰ 25	18 ⁰ 50	21 ⁰ 56	27 ⁰ 54	29 ⁰ 16	7 ⁰ 53	6 ⁰ 38	18 ⁰ D18	19 ⁰ 37	6 ⁰ 41	6 ⁰ 1	S 3
M 4	8 57 4	15 ⁰ 23'30	28 ⁰ 33	17 ⁰ 35	29 ⁰ 8	19 ⁰ 31	22 ⁰ 7	28 ⁰ 0	29 ⁰ 15	7 ⁰ 52	6 ⁰ 40	18 ⁰ 18	19 ⁰ 34	6 ⁰ 48	6 ⁰ 2	M 4
T 5	9 1 0	16 ⁰ 24'16	12 ⁰ 40	19 ⁰ 22	29 ⁰ 50	20 ⁰ 12	22 ⁰ 17	28 ⁰ 5	29 ⁰ 13	7 ⁰ 51	6 ⁰ 42	18 ⁰ R18	19 ⁰ 31	6 ⁰ 55	6 ⁰ 3	T 5
W 6	9 4 57	17 ⁰ 25'01	26 ⁰ 44	21 ⁰ 10	0 ⁰ Y31	20 ⁰ 53	22 ⁰ 28	28 ⁰ 11	29 ⁰ 12	7 ⁰ 50	6 ⁰ 44	18 ⁰ 18	19 ⁰ 27	7 ⁰ 1	6 ⁰ 4	W 6
T 7	9 8 54	18 ⁰ 25'45	10 ⁰ X45	22 ⁰ 58	1 ⁰ 10	21 ⁰ 35	22 ⁰ 38	28 ⁰ 16	29 ⁰ 10	7 ⁰ 49	6 ⁰ 46	18 ⁰ 16	19 ⁰ 24	7 ⁰ 8	6 ⁰ 6	T 7
F 8	9 12 50	19 ⁰ 26'28	24 ⁰ 42	24 ⁰ 47	1 ⁰ 48	22 ⁰ 16	22 ⁰ 48	28 ⁰ 22	29 ⁰ 9	7 ⁰ 48	6 ⁰ 48	18 ⁰ 11	19 ⁰ 21	7 ⁰ 15	6 ⁰ 7	F 8
S 9	9 16 47	20 ⁰ 27'10	8 ⁰ Z31	26 ⁰ 37	2 ⁰ 25	22 ⁰ 57	22 ⁰ 58	28 ⁰ 27	29 ⁰ 7	7 ⁰ 47	6 ⁰ 49	18 ⁰ 4	19 ⁰ 18	7 ⁰ 21	6 ⁰ 9	S 9
S 10	9 20 43	21 ⁰ 27'50	22 ⁰ 12	28 ⁰ 27	3 ⁰ 1	23 ⁰ 38	23 ⁰ 8	28 ⁰ 32	29 ⁰ 6	7 ⁰ 46	6 ⁰ 51	17 ⁰ 55	19 ⁰ 15	7 ⁰ 28	6 ⁰ 10	S 10
M11	9 24 40	22 ⁰ 28'30	5 ⁰ 41	0 ⁰ X17	3 ⁰ 35	24 ⁰ 19	23 ⁰ 18	28 ⁰ 37	29 ⁰ 5	7 ⁰ 45	6 ⁰ 53	17 ⁰ 45	19 ⁰ 12	7 ⁰ 34	6 ⁰ 12	M11
T 12	9 28 36	23 ⁰ 29'07	18 ⁰ 57	2 ⁰ 7	4 ⁰ 8	25 ⁰ 0	23 ⁰ 28	28 ⁰ 42	29 ⁰ 4	7 ⁰ 44	6 ⁰ 55	17 ⁰ 35	19 ⁰ 8	7 ⁰ 41	6 ⁰ 14	T 12
W13	9 32 33	24 ⁰ 29'44	1 ⁰ X56	3 ⁰ 57	4 ⁰ 39	25 ⁰ 41	23 ⁰ 38	28 ⁰ 47	29 ⁰ 2	7 ⁰ 43	6 ⁰ 57	17 ⁰ 26	19 ⁰ 5	7 ⁰ 48	6 ⁰ 16	W13
T 14	9 36 29	25 ⁰ 30'18	14 ⁰ 39	5 ⁰ 47	5 ⁰ 9	26 ⁰ 23	23 ⁰ 47	28 ⁰ 52	29 ⁰ 1	7 ⁰ 42	6 ⁰ 59	17 ⁰ 19	19 ⁰ 2	7 ⁰ 54	6 ⁰ 17	T 14
F 15	9 40 26	26 ⁰ 30'51	27 ⁰ 6	7 ⁰ 37	5 ⁰ 37	27 ⁰ 4	23 ⁰ 57	28 ⁰ 57	29 ⁰ 0	7 ⁰ 41	7 ⁰ 0	17 ⁰ 15	18 ⁰ 59	8 ⁰ 1	6 ⁰ 19	F 15
S 16	9 44 23	27 ⁰ 31'23	9 ⁰ Y17	9 ⁰ 26	6 ⁰ 3	27 ⁰ 45	24 ⁰ 6	29 ⁰ 2	28 ⁰ 59	7 ⁰ 40	7 ⁰ 2	17 ⁰ 12	18 ⁰ 56	8 ⁰ 8	6 ⁰ 21	S 16
S 17	9 48 19	28 ⁰ 31'52	21 ⁰ 17	11 ⁰ 14	6 ⁰ 28	28 ⁰ 26	24 ⁰ 15	29 ⁰ 6	28 ⁰ 58	7 ⁰ 38	7 ⁰ 4	17 ⁰ D12	18 ⁰ 53	8 ⁰ 14	6 ⁰ 23	S 17
M18	9 52 16	29 ⁰ 32'20	3 ⁰ X8	13 ⁰ 0	6 ⁰ 51	29 ⁰ 7	24 ⁰ 24	29 ⁰ 11	28 ⁰ 57	7 ⁰ 37	7 ⁰ 6	17 ⁰ 13	18 ⁰ 49	8 ⁰ 21	6 ⁰ 25	M18
T 19	9 56 12	0 ⁰ X32'46	14 ⁰ 56	14 ⁰ 45	7 ⁰ 12	29 ⁰ 48	24 ⁰ 33	29 ⁰ 15	28 ⁰ 57	7 ⁰ 36	7 ⁰ 7	17 ⁰ 14	18 ⁰ 46	8 ⁰ 28	6 ⁰ 27	T 19
W20	10 0 9	1 ⁰ 33'10	26 ⁰ 46	16 ⁰ 27	7 ⁰ 31	0 ⁰ X29	24 ⁰ 42	29 ⁰ 20	28 ⁰ 56	7 ⁰ 35	7 ⁰ 9	17 ⁰ R16	18 ⁰ 43	8 ⁰ 34	6 ⁰ 29	W20
T 21	10 4 5	2 ⁰ 33'32	8 ⁰ II42	18 ⁰ 7	7 ⁰ 47	1 ⁰ 10	24 ⁰ 51	29 ⁰ 24	28 ⁰ 55	7 ⁰ 33	7 ⁰ 11	17 ⁰ 15	18 ⁰ 40	8 ⁰ 41	6 ⁰ 31	T 21
F 22	10 8 2	3 ⁰ 33'52	20 ⁰ 51	19 ⁰ 44	8 ⁰ 2	1 ⁰ 50	25 ⁰ 0	29 ⁰ 29	28 ⁰ 54	7 ⁰ 32	7 ⁰ 13	17 ⁰ 14	18 ⁰ 37	8 ⁰ 48	6 ⁰ 34	F 22
S 23	10 11 58	4 ⁰ 34'10	3 ⁰ X16	21 ⁰ 16	8 ⁰ 15	2 ⁰ 31	25 ⁰ 8	29 ⁰ 33	28 ⁰ 54	7 ⁰ 31	7 ⁰ 14	17 ⁰ 10	18 ⁰ 33	8 ⁰ 54	6 ⁰ 36	S 23
S 24	10 15 55	5 ⁰ 34'27	16 ⁰ 2	22 ⁰ 45	8 ⁰ 25	3 ⁰ 12	25 ⁰ 17	29 ⁰ 37	28 ⁰ 53	7 ⁰ 30	7 ⁰ 16	17 ⁰ 5	18 ⁰ 30	9 ⁰ 1	6 ⁰ 38	S 24
M25	10 19 52	6 ⁰ 34'41	29 ⁰ 10	24 ⁰ 8	8 ⁰ 33	3 ⁰ 53	25 ⁰ 25	29 ⁰ 41	28 ⁰ 52	7 ⁰ 28	7 ⁰ 18	16 ⁰ 58	18 ⁰ 27	9 ⁰ 8	6 ⁰ 41	M25
T 26	10 23 48	7 ⁰ 34'53	12 ⁰ 43	25 ⁰ 26	8 ⁰ 39	4 ⁰ 34	25 ⁰ 33	29 ⁰ 45	28 ⁰ 52	7 ⁰ 27	7 ⁰ 19	16 ⁰ 51	18 ⁰ 24	9 ⁰ 14	6 ⁰ 43	T 26
W27	10 27 45	8 ⁰ 35'03	26 ⁰ 38	26 ⁰ 37	8 ⁰ 43	5 ⁰ 15	25 ⁰ 41	29 ⁰ 49	28 ⁰ 51	7 ⁰ 25	7 ⁰ 21	16 ⁰ 45	18 ⁰ 21	9 ⁰ 21	6 ⁰ 46	W 27
T 28	10 31 41	9 ⁰ X35'12	10 ⁰ Y51	27 ⁰ X42	8 ⁰ R44	5 ⁰ X55	25 ⁰ X49	29 ⁰ X53	28 ⁰ II51	7 ⁰ 24	7 ⁰ X23	16 ⁰ Y40	18 ⁰ Y18	9 ⁰ X28	6 ⁰ X48	T 28

ASTRODIENST EPHEMERIS for the year 1782
geocentric

MARCH 1782

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	10 35 38	10 ^h 35'18	25 ^m 18	28 ^s 39	8°R42	6 ^h 36	25 ^m 57	29 ^s 57	28°R51	7°R23	7 ^h 24	16°R36	18°V14	9 ^h 34	6 ^h 51	F 1
S 2	10 39 34	11°35'23	9 ^h 53	29°29	8°V38	7°17	26° 4	0 ^h 3 0	28°II50	7 ^h 21	7°26	16°D35	18°11	9°41	6°53	S 2
S 3	10 43 31	12°35'26	24°29	0 ^h Y10	8°32	7°58	26°12	0° 4	28°50	7°20	7°27	16°V35	18° 8	9°48	6°56	S 3
M 4	10 47 27	13°35'27	9 ^m 1	0°43	8°23	8°38	26°19	0° 8	28°50	7°18	7°29	16°36	18° 5	9°54	6°59	M 4
T 5	10 51 24	14°35'27	23°24	1° 7	8°11	9°19	26°26	0°11	28°50	7°17	7°31	16°38	18° 2	10° 1	7° 1	T 5
W 6	10 55 21	15°35'25	7 ^h 36	1°22	7°58	10° 0	26°33	0°14	28°50	7°15	7°32	16°39	17°59	10° 8	7° 4	W 6
T 7	10 59 17	16°35'22	21°36	1°R28	7°41	10°40	26°40	0°18	28°D50	7°14	7°34	16°R39	17°55	10°14	7° 7	T 7
F 8	11 3 14	17°35'17	5 ^h 31	1°26	7°22	11°21	26°47	0°21	28°50	7°12	7°35	16°38	17°52	10°21	7°10	F 8
S 9	11 7 10	18°35'10	18°53	1°14	7° 1	12° 1	26°53	0°24	28°50	7°11	7°37	16°35	17°49	10°27	7°13	S 9
S 10	11 11 7	19°35'02	2 ^h 12	0°55	6°38	12°42	27° 0	0°27	28°50	7° 9	7°38	16°31	17°46	10°34	7°16	S 10
M 11	11 15 3	20°34'51	15°16	0°27	6°12	13°22	27° 6	0°30	28°50	7° 8	7°40	16°27	17°43	10°41	7°19	M 11
T 12	11 19 0	21°34'39	28° 7	29 ^h 53	5°45	14° 3	27°12	0°33	28°50	7° 6	7°41	16°23	17°39	10°47	7°22	T 12
W 13	11 22 56	22°34'25	10 ^h 45	29°12	5°15	14°43	27°18	0°35	28°51	7° 4	7°42	16°19	17°36	10°54	7°25	W 13
T 14	11 26 53	23°34'09	23°11	28°27	4°44	15°24	27°24	0°38	28°51	7° 3	7°44	16°17	17°33	11° 1	7°28	T 14
F 15	11 30 50	24°33'51	5 ^h Y25	27°37	4°11	16° 4	27°30	0°41	28°51	7° 1	7°45	16°15	17°30	11° 7	7°31	F 15
S 16	11 34 46	25°33'31	17°28	26°44	3°37	16°45	27°35	0°43	28°52	7° 0	7°47	16°D15	17°27	11°14	7°35	S 16
S 17	11 38 43	26°33'09	29°24	25°50	3° 2	17°25	27°40	0°45	28°52	6°58	7°48	16°15	17°24	11°21	7°38	S 17
M 18	11 42 39	27°32'45	11 ^h 14	24°55	2°25	18° 5	27°45	0°48	28°53	6°56	7°49	16°16	17°20	11°27	7°41	M 18
T 19	11 46 36	28°32'19	23° 2	24° 1	1°48	18°46	27°50	0°50	28°54	6°55	7°51	16°18	17°17	11°34	7°44	T 19
W 20	11 50 32	29°31'50	4 ^h II51	23° 8	1°11	19°26	27°55	0°52	28°54	6°53	7°52	16°19	17°14	11°41	7°48	W 20
T 21	11 54 29	0 ^h Y31'19	22°18	0°33	20° 6	28° 0	28° 0	0°54	28°55	6°52	7°53	16°21	17°11	11°47	7°51	T 21
F 22	11 58 25	1°30'46	28°54	21°31	29 ^h 55	20°46	28° 4	0°56	28°56	6°50	7°54	16°R21	17° 8	11°54	7°55	F 22
S 23	12 2 22	2°30'10	11 ^h 36	20°49	29°18	21°27	28° 9	0°58	28°57	6°48	7°56	16°21	17° 4	12° 1	7°58	S 23
S 24	12 6 19	3°29'32	23°59	20°11	28°41	22° 7	28°13	0°59	28°57	6°47	7°57	16°20	17° 1	12° 7	8° 1	S 24
M 25	12 10 15	4°28'52	7 ^h 12	19°39	28° 4	22°47	28°17	1° 1	28°58	6°45	7°58	16°19	16°58	12°14	8° 5	M 25
T 26	12 14 12	5°28'10	20°37	19°12	27°29	23°27	28°21	1° 2	28°59	6°43	7°59	16°17	16°55	12°21	8° 8	T 26
W 27	12 18 8	6°27'25	4 ^h 13	18°51	26°55	24° 7	28°24	1° 4	29° 0	6°42	8° 0	16°16	16°52	12°27	8°12	W 27
T 28	12 22 5	7°26'38	18°57	18°35	26°23	24°47	28°28	1° 5	29° 2	6°40	8° 1	16°15	16°49	12°34	8°16	T 28
F 29	12 26 1	8°25'49	3 ^h 49	18°25	25°52	25°27	28°31	1° 6	29° 3	6°38	8° 3	16°15	16°45	12°41	8°19	F 29
S 30	12 29 58	9°24'57	18°34	18°D21	25°23	26° 7	28°34	1° 8	29° 4	6°37	8° 4	16°D14	16°42	12°47	8°23	S 30
S 31	12 33 54	10°Y24'04	3 ^h 13	18 ^h 23	24 ^h 55	26 ^h 47	28 ^h 37	1 ^h 3 9	29 ^h II 5	6 ^h 35	8 ^h 5	16°Y15	16°Y39	12 ^h 54	8 ^h 27	S 31

Delta T = 22.31 sec

Greg. Calendar

APRIL 1782

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	12 37 51	11°Y23'09	18 ^m 32	18 ^h 30	24°R30	27 ^h 8	28 ^h 40	1 ^h 3 9	29 ^h II 6	6°R33	8 ^h 6	16°Y15	16°Y36	13 ^h 8	8 ^h 30	M 1
T 2	12 41 47	12°22'12	3 ^h 18	18°42	24 ^h 7	28° 7	28°43	1°10	29° 8	6 ^h 32	8° 7	16°15	16°33	13° 7	8°34	T 2
W 3	12 45 44	13°21'13	17°48	18°59	23°47	28°47	28°45	1°11	29° 9	6°30	8° 8	16°16	16°30	13°14	8°38	W 3
T 4	12 49 41	14°20'13	1 ^h 35	19°21	23°29	29°27	28°47	1°12	29°11	6°28	8° 9	16°16	16°26	13°21	8°41	T 4
F 5	12 53 37	15°19'10	15°45	19°48	23°13	0 ^h II 7	28°49	1°12	29°12	6°27	8°10	16°R16	16°23	13°27	8°45	F 5
S 6	12 57 34	16°18'06	29°12	20°19	22°59	0°47	28°51	1°13	29°14	6°25	8°10	16°D16	16°20	13°34	8°49	S 6
S 7	13 1 30	17°17'01	12 ^h 18	20°54	22°48	1°27	28°53	1°13	29°15	6°24	8°11	16°16	16°17	13°41	8°53	S 7
M 8	13 5 27	18°15'53	25° 7	21°33	22°40	2° 7	28°54	1°13	29°17	6°22	8°12	16°16	16°14	13°47	8°57	M 8
T 9	13 9 23	19°14'44	7 ^h 40	22°16	22°34	2°46	28°55	1°13	29°18	6°20	8°13	16°16	16°10	13°54	9° 1	T 9
W 10	13 13 20	20°13'33	20° 0	23° 3	22°30	3°26	28°57	1°R13	29°20	6°19	8°14	16°17	16° 7	14° 1	9° 4	W 10
T 11	13 17 16	21°12'20	2 ^h Y10	23°53	22°D29	4° 6	28°57	1°13	29°22	6°17	8°15	16°17	16° 4	14° 7	9° 8	T 11
F 12	13 21 13	22°11'05	14°11	24°46	22°31	4°46	28°58	1°13	29°24	6°16	8°15	16°R17	16° 1	14°14	9°12	F 12
S 13	13 25 10	23° 9'48	26° 6	25°42	22°34	5°25	28°59	1°13	29°26	6°14	8°16	16°17	15°58	14°21	9°16	S 13
S 14	13 29 6	24° 8'29	7 ^h 56	26°41	22°40	6° 5	28°59	1°12	29°28	6°12	8°17	16°17	15°55	14°27	9°20	S 14
M 15	13 33 3	25° 7'08	19°45	27°43	22°48	6°45	28°R59	1°12	29°30	6°11	8°17	16°16	15°51	14°34	9°24	M 15
T 16	13 36 59	26° 5'45	1 ^h II34	28°48	22°58	7°24	28°59	1°11	29°32	6° 9	8°18	16°14	15°48	14°41	9°28	T 16
W 17	13 40 56	27° 4'20	13°25	29°55	23°11	8° 4	28°59	1°11	29°34	6° 8	8°19	16°13	15°45	14°47	9°32	W 17
T 18	13 44 52	28° 2'53	25°23	1 ^h Y 5	23°25	8°43	28°59	1°10	29°36	6° 6	8°19	16°11	15°42	14°54	9°36	T 18
F 19	13 48 49	29° 1'24	7 ^h 30	2°17	23°41	9°23	28°58	1° 9	29°38	6° 5	8°20	16°10	15°39	15° 1	9°40	F 19
S 20	13 52 45	29°59'53	19°51	3°31	24° 0	10° 2	28°57	1° 8	29°40	6° 3	8°20	16° 9	15°36	15° 7	9°44	S 20
S 21	13 56 42	0 ^h 58'20	2 ^h 13	4°48	24°20	10°42	28°56	1° 7	29°42	6° 2	8°21	16°D 9	15°32	15°14	9°48	S 21
M 22	14 0 39	1°56'44	15°30	6° 6	24°42	11°21	28°55	1° 6	29°44	6° 0	8°21	16° 9	15°29	15°21	9°52	M 22
T 23	14 4 35	2°55'06	28°54	7°27	25° 5	12° 1	28°54	1° 5	29°47	5°59	8°22	16°10	15°26	15°27	9°56	T 23
W 24	14 8 32	3°53'26	12 ^h 45	8°50	25°31	12°40	28°52	1° 4	29°49	5°58	8°22	16°12	15°23	15°34	10° 0	W 24
T 25	14 12 28	4°51'44	27° 2	10°15	25°58	13°20	28°50	1° 2	29°51	5°56	8°23	16°13	15°20	15°41	10° 4	T 25
F 26	14 16 25	5°50'00	11 ^h 44	11°42	26°26	13°59	28°49	1° 1	29°54	5°55	8°23	16°R13	15°16	15°47	10° 8	F 26
S 27	14 20 21	6°48'14	26°45	13°11	26°56	14°38	28°46	0°59	29°56	5°53	8°23	16°13	15°13	15°54	10°12	S 27
S 28	14 24 18	7°46'27	11 ^h 56	14°42	27°28	15°18	28°44	0°57	29°59	5°52	8°24	16°12	15°10	16° 1	10°16	S 28
M 29	14 28 14	8°44'37	27°10	16°15	28° 1	15°57	28°42	0°56	0 ^h 5 1	5°51	8°24	16°10	15° 7	16° 7	10°20	M 29
T 30	14 32 11	9 ^h 42'47	12 ^h 15	17°Y50	28 ^h 35	16 ^h II36	28 ^h 39	0 ^h 35	0 ^h 5 4	5 ^h 49	8 ^h 24	16°Y 7	15°Y 4	16 ^h 14	10 ^h 24	T 30

Delta T = 22.31 sec

Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1782
geocentric

MAY 1782

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	14 36 8	10♂40'54	27♂ 3	19♂26	29♂11	17♂15	28♂R36	0°R52	0♂ 6	5°R48	8♂25	16°R 3	15♂ 1	16♂21	10♂28	W 1
T 2	14 40 4	11°39'00	11♂27	21° 5	29°47	17°55	28♂133	0♂50	0° 9	5♂47	8°25	16♂ 1	14°57	16°27	10°33	T 2
F 3	14 44 1	12°37'05	25°25	22°46	0♂25	18°34	28°30	0°48	0°12	5°46	8°25	15°58	14°54	16°34	10°37	F 3
S 4	14 47 57	13°35'08	8♂55	24°28	1° 5	19°13	28°27	0°45	0°14	5°44	8°25	15°D57	14°51	16°41	10°41	S 4
S 5	14 51 54	14°33'10	22° 0	26°12	1°45	19°52	28°23	0°43	0°17	5°43	8°25	15°57	14°48	16°47	10°45	S 5
M 6	14 55 50	15°31'10	4♂43	27°59	2°26	20°31	28°20	0°41	0°20	5°42	8°25	15°59	14°45	16°54	10°49	M 6
T 7	14 59 47	16°29'10	17° 7	29°47	3° 8	21°10	28°16	0°38	0°23	5°41	8°25	16° 0	14°42	17° 1	10°53	T 7
W 8	15 3 43	17°27'07	29°17	1♂37	3°52	21°50	28°12	0°36	0°26	5°40	8°26	16° 2	14°38	17° 7	10°57	W 8
T 9	15 7 40	18°25'04	11♂16	3°29	4°36	22°29	28° 8	0°33	0°28	5°38	8°R26	16°R 3	14°35	17°14	11° 1	T 9
F 10	15 11 37	19°22'59	23° 9	5°23	5°21	23° 8	28° 3	0°30	0°31	5°37	8°26	16° 3	14°32	17°21	11° 5	F 10
S 11	15 15 33	20°20'52	4♂58	7°19	6° 7	23°47	27°59	0°28	0°34	5°36	8°25	16° 1	14°29	17°27	11° 9	S 11
S 12	15 19 30	21°18'44	16°45	9°16	6°54	24°26	27°54	0°25	0°37	5°35	8°25	15°58	14°26	17°34	11°13	S 12
M13	15 23 26	22°16'35	28°35	11°16	7°41	25° 5	27°49	0°22	0°40	5°34	8°25	15°53	14°22	17°41	11°17	M13
T 14	15 27 23	23°14'25	10♂27	13°17	8°30	25°44	27°44	0°19	0°43	5°33	8°25	15°46	14°19	17°47	11°21	T 14
W15	15 31 19	24°12'13	22°24	15°20	9°19	26°23	27°39	0°16	0°46	5°32	8°25	15°39	14°16	17°54	11°25	W15
T 16	15 35 16	25° 9'59	4♂28	17°25	10° 9	27° 2	27°34	0°13	0°49	5°31	8°25	15°32	14°13	18° 1	11°29	T 16
F 17	15 39 12	26° 7'44	16°41	19°31	10°59	27°41	27°28	0° 9	0°52	5°30	8°25	15°26	14°10	18° 7	11°33	F 17
S 18	15 43 9	27° 5'27	29° 6	21°39	11°50	28°19	27°23	0° 6	0°55	5°29	8°25	15°21	14° 7	18°14	11°37	S 18
S 19	15 47 6	28° 3'09	11♂45	23°48	12°42	28°58	27°17	0° 3	0°59	5°29	8°24	15°18	14° 3	18°21	11°41	S 19
M20	15 51 2	29° 0'49	24°42	25°58	13°34	29°37	27°11	29♂59	1° 2	5°28	8°24	15°D16	14° 0	18°27	11°45	M20
T 21	15 54 59	29°58'28	7♂59	28° 8	14°27	0♂16	27° 6	29°56	1° 5	5°27	8°24	15°17	13°57	18°34	11°49	T 21
W22	15 58 55	0♂56'04	21°40	0♂20	15°20	0°55	26°59	29°52	1° 8	5°26	8°23	15°18	13°54	18°41	11°53	W22
T 23	16 2 52	1°53'40	5♂46	2°32	16°14	1°34	26°53	29°49	1°11	5°25	8°23	15°19	13°51	18°47	11°57	T 23
F 24	16 6 48	2°51'14	20°16	4°43	17° 9	2°12	26°47	29°45	1°15	5°25	8°23	15°R19	13°48	18°54	12° 0	F 24
S 25	16 10 45	3°48'46	5♂ 7	6°55	18° 4	2°51	26°41	29°41	1°18	5°24	8°22	15°18	13°44	19° 1	12° 4	S 25
S 26	16 14 41	4°46'18	20°14	9° 6	19° 0	3°30	26°34	29°38	1°21	5°23	8°22	15°14	13°41	19° 7	12° 8	S 26
M27	16 18 38	5°43'48	5♂28	11°17	19°56	4° 9	26°27	29°34	1°25	5°23	8°21	15° 8	13°38	19°14	12°12	M27
T 28	16 22 35	6°41'17	20°38	13°26	20°52	4°47	26°21	29°30	1°28	5°22	8°21	15° 1	13°35	19°21	12°16	T 28
W29	16 26 31	7°38'46	5♂34	15°35	21°49	5°26	26°14	29°26	1°31	5°21	8°20	14°53	13°32	19°27	12°20	W29
T 30	16 30 28	8°36'13	20° 8	17°42	22°46	6° 5	26° 7	29°22	1°35	5°21	8°20	14°46	13°28	19°34	12°23	T 30
F 31	16 34 24	9♂33'40	4♂15	19♂47	23♂44	6♂43	26♂ 0	29♂18	1♂38	5♂20	8♂19	14♂40	13♂25	19♂41	12♂27	F 31

Delta T = 22.31 sec

Greg. Calendar

JUNE 1782

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	16 38 21	10♂31'05	17♂53	21♂50	24♂42	7♂22	25°R53	29°R14	1♂41	5°R20	8°R19	14°R35	13♂22	19♂47	12♂31	S 1
S 2	16 42 17	11°28'31	1♂ 1	23°52	25°41	8° 1	25♂46	29♂10	1°45	5♂19	8♂18	14♂33	13°19	19°54	12°35	S 2
M 3	16 46 14	12°25'55	13°45	25°51	26°40	8°39	25°39	29° 6	1°48	5°19	8°18	14°D32	13°16	20° 1	12°38	M 3
T 4	16 50 11	13°23'19	26° 7	27°48	27°39	9°18	25°31	29° 2	1°52	5°19	8°17	14°33	13°13	20° 7	12°42	T 4
W 5	16 54 7	14°20'42	8♂14	29°43	28°39	9°56	25°24	28°58	1°55	5°18	8°16	14°34	13° 9	20°14	12°45	W 5
T 6	16 58 4	15°18'04	20° 9	1♂35	29°39	10°35	25°17	28°54	1°59	5°18	8°16	14°R34	13° 6	20°21	12°49	T 6
F 7	17 2 0	16°15'26	1♂58	3°25	0♂39	11°13	25° 9	28°49	2° 2	5°18	8°15	14°32	13° 3	20°27	12°53	F 7
S 8	17 5 57	17°12'48	13°46	5°13	1°40	11°52	25° 2	28°45	2° 6	5°17	8°14	14°28	13° 0	20°34	12°56	S 8
S 9	17 9 53	18°10'09	25°34	6°58	2°40	12°30	24°54	28°41	2° 9	5°17	8°13	14°22	12°57	20°41	13° 0	S 9
M10	17 13 50	19° 7'29	7♂27	8°40	3°42	13° 9	24°47	28°36	2°13	5°17	8°13	14°13	12°54	20°47	13° 3	M10
T 11	17 17 46	20° 4'49	19°26	10°20	4°43	13°47	24°39	28°32	2°16	5°17	8°12	14° 2	12°50	20°54	13° 7	T 11
W12	17 21 43	21° 2'08	1♂32	11°58	5°45	14°26	24°31	28°28	2°20	5°17	8°11	13°50	12°47	21° 1	13°10	W12
T 13	17 25 40	21°59'27	13°47	13°33	6°47	15° 4	24°24	28°23	2°23	5°16	8°10	13°38	12°44	21° 7	13°13	T 13
F 14	17 29 36	22°56'45	26°12	15° 5	7°49	15°43	24°16	28°19	2°27	5°16	8° 9	13°27	12°41	21°14	13°17	F 14
S 15	17 33 33	23°54'02	8♂47	16°35	8°52	16°21	24° 8	28°15	2°31	5°16	8° 8	13°18	12°38	21°21	13°20	S 15
S 16	17 37 29	24°51'18	21°35	18° 2	9°55	17° 0	24° 1	28°10	2°34	5°D16	8° 7	13°11	12°34	21°27	13°23	S 16
M17	17 41 26	25°48'34	4♂36	19°26	10°58	17°38	23°53	28° 6	2°38	5°16	8° 7	13° 7	12°31	21°34	13°27	M17
T 18	17 45 22	26°45'49	17°54	20°48	12° 1	18°17	23°45	28° 1	2°41	5°16	8° 6	13° 5	12°28	21°41	13°30	T 18
W19	17 49 19	27°43'03	1♂29	22° 7	13° 4	18°55	23°38	27°57	2°45	5°16	8° 5	13°D 5	12°25	21°47	13°33	W19
T 20	17 53 15	28°40'16	15°24	23°23	14° 8	19°33	23°30	27°53	2°49	5°17	8° 4	13°R 5	12°22	21°54	13°36	T 20
F 21	17 57 12	29°37'29	29°40	24°37	15°12	20°12	23°22	27°48	2°52	5°17	8° 3	13° 5	12°19	22° 1	13°39	F 21
S 22	18 1 9	0♂34'41	14♂15	25°47	16°16	20°50	23°15	27°44	2°56	5°17	8° 2	13° 2	12°15	22° 7	13°43	S 22
S 23	18 5 5	1°31'53	29° 5	26°55	17°20	21°28	23° 7	27°39	2°59	5°17	8° 1	12°57	12°12	22°14	13°46	S 23
M24	18 9 2	2°29'04	14♂ 4	28° 0	18°25	22° 7	23° 0	27°35	3° 3	5°17	8° 0	12°49	12° 9	22°21	13°49	M24
T 25	18 12 58	3°26'16	29° 3	29° 1	19°29	22°45	22°52	27°31	3° 7	5°18	7°58	12°39	12° 6	22°27	13°52	T 25
W26	18 16 55	4°23'26	13♂53	29°59	20°34	23°23	22°45	27°26	3°10	5°18	7°57	12°28	12° 3	22°34	13°55	W26
T 27	18 20 51	5°20'37	28°25	0♂54	21°39	24° 2	22°38	27°22	3°14	5°18	7°56	12°17	12° 0	22°41	13°57	T 27
F 28	18 24 48	6°17'48	12♂32	1°46	22°45	24°40	22°30	27°18	3°17	5°19	7°55	12° 8	11°56	22°48	14° 0	F 28
S 29	18 28 45	7°14'59	26°12	2°34	23°50	25°18	22°23	27°13	3°21	5°19	7°54	12° 1	11°53	22°54	14° 3	S 29
S 30	18 32 41	8♂12'09	9♂24	3♂19	24♂56	25♂56	22♂16	27♂ 9	3♂25	5♂19	7♂53	11♂56	11♂50	23♂ 1	14♂ 6	S 30

Delta T = 22.31 sec

Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1782

geocentric

JULY 1782

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	18 36 38	9°52' 22"	22°10' 10"	3°59' 26"	26°35' 22"	22°R 9	27°R 5	3°28' 52"	5°20' 7°R52	11°R54	11°Y47	23°8' 14°8' 9	M 1			
T 2	18 40 34	10° 6'32"	4°Y35	4°36' 27° 7	27°13' 22°27	27°13' 27°13' 0	3°32' 5°20' 7°R51	11°Y53	11°44' 23°14' 14°11	T 2						
W 3	18 44 31	11° 3'43"	16°42' 5° 9	28°14' 27°51	21°55' 26°56	3°35' 5°21' 7°49	11°53' 11°40' 23°21' 14°14	W 3								
T 4	18 48 27	12° 0'55"	28°38' 5°38	29°20' 28°29	21°48' 26°52	3°39' 5°21' 7°48	11°53' 11°37' 23°28' 14°17	T 4								
F 5	18 52 24	12°58'07"	10°8'27"	6° 2' 0°II26	29° 8' 21°42	26°48' 3°43' 5°22' 7°47	11°51' 11°34' 23°34' 14°19	F 5								
S 6	18 56 20	13°55'20"	22°16' 6°22	1°33' 29°46	21°35' 26°44	3°46' 5°23' 7°46	11°46' 11°31' 23°41' 14°22	S 6								
S 7	19 0 17	14°52'33"	4°II 7	6°38' 2°40	0°II24	21°28' 26°40	3°50' 5°23' 7°45	11°39' 11°28' 23°48' 14°24	S 7							
M 8	19 4 14	15°49'47"	16° 5' 6°49	3°46' 1° 2	21°22' 26°36	3°53' 5°24' 7°43	11°30' 11°25' 23°54' 14°27	M 8								
T 9	19 8 10	16°47'00"	28°12' 6°55	4°53' 1°40	21°16' 26°32	3°57' 5°25' 7°42	11°18' 11°21' 24° 1' 14°29	T 9								
W10	19 12 7	17°44'15"	10°30' 6°R57	6° 1' 2°19	21° 9' 26°28	4° 0' 5°25' 7°41	11° 5' 11°18' 24° 8' 14°31	W10								
T 11	19 16 3	18°41'29"	23° 0' 6°54	7° 8' 2°57	21° 3' 26°24	4° 4' 5°26' 7°39	10°52' 11°15' 24°14' 14°34	T 11								
F 12	19 20 0	19°38'44"	5°II41	6°46' 8°15	3°35' 20°57	26°20' 4° 7' 5°27' 7°38	10°40' 11°12' 24°21' 14°36	F 12								
S 13	19 23 56	20°35'59"	18°33' 6°33	9°23' 4°13	20°52' 26°16	4°11' 5°28' 7°37	10°30' 11° 9' 24°28' 14°38	S 13								
S 14	19 27 53	21°33'14"	1°II38	6°16' 10°30	4°51' 20°46	26°12' 4°14' 5°29' 7°36	10°22' 11° 6' 24°34' 14°40	S 14								
M15	19 31 49	22°30'30"	14°53' 5°54	11°38' 5°30	20°40' 26° 8' 4°18	5°30' 7°34	10°18' 11° 2' 24°41' 14°42	M15								
T 16	19 35 46	23°27'45"	28°20' 5°28	12°46' 6° 8' 20°35	26° 5' 4°21' 5°31' 7°33	10°15' 10°59' 24°48' 14°44	T 16									
W17	19 39 43	24°25'01"	12°II 0	4°57' 13°54	6°46' 20°30	26° 1' 4°25' 5°32' 7°32	10°D15' 10°56' 24°54' 14°46	W17								
T 18	19 43 39	25°22'17"	25°53' 4°24	15° 2' 7°24	20°25' 25°58	4°28' 5°32' 7°30	10°R15' 10°53' 25° 1' 14°48	T 18								
F 19	19 47 36	26°19'33"	10°II 0	3°47' 16°10	8° 2' 20°20	25°54' 4°32' 5°34' 7°29	10°15' 10°50' 25° 8' 14°50	F 19								
S 20	19 51 32	27°16'50"	24°19' 3° 8' 17°19	8°40' 20°15	25°51' 4°35' 5°35' 7°28	10°12' 10°46' 25°15' 14°52	S 20									
S 21	19 55 29	28°14'07"	8°II49	2°26' 18°27	9°19' 20°10	25°47' 4°38' 5°36' 7°26	10° 8' 10°43' 25°21' 14°54	S 21								
M22	19 59 25	29°11'24"	23°25' 1°44	19°36' 9°57	20° 6' 25°44	4°42' 5°37' 7°25	10° 0' 10°40' 25°28' 14°55	M22								
T 23	20 3 22	0°II 8'42"	8°II 1	1° 1' 20°44	10°35' 20° 1' 25°41	4°45' 5°38' 7°24	9°51' 10°37' 25°35' 14°57	T 23								
W24	20 7 18	1° 6'01"	22°31' 0°18	21°53' 11°13	19°57' 25°37	4°49' 5°39' 7°22	9°41' 10°34' 25°41' 14°59	W24								
T 25	20 11 15	2° 3'20"	6°II46	29°36' 23° 2' 11°51	19°53' 25°34	4°52' 5°40' 7°21	9°31' 10°31' 25°48' 15° 0'	T 25								
F 26	20 15 12	3° 0'40"	20°43' 28°56	24°11' 12°29	19°49' 25°31	4°55' 5°41' 7°19	9°22' 10°27' 25°55' 15° 2'	F 26								
S 27	20 19 8	3°58'01"	4°II16	28°18' 25°20	13° 7' 19°45	25°28' 4°58' 5°43' 7°18	9°15' 10°24' 26° 1' 15° 3'	S 27								
S 28	20 23 5	4°55'22"	17°25' 27°44	26°30' 13°45	19°42' 25°25	5° 2' 5°44' 7°17	9°11' 10°21' 26° 8' 15° 4'	S 28								
M29	20 27 1	5°52'45"	0°Y11	27°14' 27°39	14°24' 19°39	25°23' 5° 5' 5°45' 7°15	9° 9' 10°18' 26°15' 15° 6'	M29								
T 30	20 30 58	6°50'09"	12°36' 26°48	28°48' 15° 2' 19°35	25°20' 5° 8' 5°47' 7°14	9°D 8' 10°15' 26°21' 15° 7'	T 30									
W31	20 34 54	7°II47'34"	24°Y45	26°52' 29°II58	15°II40	19°II32	25°II17	5°II11	5°II48	7°II13	9°Y 9	10°Y12	26°II28	15°II 8	W31	

Delta T = 22.31 sec

Greg. Calendar

AUGUST 1782

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	20 38 51	8♂45'00	6♂43	26°R11	1♂ 7	16♂18	19°R30	25°R15	5♂14	5♂49	7°R11	9°R10	10°Y 8	26♂35	15♂ 9	T 1
F 2	20 42 47	9°42'27	18°34	26♂ 2	2°17	16°56	19♂27	25♂12	5°18	5°51	7♂10	9°Y 9	10° 5	26°41	15°11	F 2
S 3	20 46 44	10°39'56	0♂24	25°D59	3°27	17°34	19°24	25°10	5°21	5°52	7° 8	9° 7	10° 2	26°48	15°12	S 3
S 4	20 50 41	11°37'26	12°19	26° 2	4°37	18°12	19°22	25° 7	5°24	5°54	7° 7	9° 3	9°59	26°55	15°13	S 4
M 5	20 54 37	12°34'57	24°21	26°13	5°47	18°50	19°20	25° 5	5°27	5°55	7° 6	8°56	9°56	27° 2	15°13	M 5
T 6	20 58 34	13°32'30	6♂36	26°29	6°57	19°29	19°18	25° 3	5°30	5°57	7° 4	8°48	9°52	27° 8	15°14	T 6
W 7	21 2 30	14°30'03	19° 4	26°53	8° 7	20° 7	19°16	25° 1	5°33	5°58	7° 3	8°39	9°49	27°15	15°15	W 7
T 8	21 6 27	15°27'39	1♂47	27°24	9°18	20°45	19°15	24°59	5°36	6° 0	7° 2	8°29	9°46	27°22	15°16	T 8
F 9	21 10 23	16°25'15	14°46	28° 2	10°28	21°23	19°13	24°57	5°39	6° 1	7° 0	8°20	9°43	27°28	15°17	F 9
S 10	21 14 20	17°22'52	27°59	28°46	11°38	22° 1	19°12	24°55	5°42	6° 3	6°59	8°13	9°40	27°35	15°17	S 10
S 11	21 18 16	18°20'31	11♂26	29°37	12°49	22°39	19°11	24°53	5°45	6° 4	6°57	8° 8	9°37	27°42	15°18	S 11
M12	21 22 13	19°18'10	25° 4	0♂34	14° 0	23°17	19°10	24°51	5°47	6° 6	6°56	8° 5	9°33	27°48	15°18	M12
T 13	21 26 10	20°15'51	8♂51	1°38	15°10	23°56	19°10	24°50	5°50	6° 8	6°55	8°D 4	9°30	27°55	15°19	T 13
W14	21 30 6	21°13'33	22°46	2°48	16°21	24°34	19° 9	24°48	5°53	6° 9	6°53	8° 5	9°27	28° 2	15°19	W14
T 15	21 34 3	22°11'16	6♂48	4° 4	17°32	25°12	19° 9	24°47	5°56	6°11	6°52	8° 6	9°24	28° 8	15°20	T 15
F 16	21 37 59	23° 9'00	20°55	5°26	18°43	25°50	19°D 9	24°46	5°59	6°13	6°51	8°R 7	9°21	28°15	15°20	F 16
S 17	21 41 56	24° 6'45	5♂ 7	6°52	19°54	26°28	19° 9	24°44	6° 1	6°15	6°50	8° 6	9°17	28°22	15°20	S 17
S 18	21 45 52	25° 4'31	19°21	8°24	21° 5	27° 6	19° 9	24°43	6° 4	6°16	6°48	8° 4	9°14	28°28	15°20	S 18
M19	21 49 49	26° 2'19	3♂35	10° 0	22°16	27°45	19°10	24°42	6° 7	6°18	6°47	8° 0	9°11	28°35	15°20	M19
T 20	21 53 45	27° 0'07	17°45	11°40	23°28	28°23	19°11	24°41	6° 9	6°20	6°46	7°55	9° 8	28°42	15°R20	T 20
W21	21 57 42	27°57'57	1♂47	13°24	24°39	29° 1	19°11	24°41	6°12	6°22	6°44	7°48	9° 5	28°49	15°20	W21
T 22	22 1 39	28°55'48	15°38	15°10	25°51	29°39	19°12	24°40	6°14	6°24	6°43	7°42	9° 2	28°55	15°20	T 22
F 23	22 5 35	29°53'41	29°13	17° 0	27° 2	0♂17	19°14	24°39	6°17	6°25	6°42	7°37	8°58	29° 2	15°20	F 23
S 24	22 9 32	0♂51'34	12♂30	18°52	28°14	0°55	19°15	24°39	6°19	6°27	6°41	7°33	8°55	29° 9	15°20	S 24
S 25	22 13 28	1°49'30	25°28	20°46	29°25	1°34	19°17	24°38	6°22	6°29	6°39	7°31	8°52	29°15	15°20	S 25
M26	22 17 25	2°47'27	8°Y 7	22°41	0♂37	2°12	19°19	24°38	6°24	6°31	6°38	7°D30	8°49	29°22	15°19	M26
T 27	22 21 21	3°45'26	20°29	24°37	1°49	2°50	19°21	24°37	6°26	6°33	6°37	7°30	8°46	29°29	15°19	T 27
W28	22 25 18	4°43'27	2♂37	26°34	3° 1	3°28	19°23	24°37	6°29	6°35	6°36	7°32	8°43	29°35	15°18	W28
T 29	22 29 14	5°41'30	14°35	28°31	4°13	4° 6	19°25	24°D37	6°31	6°37	6°35	7°34	8°39	29°42	15°18	T 29
F 30	22 33 11	6°39'35	26°28	0♂29	5°25	4°45	19°28	24°37	6°33	6°39	6°34	7°35	8°36	29°49	15°17	F 30
S 31	22 37 8	7♂37'41	8♂19	2♂27	6♂37	5♂23	19♂30	24♂37	6♂35	6♂41	6♂32	7°R36	8°Y33	29♂55	15♂17	S 31

Delta T = 22.31 sec

Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1782

geocentric

SEPTEMBER 1782

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	22 41 4	8 ^h 35'50	20 ^h 15	4 ^h 24	7 ^h 49	6 ^h 1	19 ^h 33	24 ^h 38	6 ^h 37	6 ^h 43	6 ^h 31	7 ^h 35	8 ^h 30	0 ^h 12	15 ^h 16	S 1
M 2	22 45 1	9 ^h 34'01	2 ^h 29	6 ^h 20	9 ^h 2	6 ^h 39	19 ^h 36	24 ^h 38	6 ^h 39	6 ^h 45	6 ^h 30	7 ^h 33	8 ^h 27	0 ^h 9	15 ^h 15	M 2
T 3	22 48 57	10 ^h 32'13	14 ^h 36	8 ^h 16	10 ^h 14	7 ^h 18	19 ^h 39	24 ^h 38	6 ^h 41	6 ^h 47	6 ^h 29	7 ^h 30	8 ^h 23	0 ^h 16	15 ^h 14	T 3
W 4	22 52 54	11 ^h 30'28	27 ^h 10	10 ^h 12	11 ^h 26	7 ^h 56	19 ^h 43	24 ^h 39	6 ^h 43	6 ^h 49	6 ^h 28	7 ^h 26	8 ^h 20	0 ^h 22	15 ^h 13	W 4
T 5	22 56 50	12 ^h 28'45	10 ^h 2	12 ^h 6	12 ^h 39	8 ^h 34	19 ^h 46	24 ^h 39	6 ^h 45	6 ^h 51	6 ^h 27	7 ^h 22	8 ^h 17	0 ^h 29	15 ^h 13	T 5
F 6	23 0 47	13 ^h 27'03	23 ^h 15	14 ^h 0	13 ^h 51	9 ^h 12	19 ^h 50	24 ^h 40	6 ^h 47	6 ^h 53	6 ^h 26	7 ^h 18	8 ^h 14	0 ^h 36	15 ^h 12	F 6
S 7	23 4 43	14 ^h 25'23	6 ^h 46	15 ^h 52	15 ^h 4	9 ^h 51	19 ^h 54	24 ^h 41	6 ^h 49	6 ^h 55	6 ^h 25	7 ^h 16	8 ^h 11	0 ^h 42	15 ^h 11	S 7
S 8	23 8 40	15 ^h 23'46	20 ^h 35	17 ^h 44	16 ^h 17	10 ^h 29	19 ^h 58	24 ^h 42	6 ^h 51	6 ^h 57	6 ^h 24	7 ^h 14	8 ^h 8	0 ^h 49	15 ^h 9	S 8
M 9	23 12 37	16 ^h 22'09	4 ^h 39	19 ^h 35	17 ^h 29	11 ^h 7	20 ^h 3	24 ^h 43	6 ^h 53	7 ^h 0	6 ^h 23	7 ^h 13	8 ^h 4	0 ^h 56	15 ^h 8	M 9
T 10	23 16 33	17 ^h 20'35	18 ^h 53	21 ^h 24	18 ^h 42	11 ^h 46	20 ^h 7	24 ^h 44	6 ^h 54	7 ^h 2	6 ^h 22	7 ^h 13	8 ^h 1	1 ^h 2	15 ^h 7	T 10
W 11	23 20 30	18 ^h 19'03	3 ^h 13	23 ^h 12	19 ^h 55	12 ^h 24	20 ^h 12	24 ^h 45	6 ^h 56	7 ^h 4	6 ^h 21	7 ^h 14	7 ^h 58	1 ^h 9	15 ^h 6	W 11
T 12	23 24 26	19 ^h 17'32	17 ^h 34	25 ^h 0	21 ^h 8	13 ^h 2	20 ^h 16	24 ^h 46	6 ^h 58	7 ^h 6	6 ^h 20	7 ^h 15	7 ^h 55	1 ^h 16	15 ^h 4	T 12
F 13	23 28 23	20 ^h 16'03	1 ^h 54	26 ^h 46	22 ^h 21	13 ^h 41	20 ^h 21	24 ^h 48	6 ^h 59	7 ^h 8	6 ^h 19	7 ^h 17	7 ^h 52	1 ^h 22	15 ^h 3	F 13
S 14	23 32 19	21 ^h 14'35	16 ^h 9	28 ^h 31	23 ^h 34	14 ^h 19	20 ^h 27	24 ^h 49	7 ^h 1	7 ^h 10	6 ^h 18	7 ^h 17	7 ^h 49	1 ^h 29	15 ^h 2	S 14
S 15	23 36 16	22 ^h 13'09	0 ^h 37	0 ^h 15	24 ^h 47	14 ^h 57	20 ^h 32	24 ^h 51	7 ^h 2	7 ^h 12	6 ^h 17	7 ^h 17	7 ^h 45	1 ^h 36	15 ^h 0	S 15
M 16	23 40 12	23 ^h 11'45	14 ^h 16	1 ^h 58	26 ^h 1	15 ^h 36	20 ^h 37	24 ^h 53	7 ^h 4	7 ^h 15	6 ^h 16	7 ^h 16	7 ^h 42	1 ^h 43	14 ^h 59	M 16
T 17	23 44 9	24 ^h 10'23	28 ^h 5	3 ^h 41	27 ^h 14	16 ^h 14	20 ^h 43	24 ^h 54	7 ^h 5	7 ^h 17	6 ^h 16	7 ^h 15	7 ^h 39	1 ^h 49	14 ^h 57	T 17
W 18	23 48 6	25 ^h 9'02	11 ^h 34	5 ^h 22	28 ^h 27	16 ^h 53	20 ^h 49	24 ^h 56	7 ^h 6	7 ^h 19	6 ^h 15	7 ^h 13	7 ^h 36	1 ^h 56	14 ^h 55	W 18
T 19	23 52 2	26 ^h 7'42	25 ^h 5	7 ^h 2	29 ^h 40	17 ^h 31	20 ^h 55	24 ^h 58	7 ^h 8	7 ^h 21	6 ^h 14	7 ^h 12	7 ^h 33	2 ^h 3	14 ^h 54	T 19
F 20	23 55 59	27 ^h 6'25	8 ^h 14	8 ^h 41	0 ^h 54	18 ^h 9	21 ^h 1	25 ^h 0	7 ^h 9	7 ^h 23	6 ^h 13	7 ^h 11	7 ^h 29	2 ^h 9	14 ^h 52	F 20
S 21	23 59 55	28 ^h 5'09	21 ^h 10	10 ^h 19	2 ^h 7	18 ^h 48	21 ^h 7	25 ^h 2	7 ^h 10	7 ^h 26	6 ^h 13	7 ^h 10	7 ^h 26	2 ^h 16	14 ^h 50	S 21
S 22	0 3 52	29 ^h 3'56	3 ^h 51	11 ^h 56	3 ^h 21	19 ^h 26	21 ^h 13	25 ^h 5	7 ^h 11	7 ^h 28	6 ^h 12	7 ^h 10	7 ^h 23	2 ^h 23	14 ^h 48	S 22
M 23	0 7 48	0 ^h 24	16 ^h 19	13 ^h 32	4 ^h 34	20 ^h 5	21 ^h 20	25 ^h 7	7 ^h 12	7 ^h 30	6 ^h 11	7 ^h 10	7 ^h 20	2 ^h 29	14 ^h 46	M 23
T 24	0 11 45	1 ^h 1'34	28 ^h 33	15 ^h 7	5 ^h 48	20 ^h 43	21 ^h 27	25 ^h 9	7 ^h 13	7 ^h 32	6 ^h 10	7 ^h 10	7 ^h 17	2 ^h 36	14 ^h 44	T 24
W 25	0 15 41	2 ^h 0'27	10 ^h 38	16 ^h 42	7 ^h 2	21 ^h 22	21 ^h 33	25 ^h 12	7 ^h 14	7 ^h 34	6 ^h 10	7 ^h 10	7 ^h 14	2 ^h 43	14 ^h 42	W 25
T 26	0 19 38	2 ^h 59'22	22 ^h 34	18 ^h 15	8 ^h 15	22 ^h 0	21 ^h 40	25 ^h 14	7 ^h 15	7 ^h 37	6 ^h 9	7 ^h 11	7 ^h 10	2 ^h 50	14 ^h 40	T 26
F 27	0 23 35	3 ^h 58'19	4 ^h 26	19 ^h 48	9 ^h 29	22 ^h 39	21 ^h 48	25 ^h 17	7 ^h 16	7 ^h 39	6 ^h 9	7 ^h 11	7 ^h 7	2 ^h 56	14 ^h 38	F 27
S 28	0 27 31	4 ^h 57'19	16 ^h 17	21 ^h 20	10 ^h 43	23 ^h 17	21 ^h 55	25 ^h 20	7 ^h 17	7 ^h 41	6 ^h 8	7 ^h 12	7 ^h 4	3 ^h 3	14 ^h 36	S 28
S 29	0 31 28	5 ^h 56'20	28 ^h 12	22 ^h 51	11 ^h 57	23 ^h 56	22 ^h 2	25 ^h 23	7 ^h 18	7 ^h 43	6 ^h 7	7 ^h 12	7 ^h 1	3 ^h 10	14 ^h 34	S 29
M 30	0 35 24	6 ^h 55'24	10 ^h 14	24 ^h 21	13 ^h 11	24 ^h 34	22 ^h 10	25 ^h 26	7 ^h 19	7 ^h 46	6 ^h 7	7 ^h 12	6 ^h 58	3 ^h 16	14 ^h 31	M 30

Delta T = 22.31 sec

Greg. Calendar

OCTOBER 1782

00:00 UT

Day	Sid.t	☉	☾	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	0 39 21	7 ^h 54'31	22 ^h 30	25 ^h 50	14 ^h 25	25 ^h 13	22 ^h 18	25 ^h 29	7 ^h 19	7 ^h 48	6 ^h R 6	7 ^h 12	6 ^h Y55	3 ^h II23	14 ^h R29	T 1
W 2	0 43 17	8 ^h 53'39	5 ^h 2	27 ^h 18	15 ^h 39	25 ^h 51	22 ^h 25	25 ^h 32	7 ^h 20	7 ^h 50	6 ^h 6	7 ^h 12	6 ^h 51	3 ^h 30	14 ^h 27	W 2
T 3	0 47 14	9 ^h 52'50	17 ^h 56	28 ^h 46	16 ^h 53	26 ^h 30	22 ^h 33	25 ^h 35	7 ^h 21	7 ^h 52	6 ^h 5	7 ^h 12	6 ^h 48	3 ^h 36	14 ^h 24	T 3
F 4	0 51 10	10 ^h 52'03	1 ^h 12	0 ^h 12	18 ^h 7	27 ^h 8	22 ^h 41	25 ^h 39	7 ^h 21	7 ^h 55	6 ^h 5	7 ^h 12	6 ^h 45	3 ^h 43	14 ^h 22	F 4
S 5	0 55 7	11 ^h 51'19	14 ^h 53	1 ^h 38	19 ^h 22	27 ^h 47	22 ^h 50	25 ^h 42	7 ^h 21	7 ^h 57	6 ^h 5	7 ^h 13	6 ^h 42	3 ^h 50	14 ^h 20	S 5
S 6	0 59 3	12 ^h 50'36	28 ^h 58	3 ^h 3	20 ^h 36	28 ^h 26	22 ^h 58	25 ^h 45	7 ^h 22	7 ^h 59	6 ^h 4	7 ^h 13	6 ^h 39	3 ^h 57	14 ^h 17	S 6
M 7	1 3 0	13 ^h 49'56	13 ^h 22	4 ^h 27	21 ^h 50	29 ^h 4	23 ^h 7	25 ^h 49	7 ^h 22	8 ^h 1	6 ^h 4	7 ^h R13	6 ^h 35	4 ^h 3	14 ^h 15	M 7
T 8	1 6 57	14 ^h 49'18	28 ^h 2	5 ^h 49	23 ^h 4	29 ^h 43	23 ^h 15	25 ^h 53	7 ^h 23	8 ^h 3	6 ^h 4	7 ^h 13	6 ^h 32	4 ^h 10	14 ^h 12	T 8
W 9	1 10 53	15 ^h 48'42	12 ^h 49	7 ^h 11	24 ^h 19	0 ^h 22	23 ^h 24	25 ^h 56	7 ^h 23	8 ^h 6	6 ^h 3	7 ^h 12	6 ^h 29	4 ^h 17	14 ^h 9	W 9
T 10	1 14 50	16 ^h 48'07	27 ^h 38	8 ^h 32	25 ^h 33	1 ^h 0	23 ^h 33	26 ^h 0	7 ^h 23	8 ^h 8	6 ^h 3	7 ^h 11	6 ^h 26	4 ^h 23	14 ^h 7	T 10
F 11	1 18 46	17 ^h 47'35	12 ^h 20	9 ^h 52	26 ^h 48	1 ^h 39	23 ^h 42	26 ^h 4	7 ^h 23	8 ^h 10	6 ^h 3	7 ^h 10	6 ^h 23	4 ^h 30	14 ^h 4	F 11
S 12	1 22 43	18 ^h 47'05	26 ^h 50	11 ^h 10	28 ^h 2	2 ^h 18	23 ^h 51	26 ^h 8	7 ^h 23	8 ^h 12	6 ^h 3	7 ^h 9	6 ^h 20	4 ^h 37	14 ^h 1	S 12
S 13	1 26 39	19 ^h 46'36	11 ^h 3	12 ^h 27	29 ^h 17	2 ^h 56	24 ^h 0	26 ^h 12	7 ^h R23	8 ^h 15	6 ^h 2	7 ^h 8	6 ^h 16	4 ^h 43	13 ^h 59	S 13
M 14	1 30 36	20 ^h 46'09	24 ^h 59	13 ^h 43	0 ^h 31	3 ^h 35	24 ^h 10	26 ^h 16	7 ^h 23	8 ^h 17	6 ^h 2	7 ^h D 8	6 ^h 13	4 ^h 50	13 ^h 56	M 14
T 15	1 34 33	21 ^h 45'43	8 ^h 35	14 ^h 58	1 ^h 46	4 ^h 14	24 ^h 19	26 ^h 20	7 ^h 23	8 ^h 19	6 ^h 2	7 ^h 8	6 ^h 10	4 ^h 57	13 ^h 53	T 15
W 16	1 38 29	22 ^h 45'20	21 ^h 54	16 ^h 11	3 ^h 0	4 ^h 53	24 ^h 29	26 ^h 25	7 ^h 23	8 ^h 21	6 ^h 2	7 ^h 10	6 ^h 7	5 ^h 4	13 ^h 50	W 16
T 17	1 42 26	23 ^h 44'58	4 ^h 56	17 ^h 22	4 ^h 15	5 ^h 31	24 ^h 38	26 ^h 29	7 ^h 23	8 ^h 23	6 ^h 2	7 ^h 11	6 ^h 4	5 ^h 10	13 ^h 47	T 17
F 18	1 46 22	24 ^h 44'37	17 ^h 44	18 ^h 31	5 ^h 30	6 ^h 10	24 ^h 48	26 ^h 33	7 ^h 23	8 ^h 25	6 ^h 2	7 ^h 12	6 ^h 0	5 ^h 17	13 ^h 45	F 18
S 19	1 50 19	25 ^h 44'19	0 ^h Y18	19 ^h 39	6 ^h 44	6 ^h 49	24 ^h 58	26 ^h 38	7 ^h 22	8 ^h 28	6 ^h D 2	7 ^h 13	5 ^h 57	5 ^h 24	13 ^h 42	S 19
S 20	1 54 15	26 ^h 44'03	12 ^h 42	20 ^h 44	7 ^h 59	7 ^h 28	25 ^h 8	26 ^h 42	7 ^h 22	8 ^h 30	6 ^h 2	7 ^h R13	5 ^h 54	5 ^h 30	13 ^h 39	S 20
M 21	1 58 12	27 ^h 43'48	24 ^h 55	21 ^h 47	9 ^h 14	8 ^h 7	25 ^h 18	26 ^h 47	7 ^h 22	8 ^h 32	6 ^h 2	7 ^h 12	5 ^h 51	5 ^h 37	13 ^h 36	M 21
T 22	2 2 8	28 ^h 43'35	7 ^h 8	22 ^h 47	10 ^h 29	8 ^h 46	25 ^h 29	26 ^h 52	7 ^h 21	8 ^h 34	6 ^h 2	7 ^h 10	5 ^h 48	5 ^h 44	13 ^h 33	T 22
W 23	2 6 5	29 ^h 43'25	18 ^h 59	23 ^h 44	11 ^h 44	9 ^h 24	25 ^h 39	26 ^h 57	7 ^h 21	8 ^h 36	6 ^h 2	7 ^h 7	5 ^h 45	5 ^h 50	13 ^h 30	W 23
T 24	2 10 1	0 ^h 43'16	0 ^h II5	24 ^h 38	12 ^h 58	10 ^h 3	25 ^h 49	27 ^h 1	7 ^h 20	8 ^h 38	6 ^h 2	7 ^h 3	5 ^h 41	5 ^h 57	13 ^h 27	T 24
F 25	2 13 58	1 ^h 43'10	12 ^h 44	25 ^h 29	14 ^h 13	10 ^h 42	26 ^h 0	27 ^h 6	7 ^h 20	8 ^h 40	6 ^h 2	6 ^h 59	5 ^h 38	6 ^h 4	13 ^h 24	F 25
S 26	2 17 55	2 ^h 43'06	24 ^h 35	26 ^h 15	15 ^h 28	11 ^h 21	26 ^h 11	27 ^h 11	7 ^h 19	8 ^h 42	6 ^h 2	6 ^h 54	5 ^h 35	6 ^h 11	13 ^h 21	S 26
S 27	2 21 51	3 ^h 43'04	6 ^h 29	26 ^h 57	16 ^h 43	12 ^h 0	26 ^h 21	27 ^h 16	7 ^h 18	8 ^h 44	6 ^h 3	6 ^h 51	5 ^h 32	6 ^h 17	13 ^h 18	S 27
M 28	2 25 48	4 ^h 43'04	18 ^h 30	27 ^h 34	17 ^h 58	12 ^h 39	26 ^h 32	27 ^h 22	7 ^h 17	8 ^h 47	6 ^h 3	6 ^h 48	5 ^h 29	6 ^h 24	13 ^h 15	M 28
T 29	2 29 44	5 ^h 43'06	0 ^h 42	28 ^h 5	19 ^h 13	13 ^h 18	26 ^h 43	27 ^h 27	7 ^h 17	8 ^h 49	6 ^h 3	6 ^h D47	5 ^h 26	6 ^h 31	13 ^h 12	T 29
W 30	2 33 41	6 ^h 43'10	13 ^h 9	28 ^h 30	20 ^h 28	13 ^h 57	26 ^h 54	27 ^h 32	7 ^h 16	8 ^h 51	6 ^h 3	6 ^h 47	5 ^h 22	6 ^h 37	13 ^h 9	W 30
T 31	2 37 37	7 ^h 43'17	25 ^h 25	28 ^h 49	21 ^h 43	14 ^h 36	27 ^h 25	27 ^h 37	7 ^h 15	8 ^h 53	6 ^h 4	6 ^h Y48	5 ^h Y19	6 ^h II44	13 ^h 5	T 31

ASTRODIENST EPHEMERIS for the year 1782

geocentric

NOVEMBER 1782

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	2 41 34	8♉43'25	9♏ 8	29♊ 0	22♏58	15♏15	27♏17	27♏43	7°R14	8♏55	6♏ 4	6°Y50	5°Y16	6♏51	13°R 2	F 1
S 2	2 45 30	9°43'36	22°46	29°R 4	24°14	15°54	27°28	27°48	7°E13	8°57	6° 4	6°51	5°13	6°58	12°E59	S 2
S 3	2 49 27	10°43'48	6♏52	28°58	25°29	16°33	27°39	27°54	7°12	8°59	6° 5	6°R52	5°10	7° 4	12°56	S 3
M 4	2 53 24	11°44'03	21°23	28°44	26°44	17°12	27°51	27°59	7°11	9° 1	6° 5	6°51	5° 6	7°11	12°53	M 4
T 5	2 57 20	12°44'20	6♊17	28°19	27°59	17°51	28° 2	28° 5	7°10	9° 3	6° 6	6°49	5° 3	7°18	12°50	T 5
W 6	3 1 17	13°44'38	21°25	27°45	29°14	18°31	28°14	28°10	7° 8	9° 4	6° 6	6°44	5° 0	7°24	12°47	W 6
T 7	3 5 13	14°44'58	6♏37	27° 1	0♏29	19°10	28°26	28°16	7° 7	9° 6	6° 7	6°39	4°57	7°31	12°44	T 7
F 8	3 9 10	15°45'20	21°43	26° 7	1°45	19°49	28°38	28°22	7° 6	9° 8	6° 7	6°33	4°54	7°38	12°41	F 8
S 9	3 13 6	16°45'43	6♏34	25° 5	3° 0	20°28	28°50	28°28	7° 4	9°10	6° 8	6°27	4°51	7°44	12°37	S 9
S 10	3 17 3	17°46'08	21° 3	23°55	4°15	21° 7	29° 1	28°34	7° 3	9°12	6° 8	6°23	4°47	7°51	12°34	S 10
M 11	3 21 0	18°46'34	5♏ 6	22°39	5°31	21°46	29°14	28°40	7° 2	9°14	6° 9	6°20	4°44	7°58	12°31	M 11
T 12	3 24 56	19°47'02	18°43	21°19	6°46	22°26	29°26	28°46	7° 0	9°16	6°10	6°D19	4°41	8° 5	12°28	T 12
W 13	3 28 53	20°47'30	1♏56	19°58	8° 1	23° 5	29°38	28°52	6°59	9°17	6°10	6°20	4°38	8°11	12°25	W 13
T 14	3 32 49	21°48'00	14°47	18°39	9°16	23°44	29°50	28°58	6°57	9°19	6°11	6°21	4°35	8°18	12°22	T 14
F 15	3 36 46	22°48'31	27°21	17°24	10°32	24°23	0♏ 2	29° 4	6°55	9°21	6°12	6°22	4°32	8°25	12°19	F 15
S 16	3 40 42	23°49'04	9°Y41	16°15	11°47	25° 3	0°15	29°10	6°54	9°23	6°13	6°R23	4°28	8°31	12°16	S 16
S 17	3 44 39	24°49'38	21°50	15°14	13° 2	25°42	0°27	29°16	6°52	9°24	6°13	6°21	4°25	8°38	12°13	S 17
M 18	3 48 35	25°50'13	3♏52	14°24	14°18	26°21	0°40	29°22	6°50	9°26	6°14	6°17	4°22	8°45	12°10	M 18
T 19	3 52 32	26°50'49	15°48	13°45	15°33	27° 1	0°52	29°29	6°49	9°28	6°15	6°11	4°19	8°52	12° 7	T 19
W 20	3 56 28	27°51'27	27°42	13°17	16°48	27°40	1° 5	29°35	6°47	9°29	6°16	6° 3	4°16	8°58	12° 4	W 20
T 21	4 0 25	28°52'07	9♏34	13° 2	18° 4	28°19	1°18	29°41	6°45	9°31	6°17	5°53	4°12	9° 5	12° 1	T 21
F 22	4 4 22	29°52'48	21°26	12°D57	19°19	28°59	1°30	29°48	6°43	9°33	6°18	5°42	4° 9	9°12	11°58	F 22
S 23	4 8 18	0♏53'30	3♏19	13° 3	20°35	29°38	1°43	29°54	6°41	9°34	6°19	5°31	4° 6	9°18	11°55	S 23
S 24	4 12 15	1°54'14	15°16	13°20	21°50	0♏17	1°56	0♏ 1	6°39	9°36	6°20	5°21	4° 3	9°25	11°52	S 24
M 25	4 16 11	2°54'59	27°18	13°45	23° 6	0°57	2° 9	0° 7	6°37	9°37	6°21	5°13	4° 0	9°32	11°49	M 25
T 26	4 20 8	3°55'46	9♏30	14°19	24°21	1°36	2°22	0°14	6°35	9°39	6°22	5° 7	3°57	9°39	11°46	T 26
W 27	4 24 4	4°56'34	21°54	15° 0	25°36	2°16	2°35	0°20	6°33	9°40	6°23	5° 4	3°53	9°45	11°44	W 27
T 28	4 28 1	5°57'24	4♏36	15°48	26°52	2°55	2°48	0°27	6°31	9°42	6°24	5°D 3	3°50	9°52	11°41	T 28
F 29	4 31 58	6°58'15	17°38	16°42	28° 7	3°35	3° 1	0°34	6°29	9°43	6°25	5° 4	3°47	9°59	11°38	F 29
S 30	4 35 54	7°59'07	1♏ 6	17°M41	29°M23	4°M14	3°E14	0♏40	6°E27	9°M44	6°M26	5°R 4	3°Y44	10°M 5	11°E35	S 30

Delta T = 22.31 sec

Greg. Calendar

DECEMBER 1782

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	4 39 51	9♏ 0'01	15♏ 1	18♊44	0♏38	4♊54	3♏28	0♏47	6°R24	9♏46	6°M27	5°R 4	3°Y41	10°M12	11°R33	S 1
M 2	4 43 47	10° 0'57	29°25	19°52	1°54	5°34	3°44	0°54	6°E22	9°47	6°28	5°Y 1	3°38	10°19	11°E30	M 2
T 3	4 47 44	11° 1'53	14♊14	21° 2	3° 9	6°13	3°54	1° 1	6°20	9°48	6°29	4°57	3°34	10°26	11°27	T 3
W 4	4 51 40	12° 2'51	29°24	22°16	4°25	6°53	4° 8	1° 8	6°18	9°50	6°30	4°49	3°31	10°32	11°25	W 4
T 5	4 55 37	13° 3'50	14♏45	23°31	5°40	7°32	4°21	1°14	6°15	9°51	6°32	4°39	3°28	10°39	11°22	T 5
F 6	4 59 33	14° 4'50	0♏ 4	24°50	6°56	8°12	4°34	1°21	6°13	9°52	6°33	4°28	3°25	10°46	11°20	F 6
S 7	5 3 30	15° 5'51	15°11	26° 9	8°11	8°52	4°48	1°28	6°11	9°53	6°34	4°18	3°22	10°52	11°17	S 7
S 8	5 7 27	16° 6'52	29°56	27°31	9°27	9°31	5° 1	1°35	6° 8	9°54	6°35	4° 9	3°18	10°59	11°15	S 8
M 9	5 11 23	17° 7'54	14♏13	28°54	10°42	10°11	5°15	1°42	6° 6	9°56	6°37	4° 3	3°15	11° 6	11°13	M 9
T 10	5 15 20	18° 8'57	27°59	0♏18	11°58	10°51	5°29	1°49	6° 4	9°57	6°38	3°59	3°12	11°13	11°10	T 10
W 11	5 19 16	19°10'00	11♏17	1°43	13°13	11°31	5°42	1°56	6° 1	9°58	6°39	3°57	3° 9	11°19	11° 8	W 11
T 12	5 23 13	20°11'03	24° 8	3° 9	14°29	12°10	5°56	2° 3	5°59	9°59	6°41	3°D57	3° 6	11°26	11° 6	T 12
F 13	5 27 9	21°12'07	6°Y38	4°36	15°45	12°50	6° 9	2°10	5°56	10° 0	6°42	3°R57	3° 3	11°33	11° 3	F 13
S 14	5 31 6	22°13'11	18°52	6° 3	17° 0	13°30	6°23	2°17	5°54	10° 1	6°44	3°56	2°59	11°39	11° 1	S 14
S 15	5 35 2	23°14'15	0♏54	7°31	18°16	14°10	6°37	2°24	5°51	10° 2	6°45	3°53	2°56	11°46	10°59	S 15
M 16	5 38 59	24°15'20	12°49	9° 0	19°31	14°50	6°51	2°31	5°49	10° 2	6°46	3°48	2°53	11°53	10°57	M 16
T 17	5 42 56	25°16'26	24°41	10°29	20°47	15°29	7° 4	2°38	5°46	10° 3	6°48	3°39	2°50	12° 0	10°55	T 17
W 18	5 46 52	26°17'31	6♏32	11°59	22° 2	16° 9	7°18	2°45	5°44	10° 4	6°49	3°27	2°47	12° 6	10°53	W 18
T 19	5 50 49	27°18'38	18°24	13°29	23°18	16°49	7°32	2°52	5°41	10° 5	6°51	3°13	2°44	12°13	10°51	T 19
F 20	5 54 45	28°19'44	0♏19	14°59	24°33	17°29	7°46	2°59	5°38	10° 6	6°52	2°58	2°40	12°20	10°49	F 20
S 21	5 58 42	29°20'51	12°18	16°29	25°49	18° 9	8° 0	3° 6	5°36	10° 7	6°54	2°43	2°37	12°26	10°48	S 21
S 22	6 2 38	0♏21'59	24°22	18° 0	27° 4	18°49	8°14	3°13	5°33	10° 7	6°55	2°30	2°34	12°33	10°46	S 22
M 23	6 6 35	1°23'07	6♏23	19°32	28°20	19°29	8°27	3°20	5°31	10° 8	6°57	2°18	2°31	12°40	10°44	M 23
T 24	6 10 32	2°24'15	18°52	21° 3	29°35	20° 9	8°41	3°27	5°28	10° 9	6°59	2°10	2°28	12°47	10°42	T 24
W 25	6 14 28	3°25'24	1♏21	22°35	0♏51	20°49	8°55	3°34	5°26	10° 9	7° 0	2° 4	2°24	12°53	10°41	W 25
T 26	6 18 25	4°26'33	14° 4	24° 7	2° 6	21°29	9° 9	3°41	5°23	10°10	7° 2	2° 1	2°21	13° 0	10°39	T 26
F 27	6 22 21	5°27'42	27° 3	25°40	3°22	22° 9	9°23	3°48	5°20	10°10	7° 3	2° 1	2°18	13° 7	10°38	F 27
S 28	6 26 18	6°28'52	10♏23	27°13	4°37	22°49	9°37	3°56	5°18	10°11	7° 5	2° 1	2°15	13°13	10°36	S 28
S 29	6 30 14	7°30'03	24° 6	28°46	5°53	23°29	9°51	4° 3	5°15	10°11	7° 7	2° 0	2°12	13°20	10°35	S 29
M 30	6 34 11	8°31'13	8♊15	0♏19	7° 8	24° 9	10° 5	4°10	5°13	10°12	7° 8	1°57	2° 9	13°27	10°34	M 30
T 31	6 38 7	9♏32'25	22°M48	1♏53	8♏24	24°M49	10°E19	4°E17	5°E10	10°M12	7°M10	1°Y52	2°Y 5	13°M34	10°E33	T 31

Delta T = 22.30 sec

Greg. Calendar