

SWISS EPHEMERIS for the year 1613
heliocentric

JANUARY 1613 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♁	♂
T 1	6 42 45	10 ⁵⁰ 32	10 ⁴²	0 ⁵⁸	8 ¹⁴	28 ²²	16 ¹⁸	18 ¹³	24 ³²	24 ⁴¹	5 ¹	22 ³²
W 2	6 46 42	11 ⁵¹ 42	11 ⁴⁴	4 ¹⁸	9 ⁵²	28 ⁵¹	16 ²³	18 ¹⁵	24 ³³	24 ⁴²	5 ¹	22 ³³
T 3	6 50 38	12 ⁵² 51	12 ⁴⁶	7 ⁴³	11 ²⁹	29 ²⁰	16 ²⁷	18 ¹⁷	24 ³⁴	24 ⁴²	5 ¹	22 ³⁴
F 4	6 54 35	13 ⁵⁴ 00	13 ⁴⁹	11 ¹³	13 ⁶	29 ⁴⁹	16 ³²	18 ¹⁹	24 ³⁴	24 ⁴²	5 ¹	22 ³⁵
S 5	6 58 31	14 ⁵⁵ 08	14 ⁵²	14 ⁴⁸	14 ⁴⁴	0 ¹⁷	16 ³⁷	18 ²¹	24 ³⁵	24 ⁴³	5 ¹	22 ³⁶
S 6	7 2 28	15 ⁵⁶ 16	15 ⁵⁵	18 ²⁸	16 ²¹	0 ⁴⁶	16 ⁴¹	18 ²³	24 ³⁶	24 ⁴³	5 ¹	22 ³⁸
M 7	7 6 24	16 ⁵⁷ 23	16 ⁵⁸	22 ¹⁴	17 ⁵⁹	1 ¹⁵	16 ⁴⁶	18 ²⁵	24 ³⁷	24 ⁴³	5 ¹	22 ³⁹
T 8	7 10 21	17 ⁵⁸ 30	18 ¹	26 ⁷	19 ³⁶	1 ⁴⁴	16 ⁵⁰	18 ²⁷	24 ³⁷	24 ⁴⁴	5 ²	22 ⁴⁰
W 9	7 14 17	18 ⁵⁹ 37	19 ⁴	0 ¹³	21 ¹³	2 ¹²	16 ⁵⁵	18 ²⁹	24 ³⁸	24 ⁴⁴	5 ²	22 ⁴¹
T 10	7 18 14	20 ⁰ 43	20 ⁶	4 ¹²	22 ⁵⁰	2 ⁴¹	16 ⁵⁹	18 ³¹	24 ³⁹	24 ⁴⁴	5 ²	22 ⁴²
F 11	7 22 11	21 ¹ 49	21 ⁹	8 ²⁶	24 ²⁸	3 ¹⁰	17 ⁴	18 ³³	24 ⁴⁰	24 ⁴⁵	5 ²	22 ⁴³
S 12	7 26 7	22 ² 54	22 ¹¹	12 ⁴⁷	26 ⁵	3 ³⁸	17 ⁹	18 ³⁵	24 ⁴⁰	24 ⁴⁵	5 ²	22 ⁴⁴
S 13	7 30 4	23 ³ 59	23 ¹³	17 ¹⁶	27 ⁴²	4 ⁷	17 ¹³	18 ³⁷	24 ⁴¹	24 ⁴⁵	5 ²	22 ⁴⁶
M14	7 34 0	24 ⁵ 04	24 ¹⁴	21 ⁵⁴	29 ¹⁹	4 ³⁵	17 ¹⁸	18 ³⁸	24 ⁴²	24 ⁴⁶	5 ³	22 ⁴⁷
T 15	7 37 57	25 ⁶ 09	25 ¹⁴	26 ⁴⁰	0 ⁵⁶	5 ⁴	17 ²²	18 ⁴⁰	24 ⁴²	24 ⁴⁶	5 ³	22 ⁴⁸
W16	7 41 53	26 ⁷ 13	26 ¹⁵	1 ³⁶	2 ³³	5 ³²	17 ²⁷	18 ⁴²	24 ⁴³	24 ⁴⁷	5 ³	22 ⁴⁹
T 17	7 45 50	27 ⁸ 17	27 ¹⁵	6 ⁴⁰	4 ¹⁰	6 ¹	17 ³¹	18 ⁴⁴	24 ⁴⁴	24 ⁴⁷	5 ³	22 ⁵⁰
F 18	7 49 46	28 ⁹ 21	28 ¹⁴	11 ⁵³	5 ⁴⁷	6 ²⁹	17 ³⁶	18 ⁴⁶	24 ⁴⁵	24 ⁴⁷	5 ³	22 ⁵¹
S 19	7 53 43	29 ¹⁰ 23	29 ¹⁴	17 ¹⁶	7 ²⁴	6 ⁵⁷	17 ⁴¹	18 ⁴⁸	24 ⁴⁵	24 ⁴⁸	5 ³	22 ⁵³
S 20	7 57 40	0 ¹¹ 25	0 ¹³	22 ⁴⁷	9 ¹	7 ²⁶	17 ⁴⁵	18 ⁵⁰	24 ⁴⁶	24 ⁴⁸	5 ⁴	22 ⁵⁴
M21	8 1 36	1 ¹² 27	1 ¹²	28 ²⁷	10 ³⁸	7 ⁵⁴	17 ⁵⁰	18 ⁵²	24 ⁴⁷	24 ⁴⁸	5 ⁴	22 ⁵⁵
T 22	8 5 33	2 ¹³ 27	2 ¹¹	4 ¹⁶	12 ¹⁴	8 ²²	17 ⁵⁴	18 ⁵⁴	24 ⁴⁷	24 ⁴⁹	5 ⁴	22 ⁵⁶
W23	8 9 29	3 ¹⁴ 26	3 ¹¹	10 ¹²	13 ⁵¹	8 ⁵⁰	17 ⁵⁹	18 ⁵⁶	24 ⁴⁸	24 ⁴⁹	5 ⁴	22 ⁵⁷
T 24	8 13 26	4 ¹⁵ 24	4 ¹⁰	16 ¹⁴	15 ²⁸	9 ¹⁹	18 ³	18 ⁵⁸	24 ⁴⁹	24 ⁴⁹	5 ⁴	22 ⁵⁸
F 25	8 17 22	5 ¹⁶ 21	5 ¹⁰	22 ²³	17 ⁴	9 ⁴⁷	18 ⁸	19 ⁰	24 ⁵⁰	24 ⁵⁰	5 ⁴	22 ⁵⁹
S 26	8 21 19	6 ¹⁷ 16	6 ⁹	28 ³⁶	18 ⁴¹	10 ¹⁵	18 ¹³	19 ²	24 ⁵⁰	24 ⁵⁰	5 ⁴	23 ⁰
S 27	8 25 15	7 ¹⁸ 11	7 ⁹	4 ⁵³	20 ¹⁸	10 ⁴³	18 ¹⁷	19 ⁴	24 ⁵¹	24 ⁵⁰	5 ⁵	23 ²
M28	8 29 12	8 ¹⁹ 04	8 ¹⁰	11 ¹¹	21 ⁵⁴	11 ¹¹	18 ²²	19 ⁶	24 ⁵²	24 ⁵¹	5 ⁵	23 ³
T 29	8 33 9	9 ¹⁹ 55	9 ¹¹	17 ³⁰	23 ³¹	11 ³⁹	18 ²⁶	19 ⁸	24 ⁵³	24 ⁵¹	5 ⁵	23 ⁴
W30	8 37 5	10 ²⁰ 46	10 ¹²	23 ⁴⁹	25 ⁷	12 ⁷	18 ³¹	19 ¹⁰	24 ⁵³	24 ⁵²	5 ⁵	23 ⁵
T 31	8 41 2	11 ²¹ 34	11 ¹³	0 ⁵	26 ⁴⁴	12 ³⁵	18 ³⁵	19 ¹²	24 ⁵⁴	24 ⁵²	5 ⁵	23 ⁶

Delta T = 102.84 sec. Greg. Calendar

FEBRUARY 1613 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♁	♂
F 1	8 44 58	12 ²² 22	12 ¹⁵	6 ¹⁶	28 ²⁰	13 ³	18 ⁴⁰	19 ¹⁴	24 ⁵⁵	24 ⁵²	5 ⁵	23 ⁷
S 2	8 48 55	13 ²³ 07	13 ¹⁷	12 ²²	29 ⁵⁶	13 ³⁰	18 ⁴⁵	19 ¹⁶	24 ⁵⁵	24 ⁵³	5 ⁶	23 ⁹
S 3	8 52 51	14 ²³ 52	14 ¹⁹	18 ²³	1 ³²	13 ⁵⁸	18 ⁴⁹	19 ¹⁸	24 ⁵⁶	24 ⁵³	5 ⁶	23 ¹⁰
M 4	8 56 48	15 ²⁴ 35	15 ²²	24 ¹⁵	3 ⁹	14 ²⁶	18 ⁵⁴	19 ²⁰	24 ⁵⁷	24 ⁵³	5 ⁶	23 ¹¹
T 5	9 0 44	16 ²⁵ 16	16 ²⁵	29 ⁵⁹	4 ⁴⁵	14 ⁵⁴	18 ⁵⁸	19 ²²	24 ⁵⁸	24 ⁵⁴	5 ⁶	23 ¹²
W 6	9 4 41	17 ²⁵ 56	17 ²⁷	5 ³⁵	6 ²¹	15 ²¹	19 ³	19 ²⁴	24 ⁵⁸	24 ⁵⁴	5 ⁶	23 ¹³
T 7	9 8 38	18 ²⁶ 34	18 ³⁰	11 ²	7 ⁵⁷	15 ⁴⁹	19 ⁷	19 ²⁶	24 ⁵⁹	24 ⁵⁴	5 ⁶	23 ¹⁴
F 8	9 12 34	19 ²⁷ 11	19 ³²	16 ¹⁹	9 ³³	16 ¹⁷	19 ¹²	19 ²⁸	25 ⁰	24 ⁵⁵	5 ⁷	23 ¹⁵
S 9	9 16 31	20 ²⁷ 47	20 ³⁴	21 ²⁶	11 ⁹	16 ⁴⁴	19 ¹⁷	19 ³⁰	25 ⁰	24 ⁵⁵	5 ⁷	23 ¹⁷
S 10	9 20 27	21 ²⁸ 22	21 ³⁶	26 ²³	12 ⁴⁵	17 ¹²	19 ²¹	19 ³²	25 ¹	24 ⁵⁵	5 ⁷	23 ¹⁸
M11	9 24 24	22 ²⁸ 55	22 ³⁷	1 ¹²	14 ²¹	17 ⁴⁰	19 ²⁶	19 ³⁴	25 ²	24 ⁵⁶	5 ⁷	23 ¹⁹
T 12	9 28 20	23 ²⁹ 28	23 ³⁸	5 ⁵⁰	15 ⁵⁷	18 ⁷	19 ³⁰	19 ³⁶	25 ³	24 ⁵⁶	5 ⁷	23 ²⁰
W13	9 32 17	24 ²⁹ 59	24 ³⁹	10 ²⁰	17 ³²	18 ³⁵	19 ³⁵	19 ³⁸	25 ³	24 ⁵⁷	5 ⁷	23 ²¹
T 14	9 36 13	25 ³⁰ 28	25 ³⁹	14 ⁴²	19 ⁸	19 ²	19 ³⁹	19 ⁴⁰	25 ⁴	24 ⁵⁷	5 ⁷	23 ²²
F 15	9 40 10	26 ³⁰ 57	26 ³⁸	18 ⁵⁵	20 ⁴⁴	19 ³⁰	19 ⁴⁴	19 ⁴²	25 ⁵	24 ⁵⁷	5 ⁸	23 ²³
S 16	9 44 7	27 ³¹ 24	27 ³⁷	23 ⁰	22 ¹⁹	19 ⁵⁷	19 ⁴⁸	19 ⁴⁴	25 ⁵	24 ⁵⁸	5 ⁸	23 ²⁵
S 17	9 48 3	28 ³¹ 50	28 ³⁶	26 ⁵⁸	23 ⁵⁵	20 ²⁴	19 ⁵³	19 ⁴⁶	25 ⁶	24 ⁵⁸	5 ⁸	23 ²⁶
M18	9 52 0	29 ³² 14	29 ³⁵	0 ⁴⁹	25 ³¹	20 ⁵²	19 ⁵⁸	19 ⁴⁸	25 ⁷	24 ⁵⁸	5 ⁸	23 ²⁷
T 19	9 55 56	0 ³² 36	0 ³⁴	4 ³³	27 ⁶	21 ¹⁹	20 ²	19 ⁵⁰	25 ⁸	24 ⁵⁹	5 ⁸	23 ²⁸
W20	9 59 53	1 ³² 56	1 ³²	8 ¹²	28 ⁴²	21 ⁴⁷	20 ⁷	19 ⁵²	25 ⁸	24 ⁵⁹	5 ⁸	23 ²⁹
T 21	10 3 49	2 ³³ 15	2 ³¹	11 ⁴⁵	0 ¹⁷	22 ¹⁴	20 ¹¹	19 ⁵⁴	25 ⁹	24 ⁵⁹	5 ⁹	23 ³⁰
F 22	10 7 46	3 ³³ 32	3 ²⁹	15 ¹²	1 ⁵³	22 ⁴¹	20 ¹⁶	19 ⁵⁶	25 ¹⁰	25 ⁰	5 ⁹	23 ³¹
S 23	10 11 42	4 ³³ 47	4 ²⁸	18 ³⁵	3 ²⁸	23 ⁸	20 ²⁰	19 ⁵⁸	25 ¹¹	25 ⁰	5 ⁹	23 ³³
S 24	10 15 39	5 ³⁴ 00	5 ²⁷	21 ⁵³	5 ³	23 ³⁶	20 ²⁵	20 ⁰	25 ¹¹	25 ⁰	5 ⁹	23 ³⁴
M25	10 19 36	6 ³⁴ 11	6 ²⁶	25 ⁶	6 ³⁹	24 ³	20 ³⁰	20 ²	25 ¹²	25 ¹	5 ⁹	23 ³⁵
T 26	10 23 32	7 ³⁴ 20	7 ²⁶	28 ¹⁶	8 ¹⁴	24 ³⁰	20 ³⁴	20 ⁴	25 ¹³	25 ¹	5 ⁹	23 ³⁶
W27	10 27 29	8 ³⁴ 27	8 ²⁵	1 ²³	9 ⁴⁹	24 ⁵⁷	20 ³⁹	20 ⁶	25 ¹³	25 ²	5 ⁹	23 ³⁷
T 28	10 31 25	9 ³⁴ 32	9 ²⁵	4 ²⁶	11 ²⁴	25 ²⁴	20 ⁴³	20 ⁸	25 ¹⁴	25 ²	5 ¹⁰	23 ³⁸

Delta T = 102.73 sec. Greg. Calendar created from Swiss Ephemeris, Copyright Astrodiest AG [13.11.2015]

SWISS EPHEMERIS for the year 1613
heliocentric

MARCH 1613 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♁	♂
F 1	10 35 22	10 ^h 34'35"	10 ^h 26'	7 ^m 27	13 ^s 0	25 ^o 51	20 ^h 48	20 ^h 10	25 ^h 15	25 ^m 2	5 ^h 10	23 ^h 39
S 2	10 39 18	11 ^h 34'36"	11 ^h 27'	10 ^m 24	14 ^s 35	26 ^o 18	20 ^h 52	20 ^h 12	25 ^h 16	25 ^m 3	5 ^h 10	23 ^h 41
S 3	10 43 15	12 ^h 34'34"	12 ^h 28'	13 ^m 20	16 ^s 10	26 ^o 45	20 ^h 57	20 ^h 14	25 ^h 16	25 ^m 3	5 ^h 10	23 ^h 42
M 4	10 47 11	13 ^h 34'30"	13 ^h 29'	16 ^m 13	17 ^s 45	27 ^o 13	21 ^h 1	20 ^h 16	25 ^h 17	25 ^m 3	5 ^h 10	23 ^h 43
T 5	10 51 8	14 ^h 34'25"	14 ^h 31'	19 ^m 4	19 ^s 20	27 ^o 40	21 ^h 6	20 ^h 18	25 ^h 18	25 ^m 4	5 ^h 10	23 ^h 44
W 6	10 55 5	15 ^h 34'16"	15 ^h 33'	21 ^m 54	20 ^s 55	28 ^o 7	21 ^h 11	20 ^h 20	25 ^h 18	25 ^m 4	5 ^h 11	23 ^h 45
T 7	10 59 1	16 ^h 34'06"	16 ^h 35'	24 ^m 43	22 ^s 30	28 ^o 33	21 ^h 15	20 ^h 22	25 ^h 19	25 ^m 4	5 ^h 11	23 ^h 46
F 8	11 2 58	17 ^h 33'54"	17 ^h 36'	27 ^m 30	24 ^s 5	29 ^o 0	21 ^h 20	20 ^h 24	25 ^h 20	25 ^m 5	5 ^h 11	23 ^h 47
S 9	11 6 54	18 ^h 33'40"	18 ^h 38'	0 ^m 16	25 ^s 40	29 ^o 27	21 ^h 24	20 ^h 26	25 ^h 21	25 ^m 5	5 ^h 11	23 ^h 49
S 10	11 10 51	19 ^h 33'24"	19 ^h 39'	3 ^m 2	27 ^s 15	29 ^o 54	21 ^h 29	20 ^h 28	25 ^h 21	25 ^m 5	5 ^h 11	23 ^h 50
M 11	11 14 47	20 ^h 33'07"	20 ^h 40'	5 ^m 47	28 ^s 50	0 ^h 21	21 ^h 33	20 ^h 30	25 ^h 22	25 ^m 6	5 ^h 11	23 ^h 51
T 12	11 18 44	21 ^h 32'47"	21 ^h 41'	8 ^m 31	0 ^s 25	0 ^h 48	21 ^h 38	20 ^h 32	25 ^h 23	25 ^m 6	5 ^h 11	23 ^h 52
W 13	11 22 40	22 ^h 32'27"	22 ^h 41'	11 ^m 16	2 ^s 0	1 ^h 15	21 ^h 43	20 ^h 34	25 ^h 23	25 ^m 7	5 ^h 12	23 ^h 53
T 14	11 26 37	23 ^h 32'04"	23 ^h 41'	14 ^m 1	3 ^s 35	1 ^h 42	21 ^h 47	20 ^h 36	25 ^h 24	25 ^m 7	5 ^h 12	23 ^h 54
F 15	11 30 34	24 ^h 31'40"	24 ^h 40'	16 ^m 46	5 ^s 10	2 ^h 8	21 ^h 52	20 ^h 38	25 ^h 25	25 ^m 7	5 ^h 12	23 ^h 55
S 16	11 34 30	25 ^h 31'13"	25 ^h 39'	19 ^m 31	6 ^s 45	2 ^h 35	21 ^h 56	20 ^h 40	25 ^h 26	25 ^m 8	5 ^h 12	23 ^h 56
S 17	11 38 27	26 ^h 30'45"	26 ^h 38'	22 ^m 18	8 ^s 19	3 ^h 2	22 ^h 1	20 ^h 42	25 ^h 26	25 ^m 8	5 ^h 12	23 ^h 58
M 18	11 42 23	27 ^h 30'16"	27 ^h 36'	25 ^m 5	9 ^s 54	3 ^h 29	22 ^h 5	20 ^h 44	25 ^h 27	25 ^m 8	5 ^h 12	23 ^h 59
T 19	11 46 20	28 ^h 29'44"	28 ^h 34'	27 ^m 53	11 ^s 29	3 ^h 56	22 ^h 10	20 ^h 46	25 ^h 28	25 ^m 9	5 ^h 13	24 ^h 0
W 20	11 50 16	29 ^h 29'10"	29 ^h 32'	0 ^m 43	13 ^s 4	4 ^h 22	22 ^h 14	20 ^h 48	25 ^h 29	25 ^m 9	5 ^h 13	24 ^h 1
T 21	11 54 13	0 ^h 28'34"	0 ^h 29'	3 ^m 34	14 ^s 39	4 ^h 49	22 ^h 19	20 ^h 50	25 ^h 29	25 ^m 9	5 ^h 13	24 ^h 2
F 22	11 58 9	1 ^h 27'56"	1 ^h 27'	6 ^m 27	16 ^s 14	5 ^h 16	22 ^h 24	20 ^h 52	25 ^h 30	25 ^m 10	5 ^h 13	24 ^h 3
S 23	12 2 6	2 ^h 27'16"	2 ^h 24'	9 ^m 22	17 ^s 48	5 ^h 42	22 ^h 28	20 ^h 54	25 ^h 31	25 ^m 10	5 ^h 13	24 ^h 4
S 24	12 6 3	3 ^h 26'34"	3 ^h 22'	12 ^m 19	19 ^s 23	6 ^h 9	22 ^h 33	20 ^h 56	25 ^h 31	25 ^m 10	5 ^h 13	24 ^h 6
M 25	12 9 59	4 ^h 25'50"	4 ^h 20'	15 ^m 19	20 ^s 58	6 ^h 36	22 ^h 37	20 ^h 58	25 ^h 32	25 ^m 11	5 ^h 13	24 ^h 7
T 26	12 13 56	5 ^h 25'04"	5 ^h 18'	18 ^m 21	22 ^s 33	7 ^h 2	22 ^h 42	21 ^h 0	25 ^h 33	25 ^m 11	5 ^h 14	24 ^h 8
W 27	12 17 52	6 ^h 24'15"	6 ^h 16'	21 ^m 27	24 ^s 8	7 ^h 29	22 ^h 46	21 ^h 2	25 ^h 34	25 ^m 12	5 ^h 14	24 ^h 9
T 28	12 21 49	7 ^h 23'24"	7 ^h 15'	24 ^m 36	25 ^s 43	7 ^h 55	22 ^h 51	21 ^h 4	25 ^h 34	25 ^m 12	5 ^h 14	24 ^h 10
F 29	12 25 45	8 ^h 22'31"	8 ^h 14'	27 ^m 48	27 ^s 17	8 ^h 22	22 ^h 55	21 ^h 6	25 ^h 35	25 ^m 12	5 ^h 14	24 ^h 11
S 30	12 29 42	9 ^h 21'35"	9 ^h 13'	1 ^m 4	28 ^s 52	8 ^h 48	23 ^h 0	21 ^h 8	25 ^h 36	25 ^m 13	5 ^h 14	24 ^h 12
S 31	12 33 38	10 ^h 20'37"	10 ^h 13'	4 ^m 25	0 ^s 27	9 ^h 15	23 ^h 5	21 ^h 10	25 ^h 36	25 ^m 13	5 ^h 14	24 ^h 13

Delta T = 102.63 sec. Greg. Calendar

APRIL 1613 GC

00:00 UT

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

SWISS EPHEMERIS for the year 1613
heliocentric

MAY 1613 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♁	♂
W 1	14 35 52	10♁34'36	10♁28	12♁34	19♁33	22♁52	25♁26	22♁12	25♁59	25♁24	5♁19	24♁48
T 2	14 39 48	11°32'37	11°28	18°34	21° 8	23°18	25°30	22°14	26° 0	25°24	5°19	24°49
F 3	14 43 45	12°30'36	12°28	24°26	22°44	23°45	25°35	22°16	26° 0	25°25	5°20	24°51
S 4	14 47 41	13°28'33	13°28	0♁10	24°19	24°11	25°39	22°18	26° 1	25°25	5°20	24°52
S 5	14 51 38	14°26'28	14°27	5°46	25°55	24°37	25°44	22°20	26° 2	25°26	5°20	24°53
M 6	14 55 34	15°24'22	15°27	11°12	27°30	25° 3	25°49	22°22	26° 2	25°26	5°20	24°54
T 7	14 59 31	16°22'15	16°27	16°28	29° 6	25°30	25°53	22°24	26° 3	25°26	5°20	24°55
W 8	15 3 27	17°20'06	17°26	21°35	0♁41	25°56	25°58	22°26	26° 4	25°27	5°20	24°56
T 9	15 7 24	18°17'56	18°25	26°33	2°17	26°22	26° 2	22°28	26° 5	25°27	5°21	24°57
F 10	15 11 21	19°15'45	19°24	1♁20	3°52	26°48	26° 7	22°30	26° 5	25°27	5°21	24°58
S 11	15 15 17	20°13'32	20°22	5°59	5°28	27°15	26°11	22°32	26° 6	25°28	5°21	24°59
S 12	15 19 14	21°11'19	21°20	10°29	7° 3	27°41	26°16	22°34	26° 7	25°28	5°21	25° 1
M13	15 23 10	22° 9'04	22°18	14°50	8°39	28° 7	26°20	22°36	26° 7	25°28	5°21	25° 2
T 14	15 27 7	23° 6'48	23°15	19° 2	10°15	28°33	26°25	22°38	26° 8	25°29	5°21	25° 3
W15	15 31 3	24° 4'31	24°12	23° 7	11°50	28°59	26°29	22°40	26° 9	25°29	5°21	25° 4
T 16	15 35 0	25° 2'12	25° 8	27° 5	13°26	29°26	26°34	22°42	26°10	25°29	5°22	25° 5
F 17	15 38 56	25°59'53	26° 5	0♁56	15° 2	29°52	26°39	22°44	26°10	25°30	5°22	25° 6
S 18	15 42 53	26°57'32	27° 1	4°40	16°37	0♁18	26°43	22°46	26°11	25°30	5°22	25° 7
S 19	15 46 50	27°55'11	27°57	8°19	18°13	0°44	26°48	22°48	26°12	25°31	5°22	25° 8
M20	15 50 46	28°52'48	28°52	11°51	19°49	1°11	26°52	22°50	26°13	25°31	5°22	25°10
T 21	15 54 43	29°50'24	29°48	15°18	21°25	1°37	26°57	22°52	26°13	25°31	5°22	25°11
W22	15 58 39	0♁47'59	0♁44	18°41	23° 1	2° 3	27° 1	22°54	26°14	25°32	5°23	25°12
T 23	16 2 36	1°45'32	1°40	21°59	24°36	2°29	27° 6	22°56	26°15	25°32	5°23	25°13
F 24	16 6 32	2°43'05	2°36	25°12	26°12	2°55	27°10	22°58	26°15	25°32	5°23	25°14
S 25	16 10 29	3°40'35	3°33	28°22	27°48	3°22	27°15	23° 0	26°16	25°33	5°23	25°15
S 26	16 14 26	4°38'05	4°30	1♁29	29°24	3°48	27°20	23° 2	26°17	25°33	5°23	25°16
M27	16 18 22	5°35'33	5°27	4°32	1♁ 0	4°14	27°24	23° 4	26°18	25°33	5°23	25°17
T 28	16 22 19	6°33'00	6°25	7°32	2°36	4°40	27°29	23° 6	26°18	25°34	5°23	25°18
W29	16 26 15	7°30'25	7°23	10°30	4°12	5° 7	27°33	23° 8	26°19	25°34	5°24	25°20
T 30	16 30 12	8°27'50	8°21	13°25	5°48	5°33	27°38	23°10	26°20	25°34	5°24	25°21
F 31	16 34 8	9♁25'13	9♁20	16♁18	7♁24	5♁59	27♁42	23♁12	26♁20	25♁35	5♁24	25♁22

Delta T = 102.41 sec. Greg. Calendar

JUNE 1613 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♁	♂
S 1	16 38 5	10♁22'35	10♁19	19♁10	9♁ 1	6♁25	27♁47	23♁14	26♁21	25♁35	5♁24	25♁23
S 2	16 42 1	11°19'56	11°18	22° 0	10°37	6°52	27°51	23°16	26°22	25°36	5°24	25°24
M 3	16 45 58	12°17'16	12°18	24°48	12°13	7°18	27°56	23°18	26°23	25°36	5°24	25°25
T 4	16 49 55	13°14'36	13°17	27°35	13°49	7°44	28° 1	23°20	26°23	25°36	5°25	25°26
W 5	16 53 51	14°11'54	14°16	0♁21	15°25	8°10	28° 5	23°22	26°24	25°37	5°25	25°27
T 6	16 57 48	15° 9'13	15°15	3° 7	17° 2	8°37	28°10	23°24	26°25	25°37	5°25	25°28
F 7	17 1 44	16° 6'30	16°13	5°52	18°38	9° 3	28°14	23°26	26°26	25°37	5°25	25°30
S 8	17 5 41	17° 3'47	17°12	8°37	20°14	9°29	28°19	23°28	26°26	25°38	5°25	25°31
S 9	17 9 37	18° 1'04	18°10	11°21	21°51	9°56	28°23	23°30	26°27	25°38	5°25	25°32
M10	17 13 34	18°58'20	19° 7	14° 6	23°27	10°22	28°28	23°32	26°28	25°38	5°26	25°33
T 11	17 17 30	19°55'36	20° 5	16°51	25° 3	10°48	28°32	23°34	26°28	25°39	5°26	25°34
W12	17 21 27	20°52'52	21° 2	19°37	26°40	11°15	28°37	23°36	26°29	25°39	5°26	25°35
T 13	17 25 24	21°50'07	21°58	22°23	28°16	11°41	28°41	23°38	26°30	25°39	5°26	25°36
F 14	17 29 20	22°47'23	22°54	25°10	29°53	12° 7	28°46	23°40	26°31	25°40	5°26	25°37
S 15	17 33 17	23°44'37	23°50	27°58	1♁29	12°34	28°51	23°42	26°31	25°40	5°26	25°38
S 16	17 37 13	24°41'52	24°46	0♁48	3° 6	13° 0	28°55	23°44	26°32	25°41	5°26	25°40
M17	17 41 10	25°39'07	25°41	3°39	4°43	13°26	29° 0	23°46	26°33	25°41	5°27	25°41
T 18	17 45 6	26°36'21	26°37	6°32	6°19	13°53	29° 4	23°48	26°33	25°41	5°27	25°42
W19	17 49 3	27°33'35	27°32	9°27	7°56	14°19	29° 9	23°50	26°34	25°42	5°27	25°43
T 20	17 52 59	28°30'48	28°28	12°25	9°33	14°46	29°13	23°52	26°35	25°42	5°27	25°44
F 21	17 56 56	29°28'02	29°23	15°25	11° 9	15°12	29°18	23°54	26°36	25°42	5°27	25°45
S 22	18 0 53	0♁25'15	0♁19	18°27	12°46	15°38	29°22	23°56	26°36	25°43	5°27	25°46
S 23	18 4 49	1°22'27	1°15	21°33	14°23	16° 5	29°27	23°58	26°37	25°43	5°28	25°47
M24	18 8 46	2°19'39	2°12	24°42	16° 0	16°31	29°31	24° 0	26°38	25°43	5°28	25°48
T 25	18 12 42	3°16'50	3° 9	27°54	17°36	16°58	29°36	24° 2	26°39	25°44	5°28	25°49
W26	18 16 39	4°14'01	4° 6	1♁11	19°13	17°24	29°41	24° 4	26°39	25°44	5°28	25°51
T 27	18 20 35	5°11'12	5° 3	4°31	20°50	17°51	29°45	24° 6	26°40	25°44	5°28	25°52
F 28	18 24 32	6° 8'22	6° 2	7°56	22°27	18°17	29°50	24° 8	26°41	25°45	5°28	25°53
S 29	18 28 28	7° 5'32	7° 0	11°26	24° 4	18°44	29°54	24°10	26°41	25°45	5°28	25°54
S 30	18 32 25	8♁ 2'42	7♁59	15♁ 2	25♁41	19♁10	29♁59	24♁12	26♁42	25♁46	5♁29	25♁55

Delta T = 102.30 sec. Greg. Calendar created from Swiss Ephemeris, Copyright Astrodiens AG [13.11.2015]

SWISS EPHEMERIS for the year 1613
heliocentric

JULY 1613 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♁	♂
M 1	18 36 22	8 ⁵⁹ 52	8 ⁵⁸	18 ⁴²	27 ¹¹ 18	19 ³⁷	0 ³	24 ¹⁵	26 ⁴³	25 ⁴⁶	5 ²⁹	25 ⁵⁶
T 2	18 40 18	9 ⁵⁷ 02	9 ⁵⁷	22 ²⁹	28 ⁵⁵	20 ⁴	0 ⁸	24 ¹⁷	26 ⁴⁴	25 ⁴⁶	5 ²⁹	25 ⁵⁷
W 3	18 44 15	10 ⁵⁴ 12	10 ⁵⁶	26 ²²	0 ³²	20 ³⁰	0 ¹²	24 ¹⁹	26 ⁴⁴	25 ⁴⁷	5 ²⁹	25 ⁵⁸
T 4	18 48 11	11 ⁵¹ 22	11 ⁵⁵	0 ²¹	2 ⁹	20 ⁵⁷	0 ¹⁷	24 ²¹	26 ⁴⁵	25 ⁴⁷	5 ²⁹	25 ⁵⁹
F 5	18 52 8	12 ⁴⁸ 33	12 ⁵³	4 ²⁸	3 ⁴⁶	21 ²³	0 ²²	24 ²³	26 ⁴⁶	25 ⁴⁷	5 ²⁹	26 ⁰ 1
S 6	18 56 4	13 ⁴⁵ 43	13 ⁵²	8 ⁴²	5 ²⁴	21 ⁵⁰	0 ²⁶	24 ²⁵	26 ⁴⁷	25 ⁴⁸	5 ³⁰	26 ⁰ 2
S 7	19 0 1	14 ⁴² 55	14 ⁵⁰	13 ⁴	7 ¹	22 ¹⁷	0 ³¹	24 ²⁷	26 ⁴⁷	25 ⁴⁸	5 ³⁰	26 ⁰ 3
M 8	19 3 58	15 ⁴⁰ 06	15 ⁴⁹	17 ³³	8 ³⁸	22 ⁴³	0 ³⁵	24 ²⁹	26 ⁴⁸	25 ⁴⁸	5 ³⁰	26 ⁰ 4
T 9	19 7 54	16 ³⁷ 19	16 ⁴⁶	22 ¹²	10 ¹⁵	23 ¹⁰	0 ⁴⁰	24 ³¹	26 ⁴⁹	25 ⁴⁹	5 ³⁰	26 ⁰ 5
W10	19 11 51	17 ³⁴ 31	17 ⁴⁴	26 ⁵⁸	11 ⁵²	23 ³⁷	0 ⁴⁴	24 ³³	26 ⁴⁹	25 ⁴⁹	5 ³⁰	26 ⁰ 6
T 11	19 15 47	18 ³¹ 45	18 ⁴¹	1 ⁵⁴	13 ³⁰	24 ³	0 ⁴⁹	24 ³⁵	26 ⁵⁰	25 ⁵⁰	5 ³⁰	26 ⁰ 7
F 12	19 19 44	19 ²⁸ 59	19 ³⁷	6 ⁵⁹	15 ⁷	24 ³⁰	0 ⁵³	24 ³⁷	26 ⁵¹	25 ⁵⁰	5 ³¹	26 ⁰ 8
S 13	19 23 40	20 ²⁶ 14	20 ³⁴	12 ¹³	16 ⁴⁴	24 ⁵⁷	0 ⁵⁸	24 ³⁹	26 ⁵²	25 ⁵⁰	5 ³¹	26 ⁰ 9
S 14	19 27 37	21 ²³ 30	21 ³⁰	17 ³⁶	18 ²²	25 ²⁴	1 ⁰ 2	24 ⁴¹	26 ⁵²	25 ⁵¹	5 ³¹	26 ⁰ 10
M15	19 31 33	22 ²⁰ 46	22 ²⁶	23 ⁸	19 ⁵⁹	25 ⁵⁰	1 ⁰ 7	24 ⁴³	26 ⁵³	25 ⁵¹	5 ³¹	26 ⁰ 12
T 16	19 35 30	23 ¹⁸ 04	23 ²¹	28 ⁴⁹	21 ³⁶	26 ¹⁷	1 ⁰ 12	24 ⁴⁵	26 ⁵⁴	25 ⁵¹	5 ³¹	26 ⁰ 13
W17	19 39 27	24 ¹⁵ 22	24 ¹⁷	4 ³⁸	23 ¹⁴	26 ⁴⁴	1 ⁰ 16	24 ⁴⁷	26 ⁵⁴	25 ⁵²	5 ³¹	26 ⁰ 14
T 18	19 43 23	25 ¹² 40	25 ¹²	10 ³⁴	24 ⁵¹	27 ¹¹	1 ⁰ 21	24 ⁴⁹	26 ⁵⁵	25 ⁵²	5 ³¹	26 ⁰ 15
F 19	19 47 20	26 ⁹ 59	26 ⁸	16 ³⁷	26 ²⁹	27 ³⁸	1 ⁰ 25	24 ⁵¹	26 ⁵⁶	25 ⁵²	5 ³²	26 ⁰ 16
S 20	19 51 16	27 ⁷ 19	27 ³	22 ⁴⁶	28 ⁶	28 ⁵	1 ⁰ 30	24 ⁵³	26 ⁵⁷	25 ⁵³	5 ³²	26 ⁰ 17
S 21	19 55 13	28 ⁴ 39	27 ⁵⁹	28 ⁵⁹	29 ⁴⁴	28 ³¹	1 ⁰ 34	24 ⁵⁵	26 ⁵⁷	25 ⁵³	5 ³²	26 ⁰ 18
M22	19 59 9	29 ² 00	28 ⁵⁵	5 ¹¹ 16	1 ²¹	28 ⁵⁸	1 ⁰ 39	24 ⁵⁷	26 ⁵⁸	25 ⁵³	5 ³²	26 ⁰ 19
T 23	20 3 6	29 ⁵⁹ 21	29 ⁵²	11 ³⁵	2 ⁵⁹	29 ²⁵	1 ⁰ 43	24 ⁵⁹	26 ⁵⁹	25 ⁵⁴	5 ³²	26 ⁰ 20
W24	20 7 2	0 ⁵⁶ 43	0 ⁴⁸	17 ⁵⁴	4 ³⁶	29 ⁵²	1 ⁰ 48	25 ¹	27 ⁰	25 ⁵⁴	5 ³²	26 ⁰ 21
T 25	20 10 59	1 ⁵⁴ 05	1 ⁴⁶	24 ¹²	6 ¹⁴	0 ¹⁹	1 ⁰ 52	25 ³	27 ⁰	25 ⁵⁵	5 ³³	26 ⁰ 23
F 26	20 14 56	2 ⁵¹ 27	2 ⁴³	0 ²⁷	7 ⁵¹	0 ⁴⁶	1 ⁰ 57	25 ⁵	27 ¹	25 ⁵⁵	5 ³³	26 ⁰ 24
S 27	20 18 52	3 ⁴⁸ 51	3 ⁴²	6 ³⁹	9 ²⁹	1 ¹³	2 ⁰ 2	25 ⁷	27 ²	25 ⁵⁵	5 ³³	26 ⁰ 25
S 28	20 22 49	4 ⁴⁶ 15	4 ⁴⁰	12 ⁴⁵	11 ⁶	1 ⁴⁰	2 ⁰ 6	25 ⁹	27 ²	25 ⁵⁶	5 ³³	26 ⁰ 26
M29	20 26 45	5 ⁴³ 40	5 ³⁹	18 ⁴⁵	12 ⁴⁴	2 ⁷	2 ⁰ 11	25 ¹¹	27 ³	25 ⁵⁶	5 ³³	26 ⁰ 27
T 30	20 30 42	6 ⁴¹ 06	6 ³⁸	24 ³⁷	14 ²¹	2 ³⁵	2 ⁰ 15	25 ¹³	27 ⁴	25 ⁵⁶	5 ³³	26 ⁰ 28
W31	20 34 38	7 ³⁸ 32	7 ³⁷	0 ²¹	15 ⁵⁹	3 ²	2 ⁰ 20	25 ¹⁵	27 ⁵	25 ⁵⁷	5 ³³	26 ⁰ 29

Delta T = 102.19 sec. Greg. Calendar

AUGUST 1613 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♁	♂
T 1	20 38 35	8 ³⁶ 00	8 ³⁷	5 ⁵⁶	17 ³⁶	3 ²⁹	2 ²⁴	25 ¹⁷	27 ⁵	25 ⁵⁷	5 ³⁴	26 ³⁰
F 2	20 42 31	9 ³³ 28	9 ³⁶	11 ²²	19 ¹⁴	3 ⁵⁶	2 ²⁹	25 ¹⁹	27 ⁶	25 ⁵⁷	5 ³⁴	26 ³¹
S 3	20 46 28	10 ³⁰ 58	10 ³⁵	16 ³⁸	20 ⁵²	4 ²³	2 ³³	25 ²¹	27 ⁷	25 ⁵⁸	5 ³⁴	26 ³²
S 4	20 50 25	11 ²⁸ 29	11 ³⁴	21 ⁴⁵	22 ²⁹	4 ⁵⁰	2 ³⁸	25 ²³	27 ⁷	25 ⁵⁸	5 ³⁴	26 ³³
M 5	20 54 21	12 ²⁶ 01	12 ³³	26 ⁴²	24 ⁷	5 ¹⁸	2 ⁴²	25 ²⁵	27 ⁸	25 ⁵⁸	5 ³⁴	26 ³⁵
T 6	20 58 18	13 ²³ 34	13 ³²	1 ²⁹	25 ⁴⁴	5 ⁴⁵	2 ⁴⁷	25 ²⁷	27 ⁹	25 ⁵⁹	5 ³⁴	26 ³⁶
W 7	21 2 14	14 ²¹ 09	14 ³⁰	6 ⁸	27 ²²	6 ¹²	2 ⁵²	25 ²⁹	27 ¹⁰	25 ⁵⁹	5 ³⁵	26 ³⁷
T 8	21 6 11	15 ¹⁸ 46	15 ²⁸	10 ³⁷	28 ⁵⁹	6 ³⁹	2 ⁵⁶	25 ³¹	27 ¹⁰	26 ⁰	5 ³⁵	26 ³⁸
F 9	21 10 7	16 ¹⁶ 24	16 ²⁵	14 ⁵⁸	0 ³⁷	7 ⁷	3 ⁰ 1	25 ³³	27 ¹¹	26 ⁰	5 ³⁵	26 ³⁹
S 10	21 14 4	17 ¹⁴ 03	17 ²³	19 ¹⁰	2 ¹⁴	7 ³⁴	3 ⁰ 5	25 ³⁵	27 ¹²	26 ⁰	5 ³⁵	26 ⁴⁰
S 11	21 18 0	18 ¹¹ 44	18 ²⁰	23 ¹⁵	3 ⁵²	8 ²	3 ⁰ 10	25 ³⁷	27 ¹³	26 ¹	5 ³⁵	26 ⁴¹
M12	21 21 57	19 ⁹ 27	19 ¹⁶	27 ¹³	5 ²⁹	8 ²⁹	3 ⁰ 14	25 ³⁹	27 ¹³	26 ¹	5 ³⁵	26 ⁴²
T 13	21 25 54	20 ⁷ 11	20 ¹³	1 ³	7 ⁷	8 ⁵⁷	3 ⁰ 19	25 ⁴¹	27 ¹⁴	26 ¹	5 ³⁶	26 ⁴³
W14	21 29 50	21 ⁴ 57	21 ⁹	4 ⁴⁷	8 ⁴⁴	9 ²⁴	3 ⁰ 23	25 ⁴³	27 ¹⁵	26 ²	5 ³⁶	26 ⁴⁴
T 15	21 33 47	22 ² 45	22 ⁵	8 ²⁵	10 ²²	9 ⁵²	3 ⁰ 28	25 ⁴⁵	27 ¹⁵	26 ²	5 ³⁶	26 ⁴⁵
F 16	21 37 43	23 ⁰ 34	23 ¹	11 ⁵⁸	11 ⁵⁹	10 ¹⁹	3 ⁰ 32	25 ⁴⁷	27 ¹⁶	26 ²	5 ³⁶	26 ⁴⁷
S 17	21 41 40	23 ⁵⁸ 24	23 ⁵⁷	15 ²⁵	13 ³⁶	10 ⁴⁷	3 ⁰ 37	25 ⁴⁹	27 ¹⁷	26 ³	5 ³⁶	26 ⁴⁸
S 18	21 45 36	24 ⁵⁶ 16	24 ⁵³	18 ⁴⁷	15 ¹⁴	11 ¹⁴	3 ⁰ 42	25 ⁵¹	27 ¹⁸	26 ³	5 ³⁶	26 ⁴⁹
M19	21 49 33	25 ⁵⁴ 09	25 ⁴⁹	22 ⁵	16 ⁵¹	11 ⁴²	3 ⁰ 46	25 ⁵³	27 ¹⁸	26 ³	5 ³⁶	26 ⁵⁰
T 20	21 53 29	26 ⁵² 03	26 ⁴⁵	25 ¹⁹	18 ²⁸	12 ¹⁰	3 ⁰ 51	25 ⁵⁵	27 ¹⁹	26 ⁴	5 ³⁷	26 ⁵¹
W21	21 57 26	27 ⁴⁹ 59	27 ⁴²	28 ²⁸	20 ⁶	12 ³⁷	3 ⁰ 55	25 ⁵⁷	27 ²⁰	26 ⁴	5 ³⁷	26 ⁵²
T 22	22 1 23	28 ⁴⁷ 56	28 ⁴⁰	1 ³⁵	21 ⁴³	13 ⁵	4 ⁰ 0	25 ⁵⁹	27 ²⁰	26 ⁵	5 ³⁷	26 ⁵³
F 23	22 5 19	29 ⁴⁵ 54	29 ³⁷	4 ³⁸	23 ²⁰	13 ³³	4 ⁰ 4	26 ¹	27 ²¹	26 ⁵	5 ³⁷	26 ⁵⁴
S 24	22 9 16	0 ⁴³ 54	0 ³⁶	7 ³⁸	24 ⁵⁷	14 ⁰	4 ⁰ 9	26 ³	27 ²²	26 ⁵	5 ³⁷	26 ⁵⁵
S 25	22 13 12	1 ⁴¹ 55	1 ³⁴	10 ³⁶	26 ³⁴	14 ²⁸	4 ⁰ 13	26 ⁵	27 ²³	26 ⁶	5 ³⁷	26 ⁵⁶
M26	22 17 9	2 ³⁹ 57	2 ³³	13 ³¹	28 ¹²	14 ⁵⁶	4 ⁰ 18	26 ⁷	27 ²³	26 ⁶	5 ³⁸	26 ⁵⁷
T 27	22 21 5	3 ³⁸ 01	3 ³³	16 ²⁴	29 ⁴⁹	15 ²⁴	4 ⁰ 22	26 ⁹	27 ²⁴	26 ⁶	5 ³⁸	26 ⁵⁹
W28	22 25 2	4 ³⁶ 06	4 ³²	19 ¹⁵	1 ²⁶	15 ⁵²	4 ⁰ 27	26 ¹¹	27 ²⁵	26 ⁷	5 ³⁸	27 ⁰ 0
T 29	22 28 58	5 ³⁴ 13	5 ³²	22 ⁵	3 ³	16 ²⁰	4 ⁰ 32	26 ¹³	27 ²⁶	26 ⁷	5 ³⁸	27 ⁰ 1
F 30	22 32 55	6 ³² 22	6 ³²	24 ⁵³	4 ⁴⁰	16 ⁴⁸	4 ⁰ 36	26 ¹⁵	27 ²⁶	26 ⁷	5 ³⁸	27 ⁰ 2
S 31	22 36 52	7 ³⁰ 32	7 ³²	27 ⁴⁰	6 ¹⁷	17 ¹⁶	4 ⁰ 41	26 ¹⁷	27 ²⁷	26 ⁸	5 ³⁸	27 ⁰ 3

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SWISS EPHEMERIS for the year 1613
heliocentric

SEPTEMBER 1613 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♁	♂
S 1	22 40 48	8°28'44	8°32	0°27	7°54	17°44	4°45	26°20	27°28	26°8	5°38	27°4
M 2	22 44 45	9°26'58	9°32	3°12	9°30	18°12	4°50	26°22	27°28	26°8	5°39	27°5
T 3	22 48 41	10°25'13	10°31	5°57	11°7	18°40	4°54	26°24	27°29	26°9	5°39	27°6
W 4	22 52 38	11°23'31	11°31	8°42	12°44	19°8	4°59	26°26	27°30	26°9	5°39	27°7
T 5	22 56 34	12°21'51	12°30	11°27	14°21	19°36	5°3	26°28	27°31	26°10	5°39	27°8
F 6	23 0 31	13°20'13	13°29	14°11	15°57	20°5	5°8	26°30	27°31	26°10	5°39	27°9
S 7	23 4 27	14°18'37	14°28	16°56	17°34	20°33	5°12	26°32	27°32	26°10	5°39	27°10
S 8	23 8 24	15°17'03	15°26	19°42	19°11	21°1	5°17	26°34	27°33	26°11	5°40	27°12
M 9	23 12 21	16°15'32	16°24	22°28	20°47	21°29	5°21	26°36	27°33	26°11	5°40	27°13
T 10	23 16 17	17°14'03	17°22	25°15	22°24	21°58	5°26	26°38	27°34	26°11	5°40	27°14
W11	23 20 14	18°12'36	18°19	28°4	24°0	22°26	5°31	26°40	27°35	26°12	5°40	27°15
T 12	23 24 10	19°11'11	19°16	0°54	25°37	22°55	5°35	26°42	27°36	26°12	5°40	27°16
F 13	23 28 7	20°9'48	20°13	3°45	27°13	23°23	5°40	26°44	27°36	26°12	5°40	27°17
S 14	23 32 3	21°8'27	21°9	6°38	28°49	23°52	5°44	26°46	27°37	26°13	5°40	27°18
S 15	23 36 0	22°7'08	22°6	9°33	0°26	24°20	5°49	26°48	27°38	26°13	5°41	27°19
M16	23 39 56	23°5'51	23°3	12°30	2°2	24°49	5°53	26°50	27°39	26°13	5°41	27°20
T 17	23 43 53	24°4'35	24°0	15°30	3°38	25°17	5°58	26°52	27°39	26°14	5°41	27°21
W18	23 47 49	25°3'22	24°57	18°33	5°14	25°46	6°2	26°54	27°40	26°14	5°41	27°22
T 19	23 51 46	26°2'11	25°55	21°39	6°50	26°15	6°7	26°56	27°41	26°15	5°41	27°23
F 20	23 55 43	27°1'01	26°53	24°48	8°26	26°44	6°11	26°58	27°41	26°15	5°41	27°25
S 21	23 59 39	27°59'53	27°51	28°0	10°2	27°12	6°16	27°0	27°42	26°15	5°42	27°26
S 22	0 3 36	28°58'47	28°50	1°17	11°38	27°41	6°21	27°2	27°43	26°16	5°42	27°27
M23	0 7 32	29°57'42	29°50	4°38	13°14	28°10	6°25	27°4	27°44	26°16	5°42	27°28
T 24	0 11 29	0°56'39	0°49	8°3	14°50	28°39	6°30	27°6	27°44	26°16	5°42	27°29
W25	0 15 25	1°55'38	1°49	11°33	16°26	29°8	6°34	27°8	27°45	26°17	5°42	27°30
T 26	0 19 22	2°54'39	2°50	15°8	18°2	29°37	6°39	27°10	27°46	26°17	5°42	27°31
F 27	0 23 18	3°53'42	3°50	18°49	19°37	0°6	6°43	27°12	27°46	26°17	5°43	27°32
S 28	0 27 15	4°52'46	4°51	22°36	21°13	0°35	6°48	27°14	27°47	26°18	5°43	27°33
S 29	0 31 12	5°51'53	5°52	26°29	22°49	1°4	6°52	27°16	27°48	26°18	5°43	27°34
M30	0 35 8	6°51'02	6°53	0°29	24°24	1°33	6°57	27°18	27°49	26°18	5°43	27°35

Delta T = 101.97 sec. Greg. Calendar

OCTOBER 1613 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♁	♂
T 1	0 39 5	7°50'12	7°54	4°36	26°0	2°2	7°1	27°20	27°49	26°19	5°43	27°36
W 2	0 43 1	8°49'26	8°55	8°50	27°35	2°32	7°6	27°22	27°50	26°19	5°43	27°38
T 3	0 46 58	9°48'41	9°55	13°12	29°11	3°1	7°10	27°24	27°51	26°20	5°43	27°39
F 4	0 50 54	10°47'58	10°56	17°42	0°46	3°30	7°15	27°26	27°52	26°20	5°44	27°40
S 5	0 54 51	11°47'18	11°56	22°20	2°22	4°0	7°20	27°28	27°52	26°20	5°44	27°41
S 6	0 58 47	12°46'40	12°56	27°8	3°57	4°29	7°24	27°30	27°53	26°21	5°44	27°42
M 7	1 2 44	13°46'05	13°55	2°4	5°32	4°58	7°29	27°32	27°54	26°21	5°44	27°43
T 8	1 6 41	14°45'32	14°54	7°9	7°8	5°28	7°33	27°34	27°54	26°21	5°44	27°44
W 9	1 10 37	15°45'01	15°53	12°23	8°43	5°57	7°38	27°36	27°55	26°22	5°44	27°45
T 10	1 14 34	16°44'33	16°51	17°47	10°18	6°27	7°42	27°38	27°56	26°22	5°45	27°46
F 11	1 18 30	17°44'06	17°50	23°19	11°53	6°57	7°47	27°40	27°57	26°22	5°45	27°47
S 12	1 22 27	18°43'42	18°47	29°0	13°29	7°26	7°51	27°42	27°57	26°23	5°45	27°48
S 13	1 26 23	19°43'20	19°45	4°49	15°4	7°56	7°56	27°44	27°58	26°23	5°45	27°49
M14	1 30 20	20°43'01	20°43	10°45	16°39	8°26	8°0	27°46	27°59	26°23	5°45	27°50
T 15	1 34 16	21°42'43	21°40	16°49	18°14	8°56	8°5	27°49	27°59	26°24	5°45	27°51
W16	1 38 13	22°42'27	22°38	22°58	19°49	9°26	8°10	27°51	28°0	26°24	5°45	27°53
T 17	1 42 10	23°42'13	23°36	29°11	21°24	9°55	8°14	27°53	28°1	26°25	5°46	27°54
F 18	1 46 6	24°42'01	24°35	5°28	22°59	10°25	8°19	27°55	28°2	26°25	5°46	27°55
S 19	1 50 3	25°41'51	25°34	11°47	24°34	10°55	8°23	27°57	28°2	26°25	5°46	27°56
S 20	1 53 59	26°41'42	26°33	18°6	26°9	11°25	8°28	27°59	28°3	26°26	5°46	27°57
M21	1 57 56	27°41'35	27°33	24°24	27°44	11°56	8°32	28°1	28°4	26°26	5°46	27°58
T 22	2 1 52	28°41'30	28°33	0°39	29°19	12°26	8°37	28°3	28°5	26°26	5°46	27°59
W23	2 5 49	29°41'26	29°33	6°50	0°54	12°56	8°41	28°5	28°5	26°27	5°47	28°0
T 24	2 9 45	0°41'24	0°34	12°56	2°29	13°26	8°46	28°7	28°6	26°27	5°47	28°1
F 25	2 13 42	1°41'24	1°35	18°56	4°4	13°56	8°50	28°9	28°7	26°27	5°47	28°2
S 26	2 17 39	2°41'25	2°37	24°48	5°39	14°27	8°55	28°11	28°7	26°28	5°47	28°3
S 27	2 21 35	3°41'28	3°39	0°32	7°14	14°57	9°0	28°13	28°8	26°28	5°47	28°4
M28	2 25 32	4°41'33	4°40	6°6	8°48	15°28	9°4	28°15	28°9	26°28	5°47	28°5
T 29	2 29 28	5°41'40	5°42	11°32	10°23	15°58	9°9	28°17	28°10	26°29	5°47	28°7
W30	2 33 25	6°41'48	6°44	16°48	11°58	16°29	9°13	28°19	28°10	26°29	5°48	28°8
T 31	2 37 21	7°41'59	7°46	21°54	13°33	16°59	9°18	28°21	28°11	26°30	5°48	28°9

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SWISS EPHEMERIS for the year 1613
heliocentric

NOVEMBER 1613 GC

00:00 UT

Day	Sid.t	Terra	☾	♁	♂	♄	♃	♅	♁	♆	♁	♁
F 1	2 41 18	8♁42'11	8♁48	26♁51	15♁8	17♁30	9♁22	28♁23	28♁12	26♁30	5♁48	28♁10
S 2	2 45 14	9°42'26	9°49	1♁38	16°43	18° 1	9°27	28°25	28°13	26°30	5°48	28°11
S 3	2 49 11	10°42'42	10°51	6°16	18°17	18°31	9°31	28°27	28°13	26°31	5°48	28°12
M 4	2 53 8	11°43'01	11°52	10°45	19°52	19° 2	9°36	28°29	28°14	26°31	5°48	28°13
T 5	2 57 4	12°43'21	12°52	15° 6	21°27	19°33	9°40	28°31	28°15	26°31	5°49	28°14
W 6	3 1 1	13°43'44	13°52	19°18	23° 2	20° 4	9°45	28°33	28°15	26°32	5°49	28°15
T 7	3 4 57	14°44'08	14°52	23°23	24°37	20°35	9°49	28°35	28°16	26°32	5°49	28°16
F 8	3 8 54	15°44'34	15°52	27°20	26°11	21° 6	9°54	28°37	28°17	26°32	5°49	28°17
S 9	3 12 50	16°45'02	16°51	1♁10	27°46	21°37	9°59	28°39	28°18	26°33	5°49	28°18
S 10	3 16 47	17°45'32	17°50	4°54	29°21	22° 8	10° 3	28°41	28°18	26°33	5°49	28°19
M 11	3 20 43	18°46'04	18°49	8°32	0♁56	22°39	10° 8	28°43	28°19	26°33	5°50	28°20
T 12	3 24 40	19°46'38	19°47	12° 4	2°31	23°10	10°12	28°45	28°20	26°34	5°50	28°21
W 13	3 28 37	20°47'13	20°46	15°31	4° 6	23°42	10°17	28°47	28°20	26°34	5°50	28°23
T 14	3 32 33	21°47'49	21°44	18°54	5°40	24°13	10°21	28°49	28°21	26°35	5°50	28°24
F 15	3 36 30	22°48'28	22°43	22°11	7°15	24°44	10°26	28°51	28°22	26°35	5°50	28°25
S 16	3 40 26	23°49'07	23°42	25°25	8°50	25°16	10°30	28°53	28°23	26°35	5°50	28°26
S 17	3 44 23	24°49'47	24°42	28°34	10°25	25°47	10°35	28°55	28°23	26°36	5°50	28°27
M 18	3 48 19	25°50'29	25°42	1♁41	12° 0	26°19	10°39	28°58	28°24	26°36	5°51	28°28
T 19	3 52 16	26°51'12	26°42	4°44	13°35	26°50	10°44	29° 0	28°25	26°36	5°51	28°29
W 20	3 56 12	27°51'55	27°43	7°44	15°10	27°22	10°49	29° 2	28°26	26°37	5°51	28°30
T 21	4 0 9	28°52'40	28°44	10°41	16°45	27°54	10°53	29° 4	28°26	26°37	5°51	28°31
F 22	4 4 6	29°53'26	29°45	13°36	18°20	28°26	10°58	29° 6	28°27	26°37	5°51	28°32
S 23	4 8 2	0♁54'13	0♁47	16°29	19°55	28°57	11° 2	29° 8	28°28	26°38	5°51	28°33
S 24	4 11 59	1°55'00	1°49	19°21	21°30	29°29	11° 7	29°10	28°28	26°38	5°52	28°34
M 25	4 15 55	2°55'49	2°52	22°10	23° 5	0♁1	11°11	29°12	28°29	26°39	5°52	28°35
T 26	4 19 52	3°56'39	3°54	24°59	24°40	0°33	11°16	29°14	28°30	26°39	5°52	28°36
W 27	4 23 48	4°57'31	4°57	27°46	26°15	1° 5	11°20	29°16	28°31	26°39	5°52	28°37
T 28	4 27 45	5°58'23	5°59	0♁32	27°50	1°37	11°25	29°18	28°31	26°40	5°52	28°39
F 29	4 31 41	6°59'16	7° 2	3°18	29°25	2° 9	11°29	29°20	28°32	26°40	5°52	28°40
S 30	4 35 38	8♁0'11	8♁5	6♁3	1♁3	2♁2	11♁34	29♁22	28♁33	26♁40	5♁52	28♁41

Delta T = 101.75 sec. Greg. Calendar

DECEMBER 1613 GC

00:00 UT

Day	Sid.t	Terra	☾	♁	♂	♄	♃	♅	♁	♆	♁	♁
S 1	4 39 35	9♁1'07	9♁7	8♁47	2♁35	3♁14	11♁39	29♁24	28♁34	26♁41	5♁53	28♁42
M 2	4 43 31	10° 2'03	10° 9	11°32	4°10	3°46	11°43	29°26	28°34	26°41	5°53	28°43
T 3	4 47 28	11° 3'01	11°11	14°17	5°45	4°18	11°48	29°28	28°35	26°41	5°53	28°44
W 4	4 51 24	12° 4'01	12°13	17° 2	7°20	4°51	11°52	29°30	28°36	26°42	5°53	28°45
T 5	4 55 21	13° 5'01	13°14	19°47	8°55	5°23	11°57	29°32	28°36	26°42	5°53	28°46
F 6	4 59 17	14° 6'02	14°15	22°34	10°31	5°56	12° 1	29°34	28°37	26°42	5°53	28°47
S 7	5 3 14	15° 7'05	15°15	25°21	12° 6	6°29	12° 6	29°36	28°38	26°43	5°54	28°48
S 8	5 7 10	16° 8'08	16°15	28° 9	13°41	7° 1	12°10	29°38	28°39	26°43	5°54	28°49
M 9	5 11 7	17° 9'13	17°14	0♁59	15°16	7°34	12°15	29°40	28°39	26°44	5°54	28°50
T 10	5 15 4	18°10'19	18°14	3°50	16°52	8° 7	12°19	29°42	28°40	26°44	5°54	28°51
W 11	5 19 0	19°11'25	19°13	6°44	18°27	8°39	12°24	29°44	28°41	26°44	5°54	28°52
T 12	5 22 57	20°12'32	20°12	9°39	20° 2	9°12	12°29	29°46	28°42	26°45	5°54	28°53
F 13	5 26 53	21°13'40	21°11	12°36	21°38	9°45	12°33	29°48	28°42	26°45	5°55	28°54
S 14	5 30 50	22°14'49	22°10	15°36	23°13	10°18	12°38	29°50	28°43	26°45	5°55	28°56
S 15	5 34 46	23°15'57	23°10	18°39	24°48	10°51	12°42	29°52	28°44	26°46	5°55	28°57
M 16	5 38 43	24°17'06	24°10	21°45	26°24	11°24	12°47	29°54	28°44	26°46	5°55	28°58
T 17	5 42 40	25°18'15	25°10	24°54	27°59	11°58	12°51	29°56	28°45	26°46	5°55	28°59
W 18	5 46 36	26°19'24	26°10	28° 7	29°35	12°31	12°56	29°59	28°46	26°47	5°55	29° 0
T 19	5 50 33	27°20'33	27°11	1♁23	1♁10	13° 4	13° 0	0♁1	28°47	26°47	5°55	29° 1
F 20	5 54 29	28°21'42	28°12	4°44	2°46	13°37	13° 5	0° 3	28°47	26°47	5°56	29° 2
S 21	5 58 26	29°22'51	29°14	8°10	4°21	14°11	13° 9	0° 5	28°48	26°48	5°56	29° 3
S 22	6 2 22	0♁24'01	0♁16	11°40	5°57	14°44	13°14	0° 7	28°49	26°48	5°56	29° 4
M 23	6 6 19	1°25'10	1°18	15°15	7°32	15°18	13°19	0° 9	28°49	26°49	5°56	29° 5
T 24	6 10 15	2°26'19	2°21	18°56	9° 8	15°51	13°23	0°11	28°50	26°49	5°56	29° 6
W 25	6 14 12	3°27'29	3°24	22°43	10°44	16°25	13°28	0°13	28°51	26°49	5°56	29° 7
T 26	6 18 9	4°28'38	4°26	26°37	12°19	16°59	13°32	0°15	28°52	26°50	5°57	29° 8
F 27	6 22 5	5°29'47	5°29	0♁37	13°55	17°32	13°37	0°17	28°52	26°50	5°57	29° 9
S 28	6 26 2	6°30'57	6°32	4°44	15°31	18° 6	13°41	0°19	28°53	26°50	5°57	29°10
S 29	6 29 58	7°32'06	7°35	8°58	17° 7	18°40	13°46	0°21	28°54	26°51	5°57	29°11
M 30	6 33 55	8°33'16	8°38	13°20	18°42	19°14	13°50	0°23	28°55	26°51	5°57	29°12
T 31	6 37 51	9♁34'25	9♁41	17♁51	20♁18	19♁48	13♁55	0♁25	28♁55	26♁51	5♁57	29♁14

Delta T = 101.65 sec. Greg. Calendar created from Swiss Ephemeris, Copyright Astrodienst AG [13.11.2015]