

SWISS EPHEMERIS for the year 1647

JANUARY 1647 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓
T 1	6 41 49	10 ³ 34'38	15 ¹¹ 28	28 ³ 31	29 ²⁷ 24	11 ¹⁰ R13	6 ⁰ R27	11 ¹⁰ R12	2 ²⁷ 44	9 ²⁷ 17	6 ⁰ R35	21 ⁰ R54	22 ²² 25	29 ²⁷ 53	16 ⁰ R58							
W 2	6 45 46	11 ⁰ 35'49	27 ⁰ 55	29 ⁰ 53	0 ⁰ 39	10 ⁰ Ω58	6 ⁰ Ω20	11 ⁰ Ω11	2 ⁴⁷	9 ¹⁹	6 ⁰ II34	21 ⁰ Ω53	22 ⁰ 22	29 ⁰ 59	16 ⁰ Ω54							
T 3	6 49 42	12 ⁰ 37'00	10 ⁰ 11	1 ⁰ 11	1 ⁰ 55	10 ⁰ 42	6 ⁰ 13	11 ⁰ 9	2 ⁵⁰	9 ²¹	6 ⁰ 33	21 ⁰ 51	22 ⁰ 19	0 ⁰ 6	16 ⁰ 50							
F 4	6 53 39	13 ⁰ 38'11	22 ⁰ 16	2 ⁰ 26	3 ⁰ 10	10 ⁰ 26	6 ⁰ 7	11 ⁰ 8	2 ⁵³	9 ²³	6 ⁰ 32	21 ⁰ 50	22 ⁰ 16	0 ⁰ 13	16 ⁰ 45							
S 5	6 57 35	14 ⁰ 39'21	4 ⁰ 34	3 ⁰ 36	4 ⁰ 25	10 ⁰ 9	6 ⁰ 0	11 ⁰ 8	2 ⁵⁶	9 ²⁵	6 ⁰ 31	21 ⁰ 49	22 ⁰ 13	0 ⁰ 19	16 ⁰ 41							
S 6	7 1 32	15 ⁰ 40'32	16 ⁰ 6	4 ⁰ 41	5 ⁰ 41	9 ⁰ 51	5 ⁰ 52	11 ⁰ 7	2 ⁵⁹	9 ²⁷	6 ⁰ 30	21 ⁰ D49	22 ⁰ 9	0 ⁰ 26	16 ⁰ 37							
M 7	7 5 28	16 ⁰ 41'42	27 ⁰ 55	5 ⁰ 40	6 ⁰ 56	9 ⁰ 33	5 ⁰ 45	11 ⁰ 6	3 ⁰ 2	9 ²⁹	6 ⁰ 29	21 ⁰ 49	22 ⁰ 6	0 ⁰ 33	16 ⁰ 32							
T 8	7 9 25	17 ⁰ 42'52	9 ⁰ 42	6 ⁰ 33	8 ⁰ 12	9 ⁰ 14	5 ⁰ 38	11 ⁰ 6	3 ⁰ 5	9 ³¹	6 ⁰ 28	21 ⁰ 49	22 ⁰ 3	0 ⁰ 39	16 ⁰ 28							
W 9	7 13 21	18 ⁰ 44'01	21 ⁰ 30	7 ⁰ 18	9 ⁰ 27	8 ⁰ 55	5 ⁰ 31	11 ⁰ 5	3 ⁰ 8	9 ³³	6 ⁰ 28	21 ⁰ 50	22 ⁰ 0	0 ⁰ 46	16 ⁰ 24							
T 10	7 17 18	19 ⁰ 45'09	3 ⁰ 21	7 ⁰ 54	10 ⁰ 43	8 ⁰ 34	5 ⁰ 23	11 ⁰ 5	3 ⁰ 10	9 ³⁵	6 ⁰ 27	21 ⁰ 50	21 ⁰ 57	0 ⁰ 53	16 ⁰ 19							
F 11	7 21 15	20 ⁰ 46'17	15 ⁰ 19	8 ⁰ 21	11 ⁰ 58	8 ⁰ 14	5 ⁰ 16	11 ⁰ 5	3 ⁰ 13	9 ³⁶	6 ⁰ 26	21 ⁰ 50	21 ⁰ 54	0 ⁰ 59	16 ⁰ 15							
S 12	7 25 11	21 ⁰ 47'24	27 ⁰ 28	8 ⁰ 37	13 ⁰ 13	7 ⁰ 53	5 ⁰ 8	11 ⁰ D 5	3 ⁰ 16	9 ³⁸	6 ⁰ 25	21 ⁰ R50	21 ⁰ 50	1 ⁰ 6	16 ⁰ 11							
S 13	7 29 8	22 ⁰ 48'30	9 ⁰ 51	8 ⁰ R43	14 ⁰ 29	7 ⁰ 31	5 ⁰ 0	11 ⁰ 5	3 ⁰ 19	9 ⁴⁰	6 ⁰ 24	21 ⁰ 50	21 ⁰ 47	1 ⁰ 13	16 ⁰ 6							
M14	7 33 4	23 ⁰ 49'36	22 ⁰ 32	8 ⁰ 37	15 ⁰ 44	7 ⁰ 9	4 ⁰ 53	11 ⁰ 5	3 ⁰ 21	9 ⁴²	6 ⁰ 24	21 ⁰ D50	21 ⁰ 44	1 ⁰ 19	16 ⁰ 2							
T 15	7 37 1	24 ⁰ 50'40	5 ⁰ 35	8 ⁰ 20	16 ⁰ 59	6 ⁰ 46	4 ⁰ 45	11 ⁰ 5	3 ⁰ 24	9 ⁴⁴	6 ⁰ 23	21 ⁰ 50	21 ⁰ 41	1 ⁰ 26	15 ⁰ 58							
W16	7 40 57	25 ⁰ 51'44	19 ⁰ 3	7 ⁰ 51	18 ⁰ 15	6 ⁰ 24	4 ⁰ 37	11 ⁰ 5	3 ⁰ 27	9 ⁴⁵	6 ⁰ 22	21 ⁰ 51	21 ⁰ 38	1 ⁰ 32	15 ⁰ 53							
T 17	7 44 54	26 ⁰ 52'46	2 ⁰ II59	7 ⁰ 10	19 ⁰ 30	6 ⁰ 0	4 ⁰ 29	11 ⁰ 6	3 ⁰ 29	9 ⁴⁷	6 ⁰ 22	21 ⁰ 51	21 ⁰ 34	1 ⁰ 39	15 ⁰ 49							
F 18	7 48 50	27 ⁰ 53'48	17 ⁰ 21	6 ⁰ 20	20 ⁰ 46	5 ⁰ 37	4 ⁰ 21	11 ⁰ 6	3 ⁰ 32	9 ⁴⁹	6 ⁰ 21	21 ⁰ 52	21 ⁰ 31	1 ⁰ 46	15 ⁰ 45							
S 19	7 52 47	28 ⁰ 54'49	2 ⁰ Ω 7	5 ⁰ 21	22 ⁰ 1	5 ⁰ 13	4 ⁰ 13	11 ⁰ 7	3 ⁰ 34	9 ⁵⁰	6 ⁰ 20	21 ⁰ 52	21 ⁰ 28	1 ⁰ 52	15 ⁰ 41							
S 20	7 56 44	29 ⁰ 55'48	17 ⁰ 11	4 ⁰ 14	23 ⁰ 16	4 ⁰ 50	4 ⁰ 5	11 ⁰ 8	3 ⁰ 37	9 ⁵²	6 ⁰ 20	21 ⁰ R52	21 ⁰ 25	1 ⁰ 59	15 ⁰ 37							
M21	8 0 40	0 ⁰ 56'47	2 ⁰ Ω26	3 ⁰ 2	24 ⁰ 32	4 ⁰ 26	3 ⁰ 57	11 ⁰ 9	3 ⁰ 39	9 ⁵⁴	6 ⁰ 19	21 ⁰ 52	21 ⁰ 22	2 ⁰ 6	15 ⁰ 32							
T 22	8 4 37	1 ⁰ 57'45	17 ⁰ 40	1 ⁰ 47	25 ⁰ 47	4 ⁰ 2	3 ⁰ 49	11 ⁰ 10	3 ⁰ 42	9 ⁵⁵	6 ⁰ 18	21 ⁰ 52	21 ⁰ 19	2 ⁰ 12	15 ⁰ 28							
W23	8 8 33	2 ⁰ 58'42	2 ⁰ II44	0 ⁰ 32	27 ⁰ 2	3 ⁰ 38	3 ⁰ 41	11 ⁰ 11	3 ⁰ 44	9 ⁵⁷	6 ⁰ 18	21 ⁰ 51	21 ⁰ 15	2 ⁰ 19	15 ⁰ 24							
T 24	8 12 30	3 ⁰ 59'38	17 ⁰ 30	29 ⁰ 317	28 ⁰ 18	3 ⁰ 14	3 ⁰ 33	11 ⁰ 12	3 ⁰ 46	9 ⁵⁸	6 ⁰ 17	21 ⁰ 49	21 ⁰ 12	2 ⁰ 26	15 ⁰ 20							
F 25	8 16 26	5 ⁰ 0'34	1 ⁰ Ω52	28 ⁰ 6	29 ⁰ 33	2 ⁰ 50	3 ⁰ 25	11 ⁰ 14	3 ⁰ 48	10 ⁰ 0	6 ⁰ 17	21 ⁰ 47	21 ⁰ 9	2 ⁰ 32	15 ⁰ 16							
S 26	8 20 23	6 ⁰ 1'28	15 ⁰ 47	27 ⁰ 0	0 ⁰ Ω48	2 ⁰ 26	3 ⁰ 17	11 ⁰ 15	3 ⁰ 51	10 ⁰ 1	6 ⁰ 16	21 ⁰ 46	21 ⁰ 6	2 ⁰ 39	15 ⁰ 12							
S 27	8 24 19	7 ⁰ 2'22	29 ⁰ 14	26 ⁰ 1	2 ⁰ 4	2 ⁰ 2	3 ⁰ 9	11 ⁰ 17	3 ⁰ 53	10 ⁰ 3	6 ⁰ 16	21 ⁰ 45	21 ⁰ 3	2 ⁰ 46	15 ⁰ 8							
M28	8 28 16	8 ⁰ 3'15	12 ⁰ II15	25 ⁰ 9	3 ⁰ 19	1 ⁰ 39	3 ⁰ 1	11 ⁰ 19	3 ⁰ 55	10 ⁰ 4	6 ⁰ 15	21 ⁰ D45	21 ⁰ 0	2 ⁰ 52	15 ⁰ 4							
T 29	8 32 13	9 ⁰ 4'08	24 ⁰ 54	24 ⁰ 25	4 ⁰ 34	1 ⁰ 15	2 ⁰ 54	11 ⁰ 20	3 ⁰ 57	10 ⁰ 5	6 ⁰ 15	21 ⁰ 46	20 ⁰ 56	2 ⁰ 59	15 ⁰ 1							
W30	8 36 9	10 ⁰ 4'59	7 ⁰ 14	23 ⁰ 50	5 ⁰ 49	0 ⁰ 52	2 ⁰ 46	11 ⁰ 22	3 ⁰ 59	10 ⁰ 7	6 ⁰ 14	21 ⁰ 47	20 ⁰ 53	3 ⁰ 6	14 ⁰ 57							
T 31	8 40 6	11 ⁰ 5'50	19 ⁰ 120	23 ⁰ 323	7 ⁰ 5	0 ⁰ Ω30	2 ⁰ Ω38	11 ⁰ 24	4 ⁰ 1	10 ⁰ 8	6 ⁰ II14	21 ⁰ Ω49	20 ⁰ Ω50	3 ⁰ Ω12	14 ⁰ Ω53							

Delta T = 49.27 sec.

Greg. Calendar

FEBRUARY 1647 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓
F 1	8 44 2	12 ⁰ 6'39	1 ⁰ 317	23 ⁰ R 5	8 ⁰ Ω20	0 ⁰ R 7	2 ⁰ R30	11 ⁰ Ω26	4 ⁰ 3	10 ⁰ 9	6 ⁰ R14	21 ⁰ Ω50	20 ⁰ Ω47	3 ⁰ Ω19	14 ⁰ R49							
S 2	8 47 59	13 ⁰ 7'28	13 ⁰ 7	22 ⁰ 354	9 ⁰ 35	29 ⁰ Ω45	2 ⁰ Ω22	11 ⁰ 29	4 ⁰ 5	10 ⁰ 11	6 ⁰ II13	21 ⁰ 51	20 ⁰ 44	3 ⁰ 25	14 ⁰ Ω46							
S 3	8 51 55	14 ⁰ 8'15	24 ⁰ 54	22 ⁰ D52	10 ⁰ 50	29 ⁰ 24	2 ⁰ 14	11 ⁰ 31	4 ⁰ 7	10 ⁰ 12	6 ⁰ 13	21 ⁰ R52	20 ⁰ 40	3 ⁰ 32	14 ⁰ 42							
M 4	8 55 52	15 ⁰ 9'01	6 ⁰ Ω41	22 ⁰ 56	12 ⁰ 6	29 ⁰ 3	2 ⁰ 7	11 ⁰ 34	4 ⁰ 8	10 ⁰ 13	6 ⁰ 13	21 ⁰ 51	20 ⁰ 37	3 ⁰ 39	14 ⁰ 39							
T 5	8 59 48	16 ⁰ 9'46	18 ⁰ 30	23 ⁰ 8	13 ⁰ 21	28 ⁰ 42	1 ⁰ 59	11 ⁰ 36	4 ⁰ 10	10 ⁰ 14	6 ⁰ 12	21 ⁰ 49	20 ⁰ 34	3 ⁰ 45	14 ⁰ 35							
W 6	9 3 45	17 ⁰ 10'30	0 ⁰ 23	23 ⁰ 26	14 ⁰ 36	28 ⁰ 22	1 ⁰ 52	11 ⁰ 39	4 ⁰ 12	10 ⁰ 15	6 ⁰ 12	21 ⁰ 45	20 ⁰ 31	3 ⁰ 52	14 ⁰ 32							
T 7	9 7 42	18 ⁰ 11'12	12 ⁰ 22	23 ⁰ 49	15 ⁰ 51	28 ⁰ 3	1 ⁰ 44	11 ⁰ 42	4 ⁰ 13	10 ⁰ 17	6 ⁰ 12	21 ⁰ 41	20 ⁰ 28	3 ⁰ 59	14 ⁰ 28							
F 8	9 11 38	19 ⁰ 11'52	24 ⁰ 29	24 ⁰ 19	17 ⁰ 7	27 ⁰ 44	1 ⁰ 37	11 ⁰ 44	4 ⁰ 15	10 ⁰ 18	6 ⁰ 11	21 ⁰ 36	20 ⁰ 25	4 ⁰ 5	14 ⁰ 25							
S 9	9 15 35	20 ⁰ 12'31	6 ⁰ Ω45	24 ⁰ 53	18 ⁰ 22	27 ⁰ 26	1 ⁰ 30	11 ⁰ 47	4 ⁰ 17	10 ⁰ 19	6 ⁰ 11	21 ⁰ 31	20 ⁰ 21	4 ⁰ 12	14 ⁰ 22							
S 10	9 19 31	21 ⁰ 13'08	19 ⁰ 14	25 ⁰ 32	19 ⁰ 37	27 ⁰ 9	1 ⁰ 22	11 ⁰ 50	4 ⁰ 18	10 ⁰ 20	6 ⁰ 11	21 ⁰ 27	20 ⁰ 18	4 ⁰ 19	14 ⁰ 19							
M11	9 23 28	22 ⁰ 13'43	1 ⁰ Ω57	26 ⁰ 15	20 ⁰ 52	26 ⁰ 52	1 ⁰ 15	11 ⁰ 54	4 ⁰ 19	10 ⁰ 21	6 ⁰ 11	21 ⁰ 23	20 ⁰ 15	4 ⁰ 25	14 ⁰ 16							
T 12	9 27 24	23 ⁰ 14'17	14 ⁰ 57	27 ⁰ 1	22 ⁰ 7	26 ⁰ 36	1 ⁰ 8	11 ⁰ 57	4 ⁰ 21	10 ⁰ 22	6 ⁰ 11	21 ⁰ 22	20 ⁰ 12	4 ⁰ 32	14 ⁰ 13							
W13	9 31 21	24 ⁰ 14'49	28 ⁰ 17	27 ⁰ 52	23 ⁰ 22	26 ⁰ 21	1 ⁰ 1	12 ⁰ 0	4 ⁰ 22	10 ⁰ 23	6 ⁰ 11	21 ⁰ D21	20 ⁰ 9	4 ⁰ 39	14 ⁰ 10							
T 14	9 35 17	25 ⁰ 15'19	11 ⁰ II59	28 ⁰ 46	24 ⁰ 38	26 ⁰ 6	0 ⁰ 55	12 ⁰ 4	4 ⁰ 23	10 ⁰ 24	6 ⁰ 10	21 ⁰ 22	20 ⁰ 5	4 ⁰ 45	14 ⁰ 7							
F 15	9 39 14	26 ⁰ 15'47	26 ⁰ 5	29 ⁰ 43	25 ⁰ 53	25 ⁰ 52	0 ⁰ 48	12 ⁰ 7	4 ⁰ 25	10 ⁰ 24	6 ⁰ 10	21 ⁰ 24	20 ⁰ 2	4 ⁰ 52	14 ⁰ 4							
S 16	9 43 11	27 ⁰ 16'13	10 ⁰ Ω33	0 ⁰ Ω42	27 ⁰ 8	25 ⁰ 39	0 ⁰ 42	12 ⁰ 11	4 ⁰ 26	10 ⁰ 25	6 ⁰ 10	21 ⁰ 25	19 ⁰ 59	4 ⁰ 59	14 ⁰ 2							
S 17	9 47 7	28 ⁰ 16'38	25 ⁰ 21	1 ⁰ 44	28 ⁰ 23	25																

SWISS EPHEMERIS for the year 1647

MARCH 1647 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♁	♃	♄
F 1	10 34 26	10♋19'18	9♌58	16♍45	13♎23	24°R 0	29°R30	13♏ 7	4♐36	10♑33	6♒11	20♓50	19♔18	6♕25	13°R35
S 2	10 38 22	11°19'22	21°46	18°11	14°37	23♌58	29♌25	13°12	4°37	10°34	6°12	20°R50	19°15	6°32	13♌33
S 3	10 42 19	12°19'23	3♍31	19°37	15°52	23°57	29°21	13°17	4°37	10°34	6°12	20°49	19°11	6°38	13°32
M 4	10 46 15	13°19'23	15°19	21° 5	17° 7	23°D56	29°17	13°22	4°38	10°34	6°12	20°46	19° 8	6°45	13°31
T 5	10 50 12	14°19'20	27°13	22°34	18°22	23°56	29°13	13°27	4°38	10°35	6°12	20°41	19° 5	6°52	13°29
W 6	10 54 9	15°19'16	9♋14	24° 4	19°37	23°57	29° 9	13°32	4°38	10°35	6°13	20°33	19° 2	6°58	13°28
T 7	10 58 5	16°19'10	21°24	25°36	20°52	23°59	29° 6	13°38	4°38	10°35	6°13	20°23	18°59	7° 5	13°27
F 8	11 2 2	17°19'02	3♌45	27° 9	22° 6	24° 1	29° 2	13°43	4°38	10°35	6°13	20°12	18°56	7°12	13°26
S 9	11 5 58	18°18'52	16°17	28°43	23°21	24° 4	28°59	13°48	4°38	10°35	6°14	20° 1	18°52	7°18	13°26
S 10	11 9 55	19°18'40	29° 0	0♋18	24°36	24° 8	28°56	13°54	4°R38	10°36	6°14	19°51	18°49	7°25	13°25
M11	11 13 51	20°18'25	11♌55	1°55	25°51	24°12	28°53	14° 0	4°38	10°36	6°15	19°43	18°46	7°32	13°24
T 12	11 17 48	21°18'09	25° 3	3°32	27° 5	24°17	28°51	14° 5	4°38	10°36	6°15	19°37	18°43	7°38	13°24
W13	11 21 44	22°17'50	8♒25	5°11	28°20	24°23	28°48	14°11	4°38	10°R36	6°16	19°34	18°40	7°45	13°23
T 14	11 25 41	23°17'29	22° 3	6°51	29°35	24°29	28°46	14°17	4°38	10°36	6°16	19°D33	18°37	7°52	13°23
F 15	11 29 37	24°17'05	5♌57	8°33	0♌49	24°36	28°44	14°23	4°38	10°36	6°17	19°34	18°33	7°58	13°23
S 16	11 33 34	25°16'40	20° 8	10°15	2° 4	24°44	28°42	14°29	4°37	10°35	6°17	19°R34	18°30	8° 5	13°23
S 17	11 37 31	26°16'12	4♌35	11°59	3°19	24°52	28°41	14°35	4°37	10°35	6°18	19°33	18°27	8°11	13°D23
M18	11 41 27	27°15'41	19°15	13°44	4°33	25° 1	28°39	14°41	4°37	10°35	6°18	19°30	18°24	8°18	13°23
T 19	11 45 24	28°15'08	4♎4	15°31	5°48	25°10	28°38	14°47	4°36	10°35	6°19	19°25	18°21	8°25	13°23
W20	11 49 20	29°14'34	18°53	17°19	7° 2	25°20	28°37	14°53	4°36	10°35	6°19	19°16	18°17	8°31	13°23
T 21	11 53 17	0♌13'56	3♌36	19° 8	8°17	25°31	28°36	14°59	4°35	10°35	6°20	19° 6	18°14	8°38	13°24
F 22	11 57 13	1°13'17	18° 3	20°58	9°31	25°42	28°35	15° 5	4°34	10°34	6°21	18°55	18°11	8°45	13°24
S 23	12 1 10	2°12'36	2♎ 8	22°50	10°46	25°54	28°35	15°12	4°34	10°34	6°21	18°44	18° 8	8°51	13°25
S 24	12 5 6	3°11'53	15°47	24°43	12° 0	26° 6	28°34	15°18	4°33	10°34	6°22	18°35	18° 5	8°58	13°25
M25	12 9 3	4°11'08	28°59	26°37	13°14	26°18	28°D34	15°25	4°32	10°33	6°23	18°28	18° 2	9° 5	13°26
T 26	12 13 0	5°10'22	11♌46	28°33	14°29	26°32	28°34	15°31	4°31	10°33	6°24	18°23	17°58	9°11	13°27
W27	12 16 56	6° 9'34	24°11	0♌30	15°43	26°45	28°34	15°38	4°30	10°32	6°24	18°21	17°55	9°18	13°28
T 28	12 20 53	7° 8'43	6♌18	2°28	16°57	26°59	28°35	15°44	4°30	10°32	6°25	18°D21	17°52	9°25	13°29
F 29	12 24 49	8° 7'52	18°13	4°28	18°12	27°14	28°35	15°51	4°29	10°31	6°26	18°R21	17°49	9°31	13°30
S 30	12 28 46	9° 6'58	0♎ 1	6°28	19°26	27°29	28°36	15°58	4°28	10°31	6°27	18°20	17°46	9°38	13°31
S 31	12 32 42	10♌ 6'02	11♍48	8♌30	20♌40	27♌45	28♌37	16♌ 4	4♌27	10♌30	6♒27	18♓18	17♔42	9♍45	13♌33

Delta T = 49.06 sec. Greg. Calendar

APRIL 1647 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♁	♃	♄
M 1	12 36 39	11♌ 5'05	23♍39	10♌33	21♌55	28♌ 1	28♌38	16♌11	4°R25	10°R30	6♒28	18°R14	17♔39	9♍51	13♌34
T 2	12 40 35	12° 4'06	5♋38	12°37	23° 9	28°17	28°40	16°18	4♌24	10♌29	6°29	18♓ 7	17°36	9°58	13°36
W 3	12 44 32	13° 3'04	17°47	14°41	24°23	28°34	28°41	16°25	4°23	10°28	6°30	17°57	17°33	10° 5	13°37
T 4	12 48 29	14° 2'01	0♌10	16°46	25°37	28°51	28°43	16°32	4°22	10°28	6°31	17°45	17°30	10°11	13°39
F 5	12 52 25	15° 0'56	12°46	18°52	26°51	29° 9	28°45	16°39	4°21	10°27	6°32	17°31	17°27	10°18	13°41
S 6	12 56 22	15°59'49	25°37	20°58	28° 6	29°27	28°47	16°46	4°19	10°26	6°33	17°18	17°23	10°25	13°43
S 7	13 0 18	16°58'40	8♌41	23° 3	29°20	29°46	28°49	16°53	4°18	10°25	6°34	17° 6	17°20	10°31	13°45
M 8	13 4 15	17°57'29	21°56	25° 9	0♌34	0♌ 5	28°52	17° 0	4°16	10°25	6°35	16°55	17°17	10°38	13°47
T 9	13 8 11	18°56'15	5♒22	27°13	1°48	0°24	28°55	17° 7	4°15	10°24	6°36	16°48	17°14	10°45	13°49
W10	13 12 8	19°55'00	18°59	29°17	3° 2	0°44	28°57	17°15	4°13	10°23	6°37	16°44	17°11	10°51	13°51
T 11	13 16 4	20°53'42	2♌44	1♌20	4°16	1° 4	29° 0	17°22	4°12	10°22	6°38	16°42	17° 8	10°58	13°54
F 12	13 20 1	21°52'22	16°38	3°20	5°30	1°24	29° 4	17°29	4°10	10°21	6°39	16°41	17° 4	11° 4	13°56
S 13	13 23 58	22°51'00	0♌42	5°19	6°44	1°45	29° 7	17°36	4° 9	10°20	6°40	16°41	17° 1	11°11	13°59
S 14	13 27 54	23°49'36	14°54	7°16	7°58	2° 6	29°11	17°44	4° 7	10°19	6°41	16°40	16°58	11°18	14° 1
M15	13 31 51	24°48'09	29°14	9°10	9°12	2°27	29°14	17°51	4° 5	10°18	6°42	16°37	16°55	11°24	14° 4
T 16	13 35 47	25°46'40	13♎38	11° 1	10°26	2°49	29°18	17°58	4° 4	10°17	6°43	16°31	16°52	11°31	14° 7
W17	13 39 44	26°45'09	28° 1	12°49	11°39	3°11	29°22	18° 6	4° 2	10°16	6°44	16°22	16°48	11°38	14°10
T 18	13 43 40	27°43'35	12♌19	14°33	12°53	3°33	29°26	18°13	4° 0	10°15	6°45	16°12	16°45	11°44	14°13
F 19	13 47 37	28°42'00	26°26	16°14	14° 7	3°56	29°31	18°21	3°58	10°14	6°46	16° 0	16°42	11°51	14°16
S 20	13 51 33	29°40'23	10♎16	17°51	15°21	4°19	29°35	18°28	3°56	10°13	6°47	15°49	16°39	11°58	14°19
S 21	13 55 30	0♌38'44	23°45	19°24	16°34	4°42	29°40	18°36	3°54	10°12	6°48	15°39	16°36	12° 4	14°22
M22	13 59 26	1°37'04	6♌52	20°53	17°48	5° 5	29°45	18°43	3°52	10°11	6°49	15°31	16°33	12°11	14°26
T 23	14 3 23	2°35'21	19°37	22°18	19° 2	5°29	29°50	18°51	3°50	10° 9	6°51	15°26	16°29	12°18	14°29
W24	14 7 20	3°33'38	2♌ 2	23°38	20°16	5°53	29°55	18°58	3°48	10° 8	6°52	15°23	16°26	12°24	14°33
T 25	14 11 16	4°31'52	14°11	24°54	21°29	6°18	0♌ 0	19° 6	3°46	10° 7	6°53	15°D22	16°23	12°31	14°36
F 26	14 15 13	5°30'06	26° 7	26° 5	22°43	6°42	0° 6	19°14	3°44	10° 6	6°54	15°23	16°20	12°38	14°40
S 27	14 19 9	6°28'17	7♎58	27°11	23°56	7° 7	0°12	19°21	3°42	10° 4	6°55	15°R23	16°17	12°44	14°44
S 28	14 23 6	7°26'27	19°47	28°13	25°10	7°32	0°17	19°29	3°40	10° 3	6°57	15°22	16°14	12°51	14°47
M29	14 27 2	8°24'36	1♋40	29°10	26°23	7°57	0°23	19°37	3°38	10° 2	6°58	15°19	16°10	12°58	14°51
T 30	14 30 59	9♌22'43	13♋43	0♒ 2	27♌37	8♌23	0♌29	19♌44	3♌36	10♌ 1	6♒59	15♓14	16♔ 7	13♍ 4	14♌55

Delta T = 48.96 sec. Greg. Calendar created from Swiss Ephemeris, Copyright Astrodienst AG [13.11.2015]

SWISS EPHEMERIS for the year 1647

JULY 1647 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁
M 1	18 35 25	8♁47'09	18II46	23II 8	12♁32	10♁14	10♁25	27♁25	1°R13	8°R26	8II21	12°R45	12♁50	19♁58	20♁52
T 2	18 39 22	9°44'22	3♁16	24°59	13°43	10°48	10°38	27°31	1°♁11	8°♁25	8°23	12♁45	12°47	20° 4	20°59
W 3	18 43 19	10°41'35	18° 1	26°53	14°54	11°23	10°50	27°38	1°10	8°23	8°24	12°D45	12°44	20°11	21° 6
T 4	18 47 15	11°38'49	2♁55	28°50	16° 5	11°58	11° 2	27°44	1° 8	8°22	8°25	12°45	12°41	20°18	21°13
F 5	18 51 12	12°36'02	17°49	0♁49	17°16	12°33	11°14	27°50	1° 6	8°21	8°26	12°R45	12°37	20°24	21°20
S 6	18 55 8	13°33'15	2♁36	2°51	18°27	13° 8	11°26	27°57	1° 5	8°19	8°27	12°45	12°34	20°31	21°27
S 7	18 59 5	14°30'28	17°10	4°54	19°38	13°43	11°39	28° 3	1° 3	8°18	8°28	12°45	12°31	20°38	21°34
M 8	19 3 1	15°27'41	1♁27	6°59	20°49	14°18	11°51	28° 9	1° 1	8°17	8°30	12°45	12°28	20°44	21°41
T 9	19 6 58	16°24'55	15°23	9° 5	22° 0	14°54	12° 4	28°15	1° 0	8°16	8°31	12°D44	12°25	20°51	21°48
W10	19 10 54	17°22'08	29° 0	11°12	23°11	15°29	12°16	28°21	0°58	8°15	8°32	12°45	12°22	20°58	21°55
T 11	19 14 51	18°19'21	12II17	13°20	24°21	16° 5	12°28	28°27	0°57	8°13	8°33	12°45	12°18	21° 4	22° 2
F 12	19 18 48	19°16'34	25°15	15°29	25°32	16°40	12°41	28°33	0°56	8°12	8°34	12°45	12°15	21°11	22° 9
S 13	19 22 44	20°13'48	7♁58	17°37	26°43	17°16	12°54	28°39	0°54	8°11	8°35	12°46	12°12	21°18	22°16
S 14	19 26 41	21°11'02	20°27	19°46	27°53	17°52	13° 6	28°44	0°53	8°10	8°36	12°47	12° 9	21°25	22°23
M15	19 30 37	22° 8'16	2♁44	21°54	29° 3	18°27	13°19	28°50	0°52	8° 9	8°37	12°47	12° 6	21°31	22°30
T 16	19 34 34	23° 5'31	14°52	24° 1	0♁14	19° 3	13°31	28°56	0°51	8° 8	8°38	12°R48	12° 3	21°38	22°37
W17	19 38 30	24° 2'46	26°52	26° 8	1°24	19°39	13°44	29° 1	0°49	8° 7	8°39	12°47	11°59	21°45	22°44
T 18	19 42 27	25° 0'02	8♁46	28°13	2°34	20°15	13°57	29° 7	0°48	8° 6	8°40	12°46	11°56	21°51	22°51
F 19	19 46 23	25°57'19	20°37	0♁18	3°44	20°52	14°10	29°12	0°47	8° 5	8°41	12°45	11°53	21°58	22°58
S 20	19 50 20	26°54'36	2♁27	2°21	4°55	21°28	14°22	29°18	0°46	8° 4	8°42	12°43	11°50	22° 5	23° 5
S 21	19 54 17	27°51'54	14°18	4°23	6° 5	22° 4	14°35	29°23	0°45	8° 3	8°43	12°40	11°47	22°11	23°12
M22	19 58 13	28°49'13	26°14	6°23	7°14	22°40	14°48	29°28	0°44	8° 2	8°44	12°38	11°43	22°18	23°19
T 23	20 2 10	29°46'32	8°V17	8°22	8°24	23°17	15° 1	29°33	0°43	8° 1	8°45	12°37	11°40	22°25	23°26
W24	20 6 6	0♁43'53	20°33	10°19	9°34	23°54	15°14	29°38	0°43	8° 1	8°46	12°35	11°37	22°31	23°33
T 25	20 10 3	1°41'15	3♁ 4	12°15	10°44	24°30	15°27	29°43	0°42	8° 0	8°47	12°D35	11°34	22°38	23°41
F 26	20 13 59	2°38'38	15°56	14° 9	11°53	25° 7	15°40	29°48	0°41	7°59	8°48	12°36	11°31	22°45	23°48
S 27	20 17 56	3°36'02	29°10	16° 2	13° 3	25°44	15°53	29°53	0°40	7°58	8°49	12°37	11°28	22°51	23°55
S 28	20 21 52	4°33'28	12II51	17°52	14°12	26°21	16° 6	29°58	0°40	7°58	8°50	12°38	11°24	22°58	24° 2
M29	20 25 49	5°30'54	26°58	19°42	15°22	26°58	16°19	0II 2	0°39	7°57	8°50	12°39	11°21	23° 5	24° 9
T 30	20 29 46	6°28'22	11♁31	21°29	16°31	27°35	16°32	0° 7	0°38	7°56	8°51	12°R40	11°18	23°11	24°15
W31	20 33 42	7♁25'51	26♁24	23♁15	17♁40	28♁12	16♁45	0II12	0♁38	7♁56	8II52	12♁39	11♁15	23♁18	24♁22

Delta T = 48.70 sec.

Greg. Calendar

AUGUST 1647 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁
T 1	20 37 39	8♁23'21	11♁31	24♁59	18♁49	28♁49	16♁58	0II16	0°R38	7°R55	8II53	12°R38	11♁12	23♁25	24♁29
F 2	20 41 35	9°20'52	26°43	26°42	19°58	29°26	17°11	0°20	0°♁37	7°♁54	8°54	12♁35	11° 9	23°31	24°36
S 3	20 45 32	10°18'23	11♁49	28°23	21° 7	0♁ 4	17°24	0°25	0°37	7°54	8°54	12°31	11° 5	23°38	24°43
S 4	20 49 28	11°15'56	26°41	0♁ 3	22°16	0°41	17°37	0°29	0°36	7°53	8°55	12°27	11° 2	23°45	24°50
M 5	20 53 25	12°13'29	11♁12	1°41	23°25	1°19	17°50	0°33	0°36	7°53	8°56	12°24	10°59	23°51	24°57
T 6	20 57 21	13°11'04	25°17	3°18	24°33	1°56	18° 3	0°37	0°36	7°52	8°57	12°21	10°56	23°58	25° 4
W 7	21 1 18	14° 8'39	8III56	4°53	25°42	2°34	18°16	0°41	0°36	7°52	8°57	12°D20	10°53	24° 5	25°11
T 8	21 5 15	15° 6'15	22° 9	6°26	26°50	3°12	18°29	0°45	0°36	7°52	8°58	12°20	10°49	24°11	25°18
F 9	21 9 11	16° 3'53	5♁ 0	7°58	27°58	3°49	18°42	0°48	0°D36	7°51	8°59	12°22	10°46	24°18	25°24
S 10	21 13 8	17° 1'31	17°32	9°28	29° 6	4°27	18°55	0°52	0°36	7°51	8°59	12°23	10°43	24°25	25°31
S 11	21 17 4	17°59'10	29°49	10°57	0♁14	5° 5	19° 8	0°56	0°36	7°51	9° 0	12°25	10°40	24°32	25°38
M12	21 21 1	18°56'50	11♁54	12°24	1°22	5°43	19°22	0°59	0°36	7°50	9° 0	12°R25	10°37	24°38	25°45
T 13	21 24 57	19°54'32	23°52	13°49	2°30	6°21	19°35	1° 3	0°36	7°50	9° 1	12°25	10°34	24°45	25°51
W14	21 28 54	20°52'15	5♁45	15°13	3°38	7° 0	19°48	1° 6	0°36	7°50	9° 1	12°22	10°30	24°52	25°58
T 15	21 32 50	21°49'59	17°35	16°35	4°45	7°38	20° 1	1° 9	0°36	7°50	9° 2	12°18	10°27	24°58	26° 5
F 16	21 36 47	22°47'44	29°25	17°56	5°53	8°16	20°14	1°12	0°37	7°49	9° 2	12°12	10°24	25° 5	26°11
S 17	21 40 44	23°45'31	11♁17	19°14	7° 0	8°55	20°27	1°15	0°37	7°49	9° 3	12° 5	10°21	25°12	26°18
S 18	21 44 40	24°43'19	23°11	20°31	8° 7	9°33	20°40	1°18	0°38	7°49	9° 3	11°57	10°18	25°18	26°24
M19	21 48 37	25°41'09	5°V12	21°46	9°14	10°12	20°53	1°21	0°38	7°49	9° 4	11°49	10°15	25°25	26°31
T 20	21 52 33	26°39'01	17°19	23° 0	10°21	10°50	21° 6	1°24	0°39	7°D49	9° 4	11°42	10°11	25°32	26°38
W21	21 56 30	27°36'54	29°37	24°11	11°28	11°29	21°19	1°26	0°39	7°49	9° 5	11°37	10° 8	25°38	26°44
T 22	22 0 26	28°34'49	12♁ 9	25°20	12°34	12° 8	21°32	1°29	0°40	7°49	9° 5	11°33	10° 5	25°45	26°50
F 23	22 4 23	29°32'46	24°57	26°27	13°41	12°46	21°45	1°31	0°40	7°49	9° 5	11°D32	10° 2	25°52	26°57
S 24	22 8 19	0♁30'45	8II 5	27°32	14°47	13°25	21°58	1°33	0°41	7°49	9° 6	11°32	9°59	25°58	27° 3
S 25	22 12 16	1°28'46	21°37	28°35	15°53	14° 4	22°12	1°36	0°42	7°50	9° 6	11°33	9°55	26° 5	27°10
M26	22 16 13	2°26'48	5♁34	29°35	16°59	14°43	22°25	1°38	0°43	7°50	9° 6	11°R34	9°52	26°12	27°16
T 27	22 20 9	3°24'53	19°58	0♁32	18° 5	15°23	22°38	1°40	0°44	7°50	9° 7	11°34	9°49	26°18	27°22
W28	22 24 6	4°23'00	4♁45	1°27	19°10	16° 2	22°51	1°42	0°45	7°50	9° 7	11°32	9°46	26°25	27°28
T 29	22 28 2	5°21'08	19°50	2°18	20°16	16°41	23° 3	1°43	0°46	7°51	9° 7	11°27	9°43	26°32	27°34
F 30	22 31 59	6°19'18	5♁ 5	3° 7	21°21	17°20	23°16	1°45	0°47	7°51	9° 7	11°21	9°40	26°39	27°41
S 31	22 35 55	7♁17'30	20♁19	3♁52	22♁26	18♁ 0	23♁29	1II47	0♁48	7♁51	9II 8	11♁13	9♁36	26♁45	27♁47

Delta T = 48.62 sec.

Greg. Calendar

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SWISS EPHEMERIS for the year 1647

SEPTEMBER 1647 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁
S 1	22 39 52	8 ^h 15'43	5 ^h 22	4 ^h 34	23 ^h 31	18 ^h 39	23 ^h 02	1 ^h 48	0 ^h 49	7 ^h 52	9 ^h 8	11 ^h 4	9 ^h 33	26 ^h 52	27 ^h 53
M 2	22 43 48	9 ^h 13'58	20 ^h 4	5 ^h 12	24 ^h 36	19 ^h 19	23 ^h 55	1 ^h 50	0 ^h 50	7 ^h 52	9 ^h 8	10 ^h 56	9 ^h 30	26 ^h 59	27 ^h 59
T 3	22 47 45	10 ^h 12'15	4 ^h 19	5 ^h 45	25 ^h 40	19 ^h 59	24 ^h 8	1 ^h 51	0 ^h 51	7 ^h 52	9 ^h 8	10 ^h 49	9 ^h 27	27 ^h 5	28 ^h 5
W 4	22 51 42	11 ^h 10'33	18 ^h 5	6 ^h 15	26 ^h 44	20 ^h 38	24 ^h 21	1 ^h 52	0 ^h 52	7 ^h 53	9 ^h 8	10 ^h 45	9 ^h 24	27 ^h 12	28 ^h 10
T 5	22 55 38	12 ^h 8'53	1 ^h 22	6 ^h 39	27 ^h 48	21 ^h 18	24 ^h 34	1 ^h 53	0 ^h 54	7 ^h 53	9 ^h 8	10 ^h 43	9 ^h 20	27 ^h 19	28 ^h 16
F 6	22 59 35	13 ^h 7'14	14 ^h 12	6 ^h 59	28 ^h 52	21 ^h 58	24 ^h 46	1 ^h 54	0 ^h 55	7 ^h 54	9 ^h 8	10 ^h 42	9 ^h 17	27 ^h 25	28 ^h 22
S 7	23 3 31	14 ^h 5'37	26 ^h 41	7 ^h 13	29 ^h 56	22 ^h 38	24 ^h 59	1 ^h 55	0 ^h 57	7 ^h 55	9 ^h 8	10 ^h 42	9 ^h 14	27 ^h 32	28 ^h 28
S 8	23 7 28	15 ^h 4'02	8 ^h 53	7 ^h 22	0 ^h 59	23 ^h 18	25 ^h 12	1 ^h 55	0 ^h 58	7 ^h 55	9 ^h 8	10 ^h 43	9 ^h 11	27 ^h 39	28 ^h 34
M 9	23 11 24	16 ^h 2'28	20 ^h 53	7 ^h 24	2 ^h 2	23 ^h 58	25 ^h 24	1 ^h 56	1 ^h 0	7 ^h 56	9 ^h 8	10 ^h 42	9 ^h 8	27 ^h 45	28 ^h 39
T 10	23 15 21	17 ^h 0'56	2 ^h 46	7 ^h 20	3 ^h 5	24 ^h 38	25 ^h 37	1 ^h 57	1 ^h 1	7 ^h 56	9 ^h 8	10 ^h 40	9 ^h 5	27 ^h 52	28 ^h 45
W 11	23 19 17	17 ^h 59'25	14 ^h 35	7 ^h 10	4 ^h 8	25 ^h 18	25 ^h 50	1 ^h 57	1 ^h 3	7 ^h 57	9 ^h 8	10 ^h 35	9 ^h 1	27 ^h 59	28 ^h 50
T 12	23 23 14	18 ^h 57'57	26 ^h 24	6 ^h 53	5 ^h 10	25 ^h 59	26 ^h 2	1 ^h 57	1 ^h 4	7 ^h 58	9 ^h 8	10 ^h 28	8 ^h 58	28 ^h 6	28 ^h 56
F 13	23 27 11	19 ^h 56'30	8 ^h 16	6 ^h 29	6 ^h 12	26 ^h 39	26 ^h 15	1 ^h 57	1 ^h 6	7 ^h 59	9 ^h 8	10 ^h 17	8 ^h 55	28 ^h 12	29 ^h 1
S 14	23 31 7	20 ^h 55'05	20 ^h 13	5 ^h 58	7 ^h 14	27 ^h 19	26 ^h 27	1 ^h 57	1 ^h 8	7 ^h 59	9 ^h 8	10 ^h 5	8 ^h 52	28 ^h 19	29 ^h 6
S 15	23 35 4	21 ^h 53'41	2 ^h 15	5 ^h 20	8 ^h 15	28 ^h 0	26 ^h 40	1 ^h 57	1 ^h 10	8 ^h 0	9 ^h 8	9 ^h 52	8 ^h 49	28 ^h 26	29 ^h 12
M 16	23 39 0	22 ^h 52'20	14 ^h 25	4 ^h 35	9 ^h 16	28 ^h 40	26 ^h 52	1 ^h 57	1 ^h 12	8 ^h 1	9 ^h 8	9 ^h 39	8 ^h 46	28 ^h 32	29 ^h 17
T 17	23 42 57	23 ^h 51'01	26 ^h 43	3 ^h 44	10 ^h 17	29 ^h 21	27 ^h 4	1 ^h 57	1 ^h 13	8 ^h 2	9 ^h 8	9 ^h 28	8 ^h 42	28 ^h 39	29 ^h 22
W 18	23 46 53	24 ^h 49'44	9 ^h 10	2 ^h 48	11 ^h 18	0 ^h 12	27 ^h 17	1 ^h 57	1 ^h 15	8 ^h 3	9 ^h 8	9 ^h 18	8 ^h 39	28 ^h 46	29 ^h 27
T 19	23 50 50	25 ^h 48'29	21 ^h 48	1 ^h 47	12 ^h 18	0 ^h 42	27 ^h 29	1 ^h 56	1 ^h 17	8 ^h 4	9 ^h 7	9 ^h 11	8 ^h 36	28 ^h 52	29 ^h 32
F 20	23 54 46	26 ^h 47'17	4 ^h 40	0 ^h 43	13 ^h 18	1 ^h 23	27 ^h 41	1 ^h 56	1 ^h 19	8 ^h 5	9 ^h 7	9 ^h 7	8 ^h 33	28 ^h 59	29 ^h 37
S 21	23 58 43	27 ^h 46'07	17 ^h 47	29 ^h 37	14 ^h 17	2 ^h 4	27 ^h 53	1 ^h 55	1 ^h 21	8 ^h 6	9 ^h 7	9 ^h 5	8 ^h 30	29 ^h 6	29 ^h 42
S 22	0 2 39	28 ^h 44'59	1 ^h 13	28 ^h 30	15 ^h 16	2 ^h 45	28 ^h 6	1 ^h 54	1 ^h 24	8 ^h 7	9 ^h 7	9 ^h 5	8 ^h 26	29 ^h 12	29 ^h 47
M 23	0 6 36	29 ^h 43'53	15 ^h 0	27 ^h 25	16 ^h 15	3 ^h 26	28 ^h 18	1 ^h 53	1 ^h 26	8 ^h 8	9 ^h 6	9 ^h 5	8 ^h 23	29 ^h 19	29 ^h 52
T 24	0 10 33	0 ^h 42'50	29 ^h 9	26 ^h 23	17 ^h 13	4 ^h 7	28 ^h 30	1 ^h 52	1 ^h 28	8 ^h 9	9 ^h 6	9 ^h 4	8 ^h 20	29 ^h 26	29 ^h 56
W 25	0 14 29	1 ^h 41'49	13 ^h 40	25 ^h 25	18 ^h 11	4 ^h 48	28 ^h 42	1 ^h 51	1 ^h 30	8 ^h 10	9 ^h 6	9 ^h 1	8 ^h 17	29 ^h 32	0 ^h 1
T 26	0 18 26	2 ^h 40'51	28 ^h 30	24 ^h 33	19 ^h 9	5 ^h 30	28 ^h 54	1 ^h 50	1 ^h 33	8 ^h 11	9 ^h 5	8 ^h 55	8 ^h 14	29 ^h 39	0 ^h 6
F 27	0 22 22	3 ^h 39'54	13 ^h 32	23 ^h 49	20 ^h 6	6 ^h 11	29 ^h 5	1 ^h 48	1 ^h 35	8 ^h 12	9 ^h 5	8 ^h 46	8 ^h 11	29 ^h 46	0 ^h 10
S 28	0 26 19	4 ^h 39'00	28 ^h 37	23 ^h 14	21 ^h 3	6 ^h 52	29 ^h 17	1 ^h 47	1 ^h 37	8 ^h 14	9 ^h 5	8 ^h 36	8 ^h 7	29 ^h 53	0 ^h 15
S 29	0 30 15	5 ^h 38'07	13 ^h 35	22 ^h 49	21 ^h 59	7 ^h 34	29 ^h 29	1 ^h 45	1 ^h 40	8 ^h 15	9 ^h 4	8 ^h 24	8 ^h 4	29 ^h 59	0 ^h 19
M 30	0 34 12	6 ^h 37'17	28 ^h 18	22 ^h 34	22 ^h 55	8 ^h 15	29 ^h 41	1 ^h 44	1 ^h 42	8 ^h 16	9 ^h 4	8 ^h 13	8 ^h 1	0 ^h 6	0 ^h 23

Delta T = 48.55 sec.

Greg. Calendar

OCTOBER 1647 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁
T 1	0 38 8	7 ^h 36'29	12 ^h 36	22 ^h D29	23 ^h 50	8 ^h 57	29 ^h 52	1 ^h R42	1 ^h 45	8 ^h 18	9 ^h R 3	8 ^h R 3	7 ^h 58	0 ^h 13	0 ^h 27
W 2	0 42 5	8 ^h 35'42	26 ^h 26	22 ^h 35	24 ^h 44	9 ^h 39	0 ^h 15	1 ^h 40	1 ^h 47	8 ^h 19	9 ^h II 3	7 ^h 56	7 ^h 55	0 ^h 19	0 ^h 31
T 3	0 46 2	9 ^h 34'58	9 ^h 48	22 ^h 52	25 ^h 39	10 ^h 20	0 ^h 15	1 ^h 38	1 ^h 50	8 ^h 20	9 ^h 2	7 ^h 52	7 ^h 52	0 ^h 26	0 ^h 35
F 4	0 49 58	10 ^h 34'15	22 ^h 42	23 ^h 18	26 ^h 32	11 ^h 2	0 ^h 27	1 ^h 36	1 ^h 52	8 ^h 22	9 ^h 2	7 ^h 50	7 ^h 48	0 ^h 33	0 ^h 39
S 5	0 53 55	11 ^h 33'34	5 ^h 13	23 ^h 55	27 ^h 25	11 ^h 44	0 ^h 38	1 ^h 34	1 ^h 55	8 ^h 23	9 ^h 1	7 ^h 49	7 ^h 45	0 ^h 39	0 ^h 43
S 6	0 57 51	12 ^h 32'55	17 ^h 26	24 ^h 40	28 ^h 17	12 ^h 26	0 ^h 49	1 ^h 32	1 ^h 58	8 ^h 24	9 ^h 1	7 ^h 49	7 ^h 42	0 ^h 46	0 ^h 47
M 7	1 1 48	13 ^h 32'18	29 ^h 26	25 ^h 33	29 ^h 9	13 ^h 8	1 ^h 1	1 ^h 29	2 ^h 0	8 ^h 26	9 ^h 0	7 ^h 48	7 ^h 39	0 ^h 53	0 ^h 51
T 8	1 5 44	14 ^h 31'42	11 ^h 18	26 ^h 33	0 ^h 1	13 ^h 50	1 ^h 12	1 ^h 27	2 ^h 3	8 ^h 27	9 ^h 0	7 ^h 46	7 ^h 36	1 ^h 0	0 ^h 54
W 9	1 9 41	15 ^h 31'08	23 ^h 7	27 ^h 40	0 ^h 50	14 ^h 32	1 ^h 23	1 ^h 24	2 ^h 6	8 ^h 29	8 ^h 59	7 ^h 41	7 ^h 32	1 ^h 6	0 ^h 58
T 10	1 13 37	16 ^h 30'36	4 ^h 57	28 ^h 53	1 ^h 40	15 ^h 14	1 ^h 34	1 ^h 21	2 ^h 9	8 ^h 30	8 ^h 58	7 ^h 33	7 ^h 29	1 ^h 13	1 ^h 1
F 11	1 17 34	17 ^h 30'06	16 ^h 53	0 ^h 11	2 ^h 29	15 ^h 57	1 ^h 45	1 ^h 19	2 ^h 11	8 ^h 32	8 ^h 58	7 ^h 23	7 ^h 26	1 ^h 20	1 ^h 5
S 12	1 21 31	18 ^h 29'38	28 ^h 57	1 ^h 34	3 ^h 17	16 ^h 39	1 ^h 55	1 ^h 16	2 ^h 14	8 ^h 34	8 ^h 57	7 ^h 10	7 ^h 23	1 ^h 26	1 ^h 8
S 13	1 25 27	19 ^h 29'11	11 ^h 9	3 ^h 0	4 ^h 4	17 ^h 21	2 ^h 6	1 ^h 13	2 ^h 17	8 ^h 35	8 ^h 56	6 ^h 56	7 ^h 20	1 ^h 33	1 ^h 11
M 14	1 29 24	20 ^h 28'47	23 ^h 32	4 ^h 29	4 ^h 50	18 ^h 4	2 ^h 17	1 ^h 10	2 ^h 20	8 ^h 37	8 ^h 56	6 ^h 43	7 ^h 17	1 ^h 40	1 ^h 14
T 15	1 33 20	21 ^h 28'25	6 ^h 5	6 ^h 1	5 ^h 36	18 ^h 46	2 ^h 27	1 ^h 7	2 ^h 23	8 ^h 38	8 ^h 55	6 ^h 31	7 ^h 13	1 ^h 46	1 ^h 17
W 16	1 37 17	22 ^h 28'05	18 ^h 48	7 ^h 35	6 ^h 20	19 ^h 29	2 ^h 38	1 ^h 4	2 ^h 26	8 ^h 40	8 ^h 54	6 ^h 20	7 ^h 10	1 ^h 53	1 ^h 20
T 17	1 41 13	23 ^h 27'46	1 ^h 42	9 ^h 11	7 ^h 4	20 ^h 12	2 ^h 48	1 ^h 0	2 ^h 29	8 ^h 42	8 ^h 53	6 ^h 13	7 ^h 7	2 ^h 0	1 ^h 23
F 18	1 45 10	24 ^h 27'31	14 ^h 48	10 ^h 48	7 ^h 47	20 ^h 54	2 ^h 59	0 ^h 57	2 ^h 32	8 ^h 44	8 ^h 53	6 ^h 9	7 ^h 4	2 ^h 6	1 ^h 26
S 19	1 49 6	25 ^h 27'17	28 ^h 5	12 ^h 26	8 ^h 28	21 ^h 37	3 ^h 9	0 ^h 53	2 ^h 35	8 ^h 45	8				

SWISS EPHEMERIS for the year 1647

NOVEMBER 1647 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁
F 1	2 40 22	8♏27'36	0♁38	4♏1	15♁34	0♁59	5♏13	0°R 2	3♁18	9♁10	8°R40	5°D 3	6♁19	3♁40	1♁54
S 2	2 44 18	9°27'50	13°12	5°40	15°55	1°43	5°21	29♁57	3°22	9°12	8♏39	5°E 3	6°16	3°47	1°56
S 3	2 48 15	10°28'06	25°27	7°17	16°15	2°27	5°30	29°53	3°25	9°14	8°38	5° 4	6°13	3°54	1°57
M 4	2 52 11	11°28'23	7♁29	8°55	16°34	3°11	5°38	29°48	3°28	9°16	8°37	5°R 5	6°10	4° 0	1°58
T 5	2 56 8	12°28'42	19°23	10°32	16°50	3°54	5°47	29°44	3°32	9°18	8°36	5° 5	6° 7	4° 7	1°59
W 6	3 0 4	13°29'03	1♁13	12° 9	17° 4	4°38	5°55	29°39	3°35	9°20	8°35	5° 3	6° 3	4°14	2° 0
T 7	3 4 1	14°29'24	13° 5	13°45	17°16	5°22	6° 3	29°35	3°39	9°22	8°34	4°59	6° 0	4°20	2° 1
F 8	3 7 58	15°29'47	25° 4	15°21	17°25	6° 6	6°11	29°30	3°43	9°24	8°33	4°52	5°57	4°27	2° 1
S 9	3 11 54	16°30'12	7♁13	16°57	17°33	6°50	6°19	29°25	3°46	9°26	8°32	4°45	5°54	4°34	2° 2
S 10	3 15 51	17°30'38	19°34	18°32	17°38	7°35	6°27	29°21	3°50	9°29	8°31	4°36	5°51	4°41	2° 2
M 11	3 19 47	18°31'05	2♁ 9	20° 8	17°41	8°19	6°34	29°16	3°53	9°31	8°30	4°27	5°48	4°47	2° 3
T 12	3 23 44	19°31'35	14°58	21°42	17°R41	9° 3	6°42	29°11	3°57	9°33	8°29	4°19	5°44	4°54	2° 3
W 13	3 27 40	20°32'05	28° 2	23°17	17°40	9°47	6°49	29° 6	4° 0	9°35	8°28	4°12	5°41	5° 1	2° 3
T 14	3 31 37	21°32'37	11♏19	24°52	17°35	10°32	6°57	29° 1	4° 4	9°37	8°27	4° 8	5°38	5° 7	2°R 3
F 15	3 35 33	22°33'11	24°47	26°26	17°28	11°16	7° 4	28°56	4° 8	9°39	8°26	4° 6	5°35	5°14	2° 3
S 16	3 39 30	23°33'47	8♁26	28° 0	17°19	12° 1	7°11	28°52	4°11	9°42	8°25	4°D 5	5°32	5°21	2° 3
S 17	3 43 27	24°34'24	22°14	29°34	17° 7	12°45	7°17	28°47	4°15	9°44	8°24	4° 6	5°29	5°27	2° 3
M 18	3 47 23	25°35'03	6♁ 9	1♁ 7	16°53	13°30	7°24	28°42	4°19	9°46	8°23	4° 8	5°25	5°34	2° 2
T 19	3 51 20	26°35'44	20°11	2°41	16°36	14°15	7°30	28°37	4°22	9°48	8°21	4°R 9	5°22	5°41	2° 2
W 20	3 55 16	27°36'26	4♏20	4°14	16°18	14°59	7°37	28°32	4°26	9°50	8°20	4° 9	5°19	5°48	2° 1
T 21	3 59 13	28°37'10	18°33	5°47	15°56	15°44	7°43	28°27	4°30	9°53	8°19	4° 7	5°16	5°54	2° 1
F 22	4 3 9	29°37'55	2♁48	7°20	15°33	16°29	7°49	28°22	4°33	9°55	8°18	4° 4	5°13	6° 1	2° 0
S 23	4 7 6	0♁38'42	17° 2	8°53	15° 8	17°14	7°55	28°17	4°37	9°57	8°17	3°59	5° 9	6° 8	1°59
S 24	4 11 2	1°39'31	1♏11	10°26	14°40	17°59	8° 1	28°12	4°41	9°59	8°16	3°54	5° 6	6°14	1°58
M 25	4 14 59	2°40'21	15°10	11°59	14°11	18°44	8° 6	28° 7	4°44	10° 2	8°15	3°49	5° 3	6°21	1°57
T 26	4 18 56	3°41'12	28°56	13°32	13°40	19°29	8°12	28° 2	4°48	10° 4	8°13	3°45	5° 0	6°28	1°56
W 27	4 22 52	4°42'05	12♁25	15° 4	13° 8	20°14	8°17	27°58	4°52	10° 6	8°12	3°42	4°57	6°35	1°55
T 28	4 26 49	5°42'58	25°34	16°37	12°34	20°59	8°22	27°53	4°55	10° 8	8°11	3°40	4°54	6°41	1°53
F 29	4 30 45	6°43'53	8♁24	18° 9	12° 0	21°45	8°27	27°48	4°59	10°11	8°10	3°D40	4°50	6°48	1°52
S 30	4 34 42	7°44'49	20♁56	19°41	11♁24	22°30	8♏32	27♁43	5♁ 3	10♁13	8♏ 9	3♁41	4♁47	6♁55	1♁50

Delta T = 48.41 sec. Greg. Calendar

DECEMBER 1647 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁
S 1	4 38 38	8♁45'45	3♁12	21♁13	10°R48	23♁15	8♏36	27°R38	5♁ 6	10♁15	8°R 8	3♁42	4♁44	7♁ 1	1°R49
M 2	4 42 35	9°46'42	15°15	22°45	10♁12	24° 1	8°41	27♁33	5°10	10°17	8♏ 7	3°44	4°41	7° 8	1♁47
T 3	4 46 31	10°47'40	27°10	24°17	9°36	24°46	8°45	27°29	5°14	10°20	8° 5	3°46	4°38	7°15	1°45
W 4	4 50 28	11°48'39	9♁ 2	25°48	8°59	25°32	8°49	27°24	5°17	10°22	8° 4	3°R46	4°35	7°22	1°43
T 5	4 54 25	12°49'38	20°54	27°19	8°24	26°17	8°53	27°19	5°21	10°24	8° 3	3°46	4°31	7°28	1°41
F 6	4 58 21	13°50'38	2♁53	28°50	7°48	27° 3	8°57	27°15	5°25	10°26	8° 2	3°45	4°28	7°35	1°39
S 7	5 2 18	14°51'38	15° 3	0♁20	7°14	27°48	9° 0	27°10	5°28	10°29	8° 1	3°43	4°25	7°42	1°37
S 8	5 6 14	15°52'39	27°27	1°49	6°41	28°34	9° 4	27° 6	5°32	10°31	8° 0	3°40	4°22	7°48	1°34
M 9	5 10 11	16°53'41	10♁ 9	3°19	6° 9	29°20	9° 7	27° 1	5°36	10°33	7°59	3°37	4°19	7°55	1°32
T 10	5 14 7	17°54'43	23°10	4°47	5°39	0♁ 5	9°10	26°57	5°39	10°35	7°57	3°35	4°15	8° 2	1°29
W 11	5 18 4	18°55'46	6♏30	6°14	5°10	0°51	9°13	26°52	5°43	10°38	7°56	3°33	4°12	8° 8	1°27
T 12	5 22 0	19°56'49	20° 9	7°40	4°44	1°37	9°15	26°48	5°47	10°40	7°55	3°32	4° 9	8°15	1°24
F 13	5 25 57	20°57'53	4♁ 4	9° 5	4°19	2°23	9°18	26°44	5°50	10°42	7°54	3°D32	4° 6	8°22	1°21
S 14	5 29 54	21°58'58	18°11	10°28	3°57	3° 9	9°20	26°39	5°54	10°44	7°53	3°32	4° 3	8°29	1°19
S 15	5 33 50	23° 0'03	2♁27	11°50	3°37	3°55	9°22	26°35	5°57	10°47	7°52	3°33	4° 0	8°35	1°16
M 16	5 37 47	24° 1'09	16°46	13° 9	3°19	4°41	9°24	26°31	6° 1	10°49	7°51	3°34	3°56	8°42	1°13
T 17	5 41 43	25° 2'16	1♏ 6	14°26	3° 4	5°27	9°26	26°27	6° 4	10°51	7°50	3°34	3°53	8°49	1°10
W 18	5 45 40	26° 3'24	15°23	15°39	2°51	6°13	9°27	26°23	6° 8	10°53	7°49	3°35	3°50	8°55	1° 6
T 19	5 49 36	27° 4'32	29°33	16°49	2°41	6°59	9°28	26°19	6°11	10°55	7°47	3°R35	3°47	9° 2	1° 3
F 20	5 53 33	28° 5'41	13♁36	17°55	2°33	7°45	9°30	26°16	6°15	10°58	7°46	3°35	3°44	9° 9	1° 0
S 21	5 57 29	29° 6'50	27°29	18°56	2°28	8°32	9°31	26°12	6°18	11° 0	7°45	3°34	3°41	9°16	0°57
S 22	6 1 26	0♁ 8'00	11♏11	19°51	2°25	9°18	9°31	26° 8	6°22	11° 2	7°44	3°34	3°37	9°22	0°53
M 23	6 5 23	1° 9'11	24°41	20°41	2°D24	10° 4	9°32	26° 5	6°25	11° 4	7°43	3°34	3°34	9°29	0°50
T 24	6 9 19	2°10'22	7♁59	21°23	2°27	10°51	9°32	26° 1	6°29	11° 6	7°42	3°33	3°31	9°36	0°46
W 25	6 13 16	3°11'33	21° 3	21°57	2°31	11°37	9°R32	25°58	6°32	11° 8	7°41	3°D33	3°28	9°42	0°42
T 26	6 17 12	4°12'45	3♁54	22°22	2°38	12°24	9°32	25°54	6°36	11°11	7°40	3°R33	3°25	9°49	0°39
F 27	6 21 9	5°13'57	16°31	22°37	2°47	13°10	9°32	25°51	6°39	11°13	7°39	3°33	3°21	9°56	0°35
S 28	6 25 5	6°15'08	28°54	22°R41	2°58	13°57	9°32	25°48	6°42	11°15	7°38	3°33	3°18	10° 3	0°31
S 29	6 29 2	7°16'20	11♁ 6	22°34	3°12	14°43	9°31	25°45	6°46	11°17	7°37	3°33	3°15	10° 9	0°27
M 30	6 32 59	8°17'31	23° 7	22°15	3°27	15°30	9°30	25°42	6°49	11°19	7°36	3°32	3°12	10°16	0°23
T 31	6 36 55	9♁18'43	5♁ 2	21♁45	3♁45	16♁16	9♏29	25♁39	6♁52	11♁21	7♏35	3♁31	3♁ 9	10♁23	0♁19

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