

SWISS EPHEMERIS for the year 1642
heliocentric

JANUARY 1642 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♁	♃
W 1	6 42 40	10 ⁵ 48'06	10 ⁵ 48	4 ⁰ 15	28 ⁵ 51	9 ⁰ 29	20 ⁵ 47	13 ⁰ 8	8 ⁰ 33	27 ⁰ 32	2 ⁰ 25	4 ⁰ 11
T 2	6 46 37	11 ⁰ 49'18	11 ⁰ 48	9 ⁰ 45	0 ⁰ 27	9 ⁰ 59	20 ⁰ 52	13 ⁰ 10	8 ⁰ 33	27 ⁰ 32	2 ⁰ 25	4 ⁰ 11
F 3	6 50 34	12 ⁰ 50'29	12 ⁰ 47	15 ⁰ 5	2 ⁰ 3	10 ⁰ 29	20 ⁰ 57	13 ⁰ 12	8 ⁰ 34	27 ⁰ 32	2 ⁰ 25	4 ⁰ 13
S 4	6 54 30	13 ⁰ 51'41	13 ⁰ 46	20 ⁰ 15	3 ⁰ 39	10 ⁰ 59	21 ⁰ 3	13 ⁰ 14	8 ⁰ 35	27 ⁰ 33	2 ⁰ 25	4 ⁰ 14
S 5	6 58 27	14 ⁰ 52'51	14 ⁰ 46	25 ⁰ 16	5 ⁰ 16	11 ⁰ 29	21 ⁰ 8	13 ⁰ 16	8 ⁰ 36	27 ⁰ 33	2 ⁰ 25	4 ⁰ 15
M 6	7 2 23	15 ⁰ 54'01	15 ⁰ 46	0 ⁰ 7	6 ⁰ 52	11 ⁰ 59	21 ⁰ 13	13 ⁰ 18	8 ⁰ 36	27 ⁰ 34	2 ⁰ 26	4 ⁰ 16
T 7	7 6 20	16 ⁰ 55'11	16 ⁰ 46	4 ⁰ 49	8 ⁰ 28	12 ⁰ 29	21 ⁰ 19	13 ⁰ 20	8 ⁰ 37	27 ⁰ 34	2 ⁰ 26	4 ⁰ 17
W 8	7 10 16	17 ⁰ 56'20	17 ⁰ 47	9 ⁰ 22	10 ⁰ 4	12 ⁰ 59	21 ⁰ 24	13 ⁰ 22	8 ⁰ 38	27 ⁰ 34	2 ⁰ 26	4 ⁰ 18
T 9	7 14 13	18 ⁰ 57'28	18 ⁰ 48	13 ⁰ 46	11 ⁰ 40	13 ⁰ 29	21 ⁰ 29	13 ⁰ 24	8 ⁰ 39	27 ⁰ 35	2 ⁰ 26	4 ⁰ 19
F 10	7 18 9	19 ⁰ 58'35	19 ⁰ 50	18 ⁰ 1	13 ⁰ 16	13 ⁰ 59	21 ⁰ 35	13 ⁰ 26	8 ⁰ 39	27 ⁰ 35	2 ⁰ 26	4 ⁰ 20
S 11	7 22 6	20 ⁰ 59'42	20 ⁰ 52	22 ⁰ 9	14 ⁰ 52	14 ⁰ 30	21 ⁰ 40	13 ⁰ 28	8 ⁰ 40	27 ⁰ 35	2 ⁰ 26	4 ⁰ 21
S 12	7 26 3	22 ⁰ 0'48	21 ⁰ 54	26 ⁰ 9	16 ⁰ 27	15 ⁰ 0	21 ⁰ 45	13 ⁰ 29	8 ⁰ 41	27 ⁰ 36	2 ⁰ 27	4 ⁰ 22
M13	7 29 59	23 ⁰ 1'53	22 ⁰ 57	0 ⁰ 2	18 ⁰ 3	15 ⁰ 30	21 ⁰ 51	13 ⁰ 31	8 ⁰ 42	27 ⁰ 36	2 ⁰ 27	4 ⁰ 23
T 14	7 33 56	24 ⁰ 2'58	23 ⁰ 59	3 ⁰ 49	19 ⁰ 39	16 ⁰ 1	21 ⁰ 56	13 ⁰ 33	8 ⁰ 42	27 ⁰ 36	2 ⁰ 27	4 ⁰ 24
W15	7 37 52	25 ⁰ 4'02	25 ⁰ 2	7 ⁰ 29	21 ⁰ 15	16 ⁰ 31	22 ⁰ 1	13 ⁰ 35	8 ⁰ 43	27 ⁰ 37	2 ⁰ 27	4 ⁰ 25
T 16	7 41 49	26 ⁰ 5'05	26 ⁰ 5	11 ⁰ 4	22 ⁰ 50	17 ⁰ 2	22 ⁰ 7	13 ⁰ 37	8 ⁰ 44	27 ⁰ 37	2 ⁰ 27	4 ⁰ 26
F 17	7 45 45	27 ⁰ 6'07	27 ⁰ 8	14 ⁰ 33	24 ⁰ 26	17 ⁰ 32	22 ⁰ 12	13 ⁰ 39	8 ⁰ 45	27 ⁰ 37	2 ⁰ 27	4 ⁰ 27
S 18	7 49 42	28 ⁰ 7'09	28 ⁰ 10	17 ⁰ 57	26 ⁰ 1	18 ⁰ 3	22 ⁰ 17	13 ⁰ 41	8 ⁰ 45	27 ⁰ 38	2 ⁰ 28	4 ⁰ 28
S 19	7 53 38	29 ⁰ 8'10	29 ⁰ 13	21 ⁰ 17	27 ⁰ 37	18 ⁰ 34	22 ⁰ 23	13 ⁰ 43	8 ⁰ 46	27 ⁰ 38	2 ⁰ 28	4 ⁰ 29
M20	7 57 35	0 ⁰ 9'10	0 ⁰ 15	24 ⁰ 32	29 ⁰ 13	19 ⁰ 5	22 ⁰ 28	13 ⁰ 45	8 ⁰ 47	27 ⁰ 39	2 ⁰ 28	4 ⁰ 30
T 21	8 1 32	1 ⁰ 10'09	1 ⁰ 18	27 ⁰ 43	0 ⁰ 48	19 ⁰ 35	22 ⁰ 33	13 ⁰ 47	8 ⁰ 48	27 ⁰ 39	2 ⁰ 28	4 ⁰ 32
W22	8 5 28	2 ⁰ 11'08	2 ⁰ 19	0 ⁰ 51	2 ⁰ 23	20 ⁰ 6	22 ⁰ 39	13 ⁰ 49	8 ⁰ 48	27 ⁰ 39	2 ⁰ 28	4 ⁰ 33
T 23	8 9 25	3 ⁰ 12'06	3 ⁰ 21	3 ⁰ 55	3 ⁰ 59	20 ⁰ 37	22 ⁰ 44	13 ⁰ 51	8 ⁰ 49	27 ⁰ 40	2 ⁰ 28	4 ⁰ 34
F 24	8 13 21	4 ⁰ 13'04	4 ⁰ 22	6 ⁰ 56	5 ⁰ 34	21 ⁰ 8	22 ⁰ 50	13 ⁰ 53	8 ⁰ 50	27 ⁰ 40	2 ⁰ 28	4 ⁰ 35
S 25	8 17 18	5 ⁰ 14'01	5 ⁰ 22	9 ⁰ 55	7 ⁰ 9	21 ⁰ 39	22 ⁰ 55	13 ⁰ 55	8 ⁰ 51	27 ⁰ 40	2 ⁰ 29	4 ⁰ 36
S 26	8 21 14	6 ⁰ 14'57	6 ⁰ 23	12 ⁰ 51	8 ⁰ 45	22 ⁰ 10	23 ⁰ 0	13 ⁰ 57	8 ⁰ 51	27 ⁰ 41	2 ⁰ 29	4 ⁰ 37
M27	8 25 11	7 ⁰ 15'52	7 ⁰ 22	15 ⁰ 45	10 ⁰ 20	22 ⁰ 41	23 ⁰ 6	13 ⁰ 59	8 ⁰ 52	27 ⁰ 41	2 ⁰ 29	4 ⁰ 38
T 28	8 29 7	8 ⁰ 16'47	8 ⁰ 22	18 ⁰ 37	11 ⁰ 55	23 ⁰ 12	23 ⁰ 11	14 ⁰ 1	8 ⁰ 53	27 ⁰ 41	2 ⁰ 29	4 ⁰ 39
W29	8 33 4	9 ⁰ 17'41	9 ⁰ 21	21 ⁰ 27	13 ⁰ 30	23 ⁰ 44	23 ⁰ 16	14 ⁰ 3	8 ⁰ 54	27 ⁰ 42	2 ⁰ 29	4 ⁰ 40
T 30	8 37 1	10 ⁰ 18'33	10 ⁰ 20	24 ⁰ 16	15 ⁰ 6	24 ⁰ 15	23 ⁰ 22	14 ⁰ 5	8 ⁰ 54	27 ⁰ 42	2 ⁰ 29	4 ⁰ 41
F 31	8 40 57	11 ⁰ 19'25	11 ⁰ 19	27 ⁰ 33	16 ⁰ 41	24 ⁰ 46	23 ⁰ 27	14 ⁰ 7	8 ⁰ 55	27 ⁰ 42	2 ⁰ 30	4 ⁰ 42

Delta T = 56.22 sec. Greg. Calendar

FEBRUARY 1642 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♁	♃
S 1	8 44 54	12 ⁰ 20'15	12 ⁰ 17	29 ⁰ 50	18 ⁰ 16	25 ⁰ 18	23 ⁰ 32	14 ⁰ 9	8 ⁰ 56	27 ⁰ 43	2 ⁰ 30	4 ⁰ 43
S 2	8 48 50	13 ⁰ 21'04	13 ⁰ 16	2 ⁰ 36	19 ⁰ 51	25 ⁰ 49	23 ⁰ 38	14 ⁰ 11	8 ⁰ 57	27 ⁰ 43	2 ⁰ 30	4 ⁰ 44
M 3	8 52 47	14 ⁰ 21'51	14 ⁰ 16	5 ⁰ 21	21 ⁰ 26	26 ⁰ 21	23 ⁰ 43	14 ⁰ 13	8 ⁰ 57	27 ⁰ 43	2 ⁰ 30	4 ⁰ 45
T 4	8 56 43	15 ⁰ 22'37	15 ⁰ 15	8 ⁰ 6	23 ⁰ 1	26 ⁰ 52	23 ⁰ 48	14 ⁰ 15	8 ⁰ 58	27 ⁰ 44	2 ⁰ 30	4 ⁰ 46
W 5	9 0 40	16 ⁰ 23'21	16 ⁰ 15	10 ⁰ 50	24 ⁰ 36	27 ⁰ 24	23 ⁰ 54	14 ⁰ 17	8 ⁰ 59	27 ⁰ 44	2 ⁰ 30	4 ⁰ 47
T 6	9 4 36	17 ⁰ 24'04	17 ⁰ 15	13 ⁰ 35	26 ⁰ 11	27 ⁰ 55	23 ⁰ 59	14 ⁰ 19	9 ⁰ 0	27 ⁰ 45	2 ⁰ 31	4 ⁰ 48
F 7	9 8 33	18 ⁰ 24'45	18 ⁰ 16	16 ⁰ 20	27 ⁰ 46	28 ⁰ 27	24 ⁰ 5	14 ⁰ 21	9 ⁰ 0	27 ⁰ 45	2 ⁰ 31	4 ⁰ 50
S 8	9 12 30	19 ⁰ 25'24	19 ⁰ 16	19 ⁰ 5	29 ⁰ 21	28 ⁰ 59	24 ⁰ 10	14 ⁰ 23	9 ⁰ 1	27 ⁰ 45	2 ⁰ 31	4 ⁰ 51
S 9	9 16 26	20 ⁰ 26'02	20 ⁰ 18	21 ⁰ 51	0 ⁰ 56	29 ⁰ 31	24 ⁰ 15	14 ⁰ 24	9 ⁰ 2	27 ⁰ 46	2 ⁰ 31	4 ⁰ 52
M10	9 20 23	21 ⁰ 26'37	21 ⁰ 19	24 ⁰ 38	2 ⁰ 31	0 ⁰ 2	24 ⁰ 21	14 ⁰ 26	9 ⁰ 3	27 ⁰ 46	2 ⁰ 31	4 ⁰ 53
T 11	9 24 19	22 ⁰ 27'12	22 ⁰ 21	27 ⁰ 26	4 ⁰ 6	0 ⁰ 34	24 ⁰ 26	14 ⁰ 28	9 ⁰ 3	27 ⁰ 46	2 ⁰ 31	4 ⁰ 54
W12	9 28 16	23 ⁰ 27'44	23 ⁰ 23	0 ⁰ 15	5 ⁰ 40	1 ⁰ 6	24 ⁰ 31	14 ⁰ 30	9 ⁰ 4	27 ⁰ 47	2 ⁰ 31	4 ⁰ 55
T 13	9 32 12	24 ⁰ 28'15	24 ⁰ 25	3 ⁰ 6	7 ⁰ 15	1 ⁰ 38	24 ⁰ 37	14 ⁰ 32	9 ⁰ 5	27 ⁰ 47	2 ⁰ 32	4 ⁰ 56
F 14	9 36 9	25 ⁰ 28'44	25 ⁰ 27	5 ⁰ 58	8 ⁰ 50	2 ⁰ 10	24 ⁰ 42	14 ⁰ 34	9 ⁰ 6	27 ⁰ 47	2 ⁰ 32	4 ⁰ 57
S 15	9 40 5	26 ⁰ 29'11	26 ⁰ 29	8 ⁰ 53	10 ⁰ 25	2 ⁰ 43	24 ⁰ 47	14 ⁰ 36	9 ⁰ 6	27 ⁰ 48	2 ⁰ 32	4 ⁰ 58
S 16	9 44 2	27 ⁰ 29'37	27 ⁰ 32	11 ⁰ 49	12 ⁰ 0	3 ⁰ 15	24 ⁰ 53	14 ⁰ 38	9 ⁰ 7	27 ⁰ 48	2 ⁰ 32	4 ⁰ 59
M17	9 47 59	28 ⁰ 30'01	28 ⁰ 34	14 ⁰ 48	13 ⁰ 35	3 ⁰ 47	24 ⁰ 58	14 ⁰ 40	9 ⁰ 8	27 ⁰ 48	2 ⁰ 32	5 ⁰ 0
T 18	9 51 55	29 ⁰ 30'23	29 ⁰ 36	17 ⁰ 50	15 ⁰ 10	4 ⁰ 19	25 ⁰ 4	14 ⁰ 42	9 ⁰ 9	27 ⁰ 49	2 ⁰ 32	5 ⁰ 1
W19	9 55 52	0 ⁰ 30'44	0 ⁰ 37	20 ⁰ 54	16 ⁰ 44	4 ⁰ 52	25 ⁰ 9	14 ⁰ 44	9 ⁰ 9	27 ⁰ 49	2 ⁰ 33	5 ⁰ 2
T 20	9 59 48	1 ⁰ 31'04	1 ⁰ 39	24 ⁰ 2	18 ⁰ 19	5 ⁰ 24	25 ⁰ 14	14 ⁰ 46	9 ⁰ 10	27 ⁰ 50	2 ⁰ 33	5 ⁰ 3
F 21	10 3 45	2 ⁰ 31'22	2 ⁰ 40	27 ⁰ 13	19 ⁰ 54	5 ⁰ 57	25 ⁰ 20	14 ⁰ 48	9 ⁰ 11	27 ⁰ 50	2 ⁰ 33	5 ⁰ 4
S 22	10 7 41	3 ⁰ 31'39	3 ⁰ 40	0 ⁰ 28	21 ⁰ 29	6 ⁰ 29	25 ⁰ 25	14 ⁰ 50	9 ⁰ 11	27 ⁰ 50	2 ⁰ 33	5 ⁰ 5
S 23	10 11 38	4 ⁰ 31'54	4 ⁰ 40	3 ⁰ 47	23 ⁰ 4	7 ⁰ 2	25 ⁰ 30	14 ⁰ 52	9 ⁰ 12	27 ⁰ 51	2 ⁰ 33	5 ⁰ 7
M24	10 15 34	5 ⁰ 32'08	5 ⁰ 40	7 ⁰ 11	24 ⁰ 38	7 ⁰ 34	25 ⁰ 36	14 ⁰ 54	9 ⁰ 13	27 ⁰ 51	2 ⁰ 33	5 ⁰ 8
T 25	10 19 31	6 ⁰ 32'20	6 ⁰ 39	10 ⁰ 39	26 ⁰ 13	8 ⁰ 7	25 ⁰ 41	14 ⁰ 56	9 ⁰ 14	27 ⁰ 51	2 ⁰ 33	5 ⁰ 9
W26	10 23 28	7 ⁰ 32'31	7 ⁰ 38	14 ⁰ 12	27 ⁰ 48	8 ⁰ 40	25 ⁰ 46	14 ⁰ 58	9 ⁰ 14	27 ⁰ 52	2 ⁰ 34	5 ⁰ 10
T 27	10 27 24	8 ⁰ 32'40	8 ⁰ 37	17 ⁰ 51	29 ⁰ 23	9 ⁰ 13	25 ⁰ 52	15 ⁰ 0	9 ⁰ 15	27 ⁰ 52	2 ⁰ 34	5 ⁰ 11
F 28	10 31 21	9 ⁰ 32'47	9 ⁰ 35	21 ⁰ 35	0 ⁰ 58	9 ⁰ 46	25 ⁰ 57	15 ⁰ 2	9 ⁰ 16	27 ⁰ 52	2 ⁰ 34	5 ⁰ 12

Delta T = 56.12 sec. Greg. Calendar created from Swiss Ephemeris, Copyright Astrodiest AG [13.11.2015

SWISS EPHEMERIS for the year 1642
heliocentric

MARCH 1642 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♄	♃	♂
S 1	10 35 17	10 ^m 32'53	10 ^m 33	25 ^{ss} 26	2 ^{ss} 33	10 ^x 19	26 ^{ss} 3	15 ^h 4	9 ^m 17	27 ^m 53	2 ^{II} 34	5 ^{II} 13	
S 2	10 39 14	11°32'56	11°31	29°23	4° 7	10°52	26° 8	15° 6	9°17	27°53	2°34	5°14	
M 3	10 43 10	12°32'58	12°29	3 ^h 27	5°42	11°25	26°13	15° 8	9°18	27°53	2°34	5°15	
T 4	10 47 7	13°32'57	13°27	7°38	7°17	11°58	26°19	15°10	9°19	27°54	2°35	5°16	
W 5	10 51 3	14°32'55	14°26	11°57	8°52	12°31	26°24	15°12	9°20	27°54	2°35	5°17	
T 6	10 55 0	15°32'50	15°25	16°24	10°27	13° 4	26°29	15°14	9°20	27°54	2°35	5°18	
F 7	10 58 56	16°32'43	16°24	20°59	12° 2	13°37	26°35	15°16	9°21	27°55	2°35	5°19	
S 8	11 2 53	17°32'34	17°23	25°43	13°37	14°11	26°40	15°18	9°22	27°55	2°35	5°20	
S 9	11 6 50	18°32'23	18°23	0 ^Y 36	15°11	14°44	26°46	15°20	9°23	27°56	2°35	5°21	
M10	11 10 46	19°32'09	19°23	5°37	16°46	15°18	26°51	15°22	9°23	27°56	2°36	5°23	
T 11	11 14 43	20°31'53	20°24	10°48	18°21	15°51	26°56	15°23	9°24	27°56	2°36	5°24	
W12	11 18 39	21°31'35	21°24	16° 8	19°56	16°25	27° 2	15°25	9°25	27°57	2°36	5°25	
T 13	11 22 36	22°31'15	22°25	21°37	21°31	16°58	27° 7	15°27	9°26	27°57	2°36	5°26	
F 14	11 26 32	23°30'52	23°26	27°15	23° 6	17°32	27°13	15°29	9°26	27°57	2°36	5°27	
S 15	11 30 29	24°30'27	24°28	3 ^B 1	24°41	18° 6	27°18	15°31	9°27	27°58	2°36	5°28	
S 16	11 34 25	25°30'00	25°29	8°54	26°16	18°39	27°23	15°33	9°28	27°58	2°36	5°29	
M17	11 38 22	26°29'31	26°30	14°55	27°51	19°13	27°29	15°35	9°29	27°58	2°37	5°30	
T 18	11 42 19	27°29'00	27°32	21° 2	29°26	19°47	27°34	15°37	9°29	27°59	2°37	5°31	
W19	11 46 15	28°28'27	28°33	27°14	1 ^h 1	20°21	27°39	15°39	9°30	27°59	2°37	5°32	
T 20	11 50 12	29°27'52	29°34	3 ^{II} 30	2°36	20°55	27°45	15°41	9°31	27°59	2°37	5°33	
F 21	11 54 8	0 ^h 27'15	0 ^h 34	9°48	4°12	21°29	27°50	15°43	9°32	28° 0	2°37	5°34	
S 22	11 58 5	1°26'37	1°35	16° 7	5°47	22° 3	27°56	15°45	9°32	28° 0	2°37	5°35	
S 23	12 2 1	2°25'57	2°34	22°26	7°22	22°38	28° 1	15°47	9°33	28° 1	2°38	5°36	
M24	12 5 58	3°25'15	3°34	28°42	8°57	23°12	28° 6	15°49	9°34	28° 1	2°38	5°38	
T 25	12 9 54	4°24'31	4°33	4 ^B 55	10°32	23°46	28°12	15°51	9°35	28° 1	2°38	5°39	
W26	12 13 51	5°23'45	5°31	11° 3	12° 7	24°21	28°17	15°53	9°35	28° 2	2°38	5°40	
T 27	12 17 48	6°22'58	6°29	17° 5	13°43	24°55	28°22	15°55	9°36	28° 2	2°38	5°41	
F 28	12 21 44	7°22'09	7°27	23° 0	15°18	25°29	28°28	15°57	9°37	28° 2	2°38	5°42	
S 29	12 25 41	8°21'18	8°24	28°47	16°53	26° 4	28°33	15°59	9°38	28° 3	2°39	5°43	
S 30	12 29 37	9°20'24	9°21	4 ^J 26	18°28	26°39	28°39	16° 1	9°38	28° 3	2°39	5°44	
MB1	12 33 34	10 ^h 19'29	10 ^h 19	9 ^h 55	20 ^h 4	27 ^h 13	28 ^h 44	16 ^h 3	9 ^m 39	28 ^m 3	2 ^{II} 39	5 ^{II} 45	

Delta T = 56.05 sec.

Greg. Calendar

APRIL 1642 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♄	♃	♂
T 1	12 37 30	11 ^h 18'32	11 ^h 16	15 ^h 14	21 ^h 39	27 ^h 48	28 ^h 49	16 ^h 5	9 ^m 40	28 ^m 4	2 ^{II} 39	5 ^{II} 46	
W 2	12 41 27	12°17'33	12°13	20°24	23°14	28°23	28°55	16° 7	9°41	28° 4	2°39	5°47	
T 3	12 45 23	13°16'31	13°10	25°25	24°50	28°58	29° 0	16° 9	9°41	28° 4	2°39	5°48	
F 4	12 49 20	14°15'27	14° 8	0 ^m 16	26°25	29°32	29° 6	16°11	9°42	28° 5	2°39	5°49	
S 5	12 53 16	15°14'22	15° 6	4°57	28° 1	0 ^h 7	29°11	16°13	9°43	28° 5	2°40	5°50	
S 6	12 57 13	16°13'13	16° 4	9°30	29°36	0°42	29°16	16°15	9°44	28° 5	2°40	5°52	
M 7	13 1 10	17°12'03	17° 3	13°54	1 ^Y 12	1°17	29°22	16°17	9°44	28° 6	2°40	5°53	
T 8	13 5 6	18°10'50	18° 2	18° 9	2°47	1°52	29°27	16°19	9°45	28° 6	2°40	5°54	
W 9	13 9 3	19° 9'35	19° 1	22°17	4°23	2°28	29°33	16°21	9°46	28° 7	2°40	5°55	
T 10	13 12 59	20° 8'18	20° 0	26°17	5°58	3° 3	29°38	16°23	9°47	28° 7	2°40	5°56	
F 11	13 16 56	21° 6'58	21° 0	0 ^h 10	7°34	3°38	29°43	16°25	9°47	28° 7	2°41	5°57	
S 12	13 20 52	22° 5'36	22° 0	3°56	9° 9	4°13	29°49	16°27	9°48	28° 8	2°41	5°58	
S 13	13 24 49	23° 4'12	23° 0	7°36	10°45	4°49	29°54	16°29	9°49	28° 8	2°41	5°59	
M14	13 28 45	24° 2'46	24° 1	11°10	12°21	5°24	29°59	16°30	9°49	28° 8	2°41	6° 0	
T 15	13 32 42	25° 1'18	25° 1	14°39	13°56	5°59	0 ^h 5	16°32	9°50	28° 9	2°41	6° 1	
W16	13 36 39	25°59'48	26° 2	18° 3	15°32	6°35	0°10	16°34	9°51	28° 9	2°41	6° 2	
T 17	13 40 35	26°58'17	27° 2	21°23	17° 8	7°11	0°16	16°36	9°52	28° 9	2°41	6° 3	
F 18	13 44 32	27°56'43	28° 2	24°38	18°44	7°46	0°21	16°38	9°52	28°10	2°42	6° 4	
S 19	13 48 28	28°55'08	29° 2	27°49	20°19	8°22	0°26	16°40	9°53	28°10	2°42	6° 6	
S 20	13 52 25	29°53'31	0 ^m 1	0 ^m 56	21°55	8°58	0°32	16°42	9°54	28°10	2°42	6° 7	
M21	13 56 21	0 ^m 51'53	1° 0	4° 0	23°31	9°33	0°37	16°44	9°55	28°11	2°42	6° 8	
T 22	14 0 18	1°50'13	1°59	7° 2	25° 7	10° 9	0°43	16°46	9°55	28°11	2°42	6° 9	
W23	14 4 14	2°48'32	2°57	10° 0	26°43	10°45	0°48	16°48	9°56	28°12	2°42	6°10	
T 24	14 8 11	3°46'49	3°54	12°56	28°19	11°21	0°54	16°50	9°57	28°12	2°43	6°11	
F 25	14 12 8	4°45'04	4°52	15°50	29°55	11°57	0°59	16°52	9°58	28°12	2°43	6°12	
S 26	14 16 4	5°43'18	5°49	18°42	1 ^B 31	12°33	1° 4	16°54	9°58	28°13	2°43	6°13	
S 27	14 20 1	6°41'30	6°45	21°32	3° 7	13° 9	1°10	16°56	9°59	28°13	2°43	6°14	
M28	14 23 57	7°39'41	7°42	24°21	4°43	13°45	1°15	16°58	10° 0	28°13	2°43	6°15	
T 29	14 27 54	8°37'50	8°38	27° 9	6°19	14°21	1°21	17° 0	10° 1	28°14	2°43	6°16	
W30	14 31 50	9 ^m 35'57	9 ^m 34	29 ^m 55	7 ^B 55	14 ^h 57	1 ^h 26	17 ^h 2	10 ^m 1	28 ^m 14	2 ^{II} 44	6 ^{II} 17	

Delta T = 55.97 sec.

Greg. Calendar

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SWISS EPHEMERIS for the year 1642
heliocentric

MAY 1642 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♁	♂
T 1	14 35 47	10M34'03	10M31	2♂41	9♂31	15♂34	1♂31	17♂4	10M2	28M14	2II44	6II19
F 2	14 39 43	11°32'07	11°27	5°26	11° 7	16°10	1°37	17° 6	10° 3	28°15	2°44	6°20
S 3	14 43 40	12°30'09	12°24	8°11	12°43	16°46	1°42	17° 8	10° 4	28°15	2°44	6°21
S 4	14 47 37	13°28'09	13°21	10°55	14°19	17°23	1°48	17°10	10° 4	28°15	2°44	6°22
M 5	14 51 33	14°26'08	14°18	13°40	15°56	17°59	1°53	17°12	10° 5	28°16	2°44	6°23
T 6	14 55 30	15°24'04	15°15	16°25	17°32	18°36	1°58	17°14	10° 6	28°16	2°44	6°24
W 7	14 59 26	16°21'59	16°13	19°10	19° 8	19°12	2° 4	17°16	10° 7	28°16	2°45	6°25
T 8	15 3 23	17°19'52	17°11	21°56	20°45	19°49	2° 9	17°18	10° 7	28°17	2°45	6°26
F 9	15 7 19	18°17'43	18° 9	24°43	22°21	20°25	2°15	17°20	10° 8	28°17	2°45	6°27
S 10	15 11 16	19°15'32	19° 8	27°31	23°57	21° 2	2°20	17°22	10° 9	28°18	2°45	6°28
S 11	15 15 12	20°13'20	20° 7	0♂20	25°34	21°39	2°25	17°24	10°10	28°18	2°45	6°29
M12	15 19 9	21°11'06	21° 6	3°11	27°10	22°16	2°31	17°26	10°10	28°18	2°45	6°30
T 13	15 23 5	22° 8'50	22° 6	6° 4	28°47	22°52	2°36	17°28	10°11	28°19	2°46	6°32
W14	15 27 2	23° 6'33	23° 6	8°58	0II23	23°29	2°42	17°30	10°12	28°19	2°46	6°33
T 15	15 30 59	24° 4'15	24° 5	11°55	2° 0	24° 6	2°47	17°32	10°13	28°19	2°46	6°34
F 16	15 34 55	25° 1'55	25° 5	14°54	3°36	24°43	2°52	17°34	10°13	28°20	2°46	6°35
S 17	15 38 52	25°59'34	26° 4	17°55	5°13	25°20	2°58	17°36	10°14	28°20	2°46	6°36
S 18	15 42 48	26°57'12	27° 3	21° 0	6°49	25°57	3° 3	17°38	10°15	28°20	2°46	6°37
M19	15 46 45	27°54'49	28° 2	24° 8	8°26	26°34	3° 9	17°40	10°16	28°21	2°47	6°38
T 20	15 50 41	28°52'25	29° 0	27°19	10° 3	27°11	3°14	17°42	10°16	28°21	2°47	6°39
W21	15 54 38	29°50'00	29°58	0♂34	11°40	27°48	3°20	17°44	10°17	28°21	2°47	6°40
T 22	15 58 35	0♂47'35	0♂56	3°53	13°16	28°25	3°25	17°46	10°18	28°22	2°47	6°41
F 23	16 2 31	1°45'08	1°53	7°17	14°53	29° 2	3°30	17°48	10°19	28°22	2°47	6°42
S 24	16 6 28	2°42'40	2°50	10°45	16°30	29°40	3°36	17°50	10°19	28°23	2°47	6°44
S 25	16 10 24	3°40'12	3°46	14°19	18° 7	0♂17	3°41	17°51	10°20	28°23	2°47	6°45
M26	16 14 21	4°37'42	4°42	17°58	19°44	0°54	3°47	17°53	10°21	28°23	2°48	6°46
T 27	16 18 17	5°35'12	5°38	21°42	21°20	1°31	3°52	17°55	10°22	28°24	2°48	6°47
W28	16 22 14	6°32'41	6°34	25°33	22°57	2° 9	3°57	17°57	10°22	28°24	2°48	6°48
T 29	16 26 10	7°30'09	7°29	29°30	24°34	2°46	4° 3	17°59	10°23	28°24	2°48	6°49
F 30	16 30 7	8°27'35	8°25	3♂35	26°11	3°24	4° 8	18° 1	10°24	28°25	2°48	6°50
S 31	16 34 4	9♂25'01	9♂21	7♂46	27II48	4♂1	4♂14	18♂3	10M25	28M25	2II48	6II51

Delta T = 55.89 sec.

Greg. Calendar

JUNE 1642 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♁	♂
S 1	16 38 0	10♂22'26	10♂17	12♂5	29II25	4♂38	4♂19	18♂5	10M25	28M25	2II49	6II52
M 2	16 41 57	11°19'50	11°13	16°33	1♂2	5°16	4°25	18° 7	10°26	28°26	2°49	6°53
T 3	16 45 53	12°17'13	12° 9	21° 8	2°40	5°54	4°30	18° 9	10°27	28°26	2°49	6°54
W 4	16 49 50	13°14'35	13° 6	25°52	4°17	6°31	4°35	18°11	10°28	28°26	2°49	6°56
T 5	16 53 46	14°11'55	14° 3	0♂45	5°54	7° 9	4°41	18°13	10°28	28°27	2°49	6°57
F 6	16 57 43	15° 9'15	15° 0	5°47	7°31	7°46	4°46	18°15	10°29	28°27	2°49	6°58
S 7	17 1 39	16° 6'33	15°58	10°58	9° 8	8°24	4°52	18°17	10°30	28°27	2°50	6°59
S 8	17 5 36	17° 3'51	16°56	16°18	10°45	9° 2	4°57	18°19	10°30	28°28	2°50	7° 0
M 9	17 9 33	18° 1'08	17°54	21°47	12°23	9°39	5° 2	18°21	10°31	28°28	2°50	7° 1
T 10	17 13 29	18°58'23	18°53	27°25	14° 0	10°17	5° 8	18°23	10°32	28°29	2°50	7° 2
W11	17 17 26	19°55'39	19°52	3♂11	15°37	10°55	5°13	18°25	10°33	28°29	2°50	7° 3
T 12	17 21 22	20°52'53	20°51	9° 5	17°15	11°32	5°19	18°27	10°33	28°29	2°50	7° 4
F 13	17 25 19	21°50'07	21°50	15° 6	18°52	12°10	5°24	18°29	10°34	28°30	2°50	7° 5
S 14	17 29 15	22°47'20	22°50	21°13	20°29	12°48	5°30	18°31	10°35	28°30	2°51	7° 7
S 15	17 33 12	23°44'33	23°49	27°26	22° 7	13°26	5°35	18°33	10°36	28°30	2°51	7° 8
M16	17 37 8	24°41'46	24°47	3II41	23°44	14° 4	5°40	18°35	10°36	28°31	2°51	7° 9
T 17	17 41 5	25°38'59	25°46	10° 0	25°22	14°42	5°46	18°37	10°37	28°31	2°51	7°10
W18	17 45 2	26°36'11	26°44	16°19	26°59	15°19	5°51	18°39	10°38	28°31	2°51	7°11
T 19	17 48 58	27°33'23	27°42	22°37	28°36	15°57	5°57	18°41	10°39	28°32	2°51	7°12
F 20	17 52 55	28°30'35	28°39	28°54	0II14	16°35	6° 2	18°43	10°39	28°32	2°52	7°13
S 21	17 56 51	29°27'48	29°36	5♂7	1°51	17°13	6° 8	18°45	10°40	28°32	2°52	7°14
S 22	18 0 48	0♂25'00	0♂33	11°15	3°29	17°51	6°13	18°47	10°41	28°33	2°52	7°15
M23	18 4 44	1°22'12	1°29	17°17	5° 6	18°29	6°18	18°49	10°42	28°33	2°52	7°16
T 24	18 8 41	2°19'25	2°25	23°11	6°44	19° 7	6°24	18°51	10°42	28°34	2°52	7°18
W25	18 12 37	3°16'37	3°20	28°58	8°21	19°45	6°29	18°53	10°43	28°34	2°52	7°19
T 26	18 16 34	4°13'50	4°16	4♂36	9°59	20°23	6°35	18°55	10°44	28°34	2°53	7°20
F 27	18 20 31	5°11'02	5°11	10° 5	11°37	21° 1	6°40	18°57	10°45	28°35	2°53	7°21
S 28	18 24 27	6° 8'14	6° 7	15°24	13°14	21°39	6°46	18°59	10°45	28°35	2°53	7°22
S 29	18 28 24	7° 5'27	7° 2	20°34	14°52	22°17	6°51	19° 1	10°46	28°35	2°53	7°23
M30	18 32 20	8♂2'39	7♂58	25♂34	16♂29	22♂55	6♂56	19♂3	10M47	28M36	2II53	7II24

Delta T = 55.81 sec.

Greg. Calendar

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SWISS EPHEMERIS for the year 1642
heliocentric

JULY 1642 GC

00:00 UT

Day	Sid.t	Terra	☾	♊	♋	♌	♍	♎	♏	♐	♑	♒
T 1	18 36 17	8 ³⁵ 59'51	8 ³⁵ 54	0 ¹⁷ 25	18 ⁰ 7	23 ³³ 33	7 ² 2	19 ⁵ 5	10 ⁴⁸ 48	28 ³⁶ 36	2 ⁵³ 53	7 ²⁵ 25
W 2	18 40 13	9 ⁰ 57'03	9 ⁰ 50	5 ⁰ 6	19 ⁴⁴ 44	24 ¹¹ 11	7 ⁰ 7	19 ⁰ 7	10 ⁴⁸ 48	28 ³⁶ 36	2 ⁵³ 53	7 ²⁶ 26
T 3	18 44 10	10 ⁰ 54'15	10 ⁰ 46	9 ³⁸ 38	21 ²² 22	24 ⁴⁹ 49	7 ¹³ 13	19 ⁰ 9	10 ⁴⁹ 49	28 ³⁷ 37	2 ⁵⁴ 54	7 ²⁷ 27
F 4	18 48 6	11 ⁰ 51'26	11 ⁰ 43	14 ⁰ 2	22 ⁵⁹ 59	25 ²⁷ 27	7 ¹⁸ 18	19 ¹¹ 11	10 ⁵⁰ 50	28 ³⁷ 37	2 ⁵⁴ 54	7 ²⁹ 29
S 5	18 52 3	12 ⁰ 48'38	12 ⁰ 40	18 ⁰ 17	24 ³⁷ 37	26 ⁰ 6	7 ²⁴ 24	19 ¹³ 13	10 ⁵¹ 51	28 ³⁷ 37	2 ⁵⁴ 54	7 ³⁰ 30
S 6	18 56 0	13 ⁰ 45'49	13 ⁰ 37	22 ⁰ 24	26 ⁰ 15	26 ⁰ 44	7 ²⁹ 29	19 ¹⁵ 15	10 ⁵¹ 51	28 ³⁸ 38	2 ⁵⁴ 54	7 ³¹ 31
M 7	18 59 56	14 ⁰ 43'01	14 ⁰ 35	26 ⁰ 24	27 ⁰ 52	27 ⁰ 22	7 ³⁴ 34	19 ¹⁷ 17	10 ⁵² 52	28 ³⁸ 38	2 ⁵⁴ 54	7 ³² 32
T 8	19 3 53	15 ⁰ 40'13	15 ⁰ 33	0 ¹⁷ 17	29 ⁰ 30	28 ⁰ 0	7 ⁴⁰ 40	19 ¹⁹ 19	10 ⁵³ 53	28 ³⁹ 39	2 ⁵⁴ 54	7 ³³ 33
W 9	19 7 49	16 ⁰ 37'24	16 ⁰ 32	4 ⁰ 3	1 ¹⁷ 7	28 ⁰ 38	7 ⁴⁵ 45	19 ²¹ 21	10 ⁵⁴ 54	28 ³⁹ 39	2 ⁵⁵ 55	7 ³⁴ 34
T 10	19 11 46	17 ⁰ 34'36	17 ⁰ 31	7 ⁰ 43	2 ⁴⁵ 45	29 ⁰ 16	7 ⁵¹ 51	19 ²³ 23	10 ⁵⁴ 54	28 ³⁹ 39	2 ⁵⁵ 55	7 ³⁵ 35
F 11	19 15 42	18 ⁰ 31'48	18 ⁰ 30	11 ⁰ 17	4 ⁰ 22	29 ⁰ 54	7 ⁵⁶ 56	19 ²⁵ 25	10 ⁵⁵ 55	28 ⁴⁰ 40	2 ⁵⁵ 55	7 ³⁶ 36
S 12	19 19 39	19 ⁰ 29'00	19 ⁰ 29	14 ⁰ 46	6 ⁰ 0	0 ³² 32	8 ⁰ 2	19 ²⁷ 27	10 ⁵⁶ 56	28 ⁴⁰ 40	2 ⁵⁵ 55	7 ³⁷ 37
S 13	19 23 35	20 ⁰ 26'13	20 ⁰ 28	18 ⁰ 10	7 ⁰ 37	1 ¹⁰ 10	8 ⁰ 7	19 ²⁹ 29	10 ⁵⁷ 57	28 ⁴⁰ 40	2 ⁵⁵ 55	7 ³⁸ 38
M14	19 27 32	21 ⁰ 23'26	21 ⁰ 27	21 ⁰ 29	9 ⁰ 15	1 ⁴⁸ 48	8 ⁰ 13	19 ³¹ 31	10 ⁵⁷ 57	28 ⁴¹ 41	2 ⁵⁵ 55	7 ⁴⁰ 40
T 15	19 31 29	22 ⁰ 20'40	22 ⁰ 26	24 ⁰ 44	10 ⁰ 52	2 ²⁶ 26	8 ⁰ 18	19 ³³ 33	10 ⁵⁸ 58	28 ⁴¹ 41	2 ⁵⁶ 56	7 ⁴¹ 41
W16	19 35 25	23 ⁰ 17'55	23 ⁰ 25	27 ⁰ 55	12 ⁰ 29	3 ⁰ 4	8 ⁰ 23	19 ³⁵ 35	10 ⁵⁹ 59	28 ⁴¹ 41	2 ⁵⁶ 56	7 ⁴² 42
T 17	19 39 22	24 ⁰ 15'10	24 ⁰ 23	1 ¹⁸ 2	14 ⁰ 7	3 ⁴³ 43	8 ⁰ 29	19 ³⁷ 37	11 ⁰ 0	28 ⁴² 42	2 ⁵⁶ 56	7 ⁴³ 43
F 18	19 43 18	25 ⁰ 12'26	25 ⁰ 21	4 ⁰ 6	15 ⁰ 44	4 ⁰ 21	8 ⁰ 34	19 ³⁹ 39	11 ⁰ 0	28 ⁴² 42	2 ⁵⁶ 56	7 ⁴⁴ 44
S 19	19 47 15	26 ⁰ 9'43	26 ⁰ 18	7 ⁰ 7	17 ⁰ 22	4 ⁰ 59	8 ⁰ 40	19 ⁴¹ 41	11 ⁰ 1	28 ⁴² 42	2 ⁵⁶ 56	7 ⁴⁵ 45
S 20	19 51 11	27 ⁰ 7'02	27 ⁰ 16	10 ⁰ 6	18 ⁰ 59	5 ⁰ 37	8 ⁰ 45	19 ⁴³ 43	11 ⁰ 2	28 ⁴³ 43	2 ⁵⁶ 56	7 ⁴⁶ 46
M21	19 55 8	28 ⁰ 4'21	28 ⁰ 12	13 ⁰ 2	20 ⁰ 36	6 ⁰ 15	8 ⁰ 51	19 ⁴⁵ 45	11 ⁰ 3	28 ⁴³ 43	2 ⁵⁶ 56	7 ⁴⁷ 47
T 22	19 59 4	29 ⁰ 1'41	29 ⁰ 9	15 ⁰ 56	22 ⁰ 13	6 ⁰ 53	8 ⁰ 56	19 ⁴⁷ 47	11 ⁰ 3	28 ⁴⁴ 44	2 ⁵⁷ 57	7 ⁴⁸ 48
W23	20 3 1	29 ⁰ 59'02	0 ⁵ 5	18 ⁰ 47	23 ⁰ 51	7 ⁰ 31	9 ⁰ 2	19 ⁴⁹ 49	11 ⁰ 4	28 ⁴⁴ 44	2 ⁵⁷ 57	7 ⁵⁰ 50
T 24	20 6 58	0 ⁵⁶ 24	1 ⁰ 1	21 ⁰ 38	25 ⁰ 28	8 ⁰ 9	9 ⁰ 7	19 ⁵¹ 51	11 ⁰ 5	28 ⁴⁴ 44	2 ⁵⁷ 57	7 ⁵¹ 51
F 25	20 10 54	1 ⁰ 53'47	1 ⁰ 57	24 ⁰ 26	27 ⁰ 5	8 ⁰ 47	9 ⁰ 12	19 ⁵² 52	11 ⁰ 6	28 ⁴⁵ 45	2 ⁵⁷ 57	7 ⁵² 52
S 26	20 14 51	2 ⁰ 51'11	2 ⁰ 53	27 ⁰ 14	28 ⁰ 42	9 ⁰ 25	9 ⁰ 18	19 ⁵⁴ 54	11 ⁰ 6	28 ⁴⁵ 45	2 ⁵⁷ 57	7 ⁵³ 53
S 27	20 18 47	3 ⁰ 48'35	3 ⁰ 48	0 ³ 0	0 ¹⁹ 19	10 ⁰ 3	9 ⁰ 23	19 ⁵⁶ 56	11 ⁰ 7	28 ⁴⁵ 45	2 ⁵⁷ 57	7 ⁵⁴ 54
M28	20 22 44	4 ⁰ 46'01	4 ⁰ 44	2 ⁰ 46	1 ⁰ 56	10 ⁰ 41	9 ⁰ 29	19 ⁵⁸ 58	11 ⁰ 8	28 ⁴⁶ 46	2 ⁵⁸ 58	7 ⁵⁵ 55
T 29	20 26 40	5 ⁰ 43'28	5 ⁰ 40	5 ⁰ 31	3 ⁰ 33	11 ⁰ 19	9 ⁰ 34	20 ⁰ 0	11 ⁰ 8	28 ⁴⁶ 46	2 ⁵⁸ 58	7 ⁵⁶ 56
W30	20 30 37	6 ⁰ 40'55	6 ⁰ 36	8 ⁰ 16	5 ⁰ 10	11 ⁰ 57	9 ⁰ 40	20 ⁰ 2	11 ⁰ 9	28 ⁴⁶ 46	2 ⁵⁸ 58	7 ⁵⁷ 57
T 31	20 34 33	7 ⁰ 38'23	7 ⁰ 32	11 ⁰ 3	6 ⁰ 47	12 ⁰ 35	9 ⁰ 45	20 ⁰ 4	11 ⁰ 10	28 ⁴⁷ 47	2 ⁵⁸ 58	7 ⁵⁸ 58

Delta T = 55.74 sec.

Greg. Calendar

AUGUST 1642 GC

00:00 UT

Day	Sid.t	Terra	☾	♊	♋	♌	♍	♎	♏	♐	♑	♒
F 1	20 38 30	8 ³⁵ 35'52	8 ³⁵ 28	13 ⁰ 45	8 ²⁴ 24	13 ¹² 12	9 ⁵¹ 51	20 ⁶ 6	11 ¹¹ 11	28 ⁴⁷ 47	2 ⁵⁸ 58	8 ⁰ 0
S 2	20 42 27	9 ⁰ 33'22	9 ⁰ 25	16 ⁰ 30	10 ⁰ 1	13 ⁰ 50	9 ⁵⁶ 56	20 ⁰ 8	11 ⁰ 11	28 ⁴⁷ 47	2 ⁵⁸ 58	8 ⁰ 1
S 3	20 46 23	10 ⁰ 30'52	10 ⁰ 22	19 ⁰ 16	11 ⁰ 38	14 ⁰ 28	10 ⁰ 1	20 ⁰ 10	11 ⁰ 12	28 ⁴⁸ 48	2 ⁵⁹ 59	8 ⁰ 2
M 4	20 50 20	11 ⁰ 28'24	11 ⁰ 20	22 ⁰ 2	13 ⁰ 15	15 ⁰ 6	10 ⁰ 7	20 ⁰ 12	11 ⁰ 13	28 ⁴⁸ 48	2 ⁵⁹ 59	8 ⁰ 3
T 5	20 54 16	12 ⁰ 25'56	12 ⁰ 18	24 ⁰ 49	14 ⁰ 51	15 ⁰ 44	10 ⁰ 12	20 ⁰ 14	11 ⁰ 14	28 ⁴⁸ 48	2 ⁵⁹ 59	8 ⁰ 4
W 6	20 58 13	13 ⁰ 23'29	13 ⁰ 16	27 ⁰ 37	16 ⁰ 28	16 ⁰ 22	10 ⁰ 18	20 ⁰ 16	11 ⁰ 14	28 ⁴⁹ 49	2 ⁵⁹ 59	8 ⁰ 5
T 7	21 2 9	14 ⁰ 21'03	14 ⁰ 15	0 ²⁶ 26	18 ⁰ 5	16 ⁰ 59	10 ⁰ 23	20 ⁰ 18	11 ⁰ 15	28 ⁴⁹ 49	2 ⁵⁹ 59	8 ⁰ 6
F 8	21 6 6	15 ⁰ 18'38	15 ⁰ 14	3 ⁰ 17	19 ⁰ 41	17 ⁰ 37	10 ⁰ 29	20 ⁰ 20	11 ⁰ 16	28 ⁵⁰ 50	2 ⁵⁹ 59	8 ⁰ 7
S 9	21 10 2	16 ⁰ 16'14	16 ⁰ 13	6 ⁰ 9	21 ⁰ 18	18 ⁰ 15	10 ⁰ 34	20 ⁰ 22	11 ⁰ 17	28 ⁵⁰ 50	2 ⁵⁹ 59	8 ⁰ 8
S 10	21 13 59	17 ⁰ 13'52	17 ⁰ 13	9 ⁰ 4	22 ⁰ 54	18 ⁰ 53	10 ⁰ 40	20 ⁰ 24	11 ⁰ 17	28 ⁵⁰ 50	3 ⁰ 0	8 ⁰ 10
M11	21 17 56	18 ⁰ 11'30	18 ⁰ 13	12 ⁰ 0	24 ⁰ 31	19 ⁰ 30	10 ⁰ 45	20 ⁰ 26	11 ⁰ 18	28 ⁵¹ 51	3 ⁰ 0	8 ⁰ 11
T 12	21 21 52	19 ⁰ 9'10	19 ⁰ 12	14 ⁰ 59	26 ⁰ 7	20 ⁰ 8	10 ⁰ 50	20 ⁰ 28	11 ⁰ 19	28 ⁵¹ 51	3 ⁰ 0	8 ⁰ 12
W13	21 25 49	20 ⁰ 6'51	20 ⁰ 12	18 ⁰ 1	27 ⁰ 44	20 ⁰ 46	10 ⁰ 56	20 ⁰ 30	11 ⁰ 20	28 ⁵¹ 51	3 ⁰ 0	8 ⁰ 13
T 14	21 29 45	21 ⁰ 4'34	21 ⁰ 11	21 ⁰ 6	29 ⁰ 20	21 ⁰ 23	11 ⁰ 1	20 ⁰ 32	11 ⁰ 20	28 ⁵² 52	3 ⁰ 0	8 ⁰ 14
F 15	21 33 42	22 ⁰ 2'18	22 ⁰ 10	24 ⁰ 14	0 ⁵⁶ 56	22 ⁰ 1	11 ⁰ 7	20 ⁰ 34	11 ⁰ 21	28 ⁵² 52	3 ⁰ 0	8 ⁰ 15
S 16	21 37 38	23 ⁰ 0'04	23 ⁰ 8	27 ⁰ 25	2 ⁰ 32	22 ⁰ 39	11 ⁰ 12	20 ⁰ 36	11 ⁰ 22	28 ⁵² 52	3 ⁰ 1	8 ⁰ 16
S 17	21 41 35	23 ⁰ 57'52	24 ⁰ 7	0 ⁴⁰ 40	4 ⁰ 9	23 ⁰ 16	11 ⁰ 18	20 ⁰ 38	11 ⁰ 23	28 ⁵³ 53	3 ⁰ 1	8 ⁰ 17
M18	21 45 31	24 ⁰ 55'42	25 ⁰ 5	4 ⁰ 0	5 ⁰ 45	23 ⁰ 54	11 ⁰ 23	20 ⁰ 40	11 ⁰ 23	28 ⁵³ 53	3 ⁰ 1	8 ⁰ 18
T 19	21 49 28	25 ⁰ 53'33	26 ⁰ 2	7 ⁰ 24	7 ⁰ 21	24 ⁰ 31	11 ⁰ 29	20 ⁰ 42	11 ⁰ 24	28 ⁵³ 53	3 ⁰ 1	8 ⁰ 20
W20	21 53 25	26 ⁰ 51'26	26 ⁰ 59	10 ⁰ 52	8 ⁰ 57	25 ⁰ 9	11 ⁰ 34	20 ⁰ 44	11 ⁰ 25	28 ⁵⁴ 54	3 ⁰ 1	8 ⁰ 21
T 21	21 57 21	27 ⁰ 49'21	27 ⁰ 56	14 ⁰ 26	10 ⁰ 33	25 ⁰ 46	11 ⁰ 39	20 ⁰ 46	11 ⁰ 26	28 ⁵⁴ 54	3 ⁰ 1	8 ⁰ 22
F 22	22 1 18	28 ⁰ 47'18	28 ⁰ 53	18 ⁰ 5	12 ⁰ 9	26 ⁰ 23	11 ⁰ 45	20 ⁰ 48	11 ⁰ 26	28 ⁵⁵ 55	3 ⁰ 2	8 ⁰ 23
S 23	22 5 14	29 ⁰ 45'16	29 ⁰ 49	21 ⁰ 50	13 ⁰ 45	27 ⁰ 1	11 ⁰ 50	20 ⁰ 50	11 ⁰ 27	28 ⁵⁵ 55	3 ⁰ 2	8 ⁰ 24
S 24	22 9 11	0 ⁴³ 16	0 ⁴⁶ 46	25 ⁰ 41	15 ⁰ 21	27 ⁰ 38	11 ⁰ 56	20 ⁰ 52	11 ⁰ 28	28 ⁵⁵ 55	3 ⁰ 2	8 ⁰ 25
M25	22 13 7	1 ⁰ 41'18	1 ⁰ 42	29 ⁰ 38	16 ⁰ 57	28 ⁰ 15	12 ⁰ 1	20 ⁰ 54	11 ⁰ 29	28 ⁵⁶ 56	3 ⁰ 2	8 ⁰ 26
T 26	22 17 4	2 ⁰ 39'21	2 ⁰ 38	3 ⁰ 43	18 ⁰ 32	28 ⁰ 53	12 ⁰ 7	20 ⁰ 56	11 ⁰ 29	28 ⁵⁶ 56	3 ⁰ 2	8 ⁰ 27
W27	22 21 0	3 ⁰ 37'26	3 ⁰ 35	7 ⁰ 54	20 ⁰ 8	29 ⁰ 30	12 ⁰ 12	20 ⁰ 58	11 ⁰ 30	28 ⁵⁶ 56	3 ⁰ 2	8 ⁰ 28
T 28	22 24 57	4 ⁰ 35'33	4 ^{0</}									

SWISS EPHEMERIS for the year 1642
heliocentric

SEPTEMBER 1642 GC

00:00 UT

Day	Sid.t	Terra	☾	♁	♂	♄	♃	♅	♁	♆	♇	♁
M 1	22 40 43	8°28'15	8°20	0°54	28°6	2°35	12°39	21°8	11°34	28°58	3°3	8°34
T 2	22 44 40	9°26'29	9°18	5°57	29°42	3°12	12°45	21°10	11°35	28°58	3°3	8°35
W 3	22 48 36	10°24'45	10°16	11°8	1°17	3°49	12°50	21°12	11°35	28°59	3°3	8°36
T 4	22 52 33	11°23'02	11°15	16°28	2°52	4°26	12°56	21°14	11°36	28°59	3°4	8°37
F 5	22 56 29	12°21'21	12°15	21°58	4°28	5°3	13°1	21°16	11°37	28°59	3°4	8°39
S 6	23 0 26	13°19'41	13°15	27°36	6°3	5°40	13°7	21°18	11°37	29°0	3°4	8°40
S 7	23 4 22	14°18'03	14°15	3°22	7°38	6°17	13°12	21°20	11°38	29°0	3°4	8°41
M 8	23 8 19	15°16'27	15°15	9°17	9°14	6°54	13°18	21°22	11°39	29°1	3°4	8°42
T 9	23 12 16	16°14'52	16°15	15°18	10°49	7°30	13°23	21°24	11°40	29°1	3°4	8°43
W10	23 16 12	17°13'20	17°16	21°25	12°24	8°7	13°29	21°26	11°40	29°1	3°4	8°44
T 11	23 20 9	18°11'49	18°16	27°37	13°59	8°44	13°34	21°28	11°41	29°2	3°5	8°45
F 12	23 24 5	19°10'20	19°16	3°53	15°34	9°20	13°40	21°30	11°42	29°2	3°5	8°46
S 13	23 28 2	20°8'54	20°16	10°11	17°10	9°57	13°45	21°32	11°43	29°2	3°5	8°48
S 14	23 31 58	21°7'30	21°16	16°31	18°45	10°33	13°50	21°34	11°43	29°3	3°5	8°49
M15	23 35 55	22°6'08	22°15	22°49	20°20	11°10	13°56	21°36	11°44	29°3	3°5	8°50
T 16	23 39 51	23°4'48	23°14	29°5	21°55	11°46	14°1	21°38	11°45	29°3	3°5	8°51
W17	23 43 48	24°3'31	24°13	5°18	23°30	12°22	14°7	21°40	11°46	29°4	3°6	8°52
T 18	23 47 45	25°2'16	25°11	11°26	25°5	12°59	14°12	21°42	11°46	29°4	3°6	8°53
F 19	23 51 41	26°1'03	26°9	17°28	26°40	13°35	14°18	21°44	11°47	29°4	3°6	8°54
S 20	23 55 38	26°59'52	27°7	23°22	28°15	14°11	14°23	21°46	11°48	29°5	3°6	8°55
S 21	23 59 34	27°58'44	28°4	29°9	29°50	14°47	14°29	21°48	11°49	29°5	3°6	8°57
M22	0 3 31	28°57'37	29°1	4°47	1°25	15°24	14°34	21°50	11°49	29°6	3°6	8°58
T 23	0 7 27	29°56'33	29°59	10°15	3°0	16°0	14°40	21°52	11°50	29°6	3°7	8°59
W24	0 11 24	0°55'31	0°56	15°34	4°34	16°36	14°45	21°54	11°51	29°6	3°7	9°0
T 25	0 15 20	1°54'30	1°53	20°44	6°9	17°12	14°51	21°56	11°52	29°7	3°7	9°1
F 26	0 19 17	2°53'32	2°50	25°43	7°44	17°48	14°56	21°58	11°52	29°7	3°7	9°2
S 27	0 23 14	3°52'36	3°48	0°34	9°19	18°24	15°1	22°0	11°53	29°7	3°7	9°3
S 28	0 27 10	4°51'42	4°45	5°15	10°54	18°59	15°7	22°2	11°54	29°8	3°7	9°4
M29	0 31 7	5°50'49	5°43	9°47	12°29	19°35	15°12	22°4	11°55	29°8	3°7	9°6
T 30	0 35 3	6°49'59	6°42	14°10	14°2	20°11	15°18	22°6	11°55	29°8	3°8	9°7

Delta T = 55.58 sec.

Greg. Calendar

OCTOBER 1642 GC

00:00 UT

Day	Sid.t	Terra	☾	♁	♂	♄	♃	♅	♁	♆	♇	♁
W 1	0 39 0	7°49'10	7°41	18°25	15°38	20°47	15°23	22°8	11°56	29°9	3°8	9°8
T 2	0 42 56	8°48'23	8°40	22°32	17°13	21°22	15°29	22°10	11°57	29°9	3°8	9°9
F 3	0 46 53	9°47'38	9°40	26°31	18°48	21°58	15°34	22°12	11°58	29°9	3°8	9°10
S 4	0 50 49	10°46'54	10°40	0°24	20°23	22°33	15°40	22°14	11°58	29°10	3°8	9°11
S 5	0 54 46	11°46'12	11°41	4°10	21°58	23°9	15°45	22°16	11°59	29°10	3°8	9°12
M 6	0 58 42	12°45'32	12°41	7°50	23°32	23°44	15°51	22°18	12°0	29°10	3°9	9°13
T 7	1 2 39	13°44'54	13°43	11°24	25°7	24°20	15°56	22°20	12°0	29°11	3°9	9°15
W 8	1 6 36	14°44'18	14°44	14°52	26°42	24°55	16°2	22°22	12°1	29°11	3°9	9°16
T 9	1 10 32	15°43'44	15°45	18°16	28°17	25°30	16°7	22°24	12°2	29°12	3°9	9°17
F 10	1 14 29	16°43'12	16°47	21°35	29°52	26°6	16°13	22°26	12°3	29°12	3°9	9°18
S 11	1 18 25	17°42'42	17°48	24°50	1°27	26°41	16°18	22°28	12°3	29°12	3°9	9°19
S 12	1 22 22	18°42'14	18°49	28°1	3°1	27°16	16°23	22°30	12°4	29°13	3°10	9°20
M13	1 26 18	19°41'49	19°50	1°8	4°36	27°51	16°29	22°32	12°5	29°13	3°10	9°21
T 14	1 30 15	20°41'26	20°50	4°12	6°11	28°26	16°34	22°34	12°6	29°13	3°10	9°22
W15	1 34 11	21°41'05	21°50	7°13	7°46	29°1	16°40	22°36	12°6	29°14	3°10	9°24
T 16	1 38 8	22°40'47	22°50	10°11	9°21	29°36	16°45	22°38	12°7	29°14	3°10	9°25
F 17	1 42 5	23°40'31	23°50	13°7	10°56	0°11	16°51	22°40	12°8	29°14	3°10	9°26
S 18	1 46 1	24°40'17	24°49	16°1	12°31	0°45	16°56	22°42	12°9	29°15	3°10	9°27
S 19	1 49 58	25°40'05	25°48	18°53	14°5	1°20	17°2	22°44	12°9	29°15	3°11	9°28
M20	1 53 54	26°39'55	26°46	21°43	15°40	1°55	17°7	22°46	12°10	29°15	3°11	9°29
T 21	1 57 51	27°39'48	27°45	24°32	17°15	2°29	17°13	22°48	12°11	29°16	3°11	9°30
W22	2 1 47	28°39'42	28°43	27°19	18°50	3°4	17°18	22°50	12°12	29°16	3°11	9°32
T 23	2 5 44	29°39'39	29°41	0°7	6°20	3°38	17°24	22°52	12°12	29°16	3°11	9°33
F 24	2 9 40	0°39'38	0°39	2°51	22°0	4°13	17°29	22°54	12°13	29°17	3°11	9°34
S 25	2 13 37	1°39'38	1°37	5°36	23°35	4°47	17°35	22°56	12°14	29°17	3°12	9°35
S 26	2 17 34	2°39'41	2°36	8°21	25°10	5°22	17°40	22°58	12°15	29°18	3°12	9°36
M27	2 21 30	3°39'45	3°34	11°6	26°45	5°56	17°46	23°0	12°15	29°18	3°12	9°37
T 28	2 25 27	4°39'51	4°33	13°51	28°20	6°30	17°51	23°2	12°16	29°18	3°12	9°38
W29	2 29 23	5°39'59	5°32	16°36	29°55	7°4	17°57	23°4	12°17	29°19	3°12	9°39
T 30	2 33 20	6°40'08	6°32	19°21	1°30	7°38	18°2	23°6	12°18	29°19	3°12	9°41
F 31	2 37 16	7°40'18	7°32	22°7	3°5	8°12	18°7	23°8	12°18	29°19	3°13	9°42

Delta T = 55.50 sec.

Greg. Calendar

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SWISS EPHEMERIS for the year 1642
heliocentric

NOVEMBER 1642 GC

00:00 UT

Day	Sid.t	Terra	☾	♁	♂	♄	♃	♅	♁	♆	♇	♈
S 1	2 41 13	8♃40'30	8♃32	24♂54	4♃41	8♃46	18♂13	23♃10	12♃19	29♃20	3♃13	9♃43
S 2	2 45 9	9°40'44	9°33	27°42	6°16	9°20	18°18	23°12	12°20	29°20	3°13	9°44
M 3	2 49 6	10°40'59	10°35	0♃31	7°51	9°54	18°24	23°14	12°21	29°20	3°13	9°45
T 4	2 53 3	11°41'15	11°36	3°22	9°26	10°28	18°29	23°16	12°21	29°21	3°13	9°46
W 5	2 56 59	12°41'33	12°38	6°15	11° 1	11° 2	18°35	23°18	12°22	29°21	3°13	9°47
T 6	3 0 56	13°41'53	13°41	9° 9	12°36	11°36	18°40	23°20	12°23	29°21	3°13	9°49
F 7	3 4 52	14°42'15	14°43	12° 6	14°12	12° 9	18°46	23°22	12°24	29°22	3°14	9°50
S 8	3 8 49	15°42'38	15°45	15° 5	15°47	12°43	18°51	23°24	12°24	29°22	3°14	9°51
S 9	3 12 45	16°43'03	16°47	18° 7	17°22	13°16	18°57	23°26	12°25	29°23	3°14	9°52
M10	3 16 42	17°43'29	17°49	21°12	18°57	13°50	19° 2	23°28	12°26	29°23	3°14	9°53
T 11	3 20 38	18°43'58	18°51	24°20	20°33	14°23	19° 8	23°30	12°26	29°23	3°14	9°54
W12	3 24 35	19°44'28	19°53	27°31	22° 8	14°57	19°13	23°32	12°27	29°24	3°14	9°55
T 13	3 28 32	20°45'00	20°54	0♃47	23°44	15°30	19°19	23°34	12°28	29°24	3°15	9°57
F 14	3 32 28	21°45'34	21°55	4° 6	25°19	16° 3	19°24	23°36	12°29	29°24	3°15	9°58
S 15	3 36 25	22°46'09	22°55	7°30	26°54	16°36	19°30	23°38	12°29	29°25	3°15	9°59
S 16	3 40 21	23°46'46	23°56	10°59	28°30	17°10	19°35	23°40	12°30	29°25	3°15	10° 0
M17	3 44 18	24°47'25	24°56	14°32	0♃ 5	17°43	19°41	23°42	12°31	29°25	3°15	10° 1
T 18	3 48 14	25°48'06	25°55	18°12	1°41	18°16	19°46	23°44	12°32	29°26	3°15	10° 2
W19	3 52 11	26°48'48	26°55	21°57	3°16	18°49	19°52	23°46	12°32	29°26	3°16	10° 3
T 20	3 56 7	27°49'32	27°54	25°48	4°52	19°22	19°57	23°48	12°33	29°26	3°16	10° 5
F 21	4 0 4	28°50'17	28°53	29°46	6°27	19°54	20° 3	23°50	12°34	29°27	3°16	10° 6
S 22	4 4 0	29°51'04	29°52	3♃50	8° 3	20°27	20° 8	23°52	12°35	29°27	3°16	10° 7
S 23	4 7 57	0♃51'52	0♃50	8° 2	9°39	21° 0	20°13	23°54	12°35	29°27	3°16	10° 8
M24	4 11 54	1°52'42	1°49	12°22	11°14	21°33	20°19	23°56	12°36	29°28	3°16	10° 9
T 25	4 15 50	2°53'32	2°48	16°50	12°50	22° 5	20°24	23°58	12°37	29°28	3°16	10°10
W26	4 19 47	3°54'24	3°48	21°26	14°26	22°38	20°30	24° 0	12°38	29°29	3°17	10°11
T 27	4 23 43	4°55'16	4°48	26°10	16° 1	23°10	20°35	24° 2	12°38	29°29	3°17	10°13
F 28	4 27 40	5°56'09	5°48	1°♃ 4	17°37	23°43	20°41	24° 4	12°39	29°29	3°17	10°14
S 29	4 31 36	6°57'03	6°48	6° 6	19°13	24°15	20°46	24° 6	12°40	29°30	3°17	10°15
S 30	4 35 33	7♃57'58	7♃49	11°♃18	20°♃49	24♃48	20♃52	24♃ 8	12♃41	29♃30	3♃17	10♃16

Delta T = 55.41 sec.

Greg. Calendar

DECEMBER 1642 GC

00:00 UT

Day	Sid.t	Terra	☾	♁	♂	♄	♃	♅	♁	♆	♇	♈
M 1	4 39 30	8♃58'53	8♃51	16°♃39	22°♃24	25♃20	20♃57	24♃10	12♃41	29♃30	3♃17	10♃17
T 2	4 43 26	9°59'49	9°53	22° 8	24° 0	25°52	21° 3	24°12	12°42	29°31	3°18	10°18
W 3	4 47 23	11° 0'46	10°55	27°47	25°36	26°24	21° 8	24°14	12°43	29°31	3°18	10°19
T 4	4 51 19	12° 1'44	11°58	3♃33	27°12	26°57	21°14	24°16	12°44	29°31	3°18	10°21
F 5	4 55 16	13° 2'42	13° 0	9°28	28°48	27°29	21°19	24°18	12°44	29°32	3°18	10°22
S 6	4 59 12	14° 3'42	14° 3	15°29	0♃24	28° 1	21°25	24°20	12°45	29°32	3°18	10°23
S 7	5 3 9	15° 4'42	15° 6	21°37	2° 0	28°33	21°30	24°22	12°46	29°32	3°18	10°24
M 8	5 7 5	16° 5'43	16° 9	27°49	3°36	29° 5	21°36	24°24	12°47	29°33	3°19	10°25
T 9	5 11 2	17° 6'44	17°11	4♃ 5	5°12	29°36	21°41	24°26	12°47	29°33	3°19	10°26
W10	5 14 59	18° 7'47	18°14	10°23	6°48	0♃ 8	21°47	24°28	12°48	29°34	3°19	10°28
T 11	5 18 55	19° 8'50	19°16	16°43	8°24	0°40	21°52	24°30	12°49	29°34	3°19	10°29
F 12	5 22 52	20° 9'55	20°18	23° 1	10° 0	1°12	21°58	24°32	12°50	29°34	3°19	10°30
S 13	5 26 48	21°11'00	21°20	29°17	11°37	1°43	22° 3	24°34	12°50	29°35	3°19	10°31
S 14	5 30 45	22°12'06	22°21	5♃30	13°13	2°15	22° 9	24°36	12°51	29°35	3°19	10°32
M15	5 34 41	23°13'13	23°22	11°38	14°49	2°46	22°14	24°38	12°52	29°35	3°20	10°33
T 16	5 38 38	24°14'20	24°23	17°39	16°25	3°18	22°20	24°40	12°52	29°36	3°20	10°34
W17	5 42 34	25°15'28	25°23	23°33	18° 1	3°49	22°25	24°42	12°53	29°36	3°20	10°36
T 18	5 46 31	26°16'37	26°23	29°20	19°38	4°21	22°31	24°44	12°54	29°36	3°20	10°37
F 19	5 50 28	27°17'47	27°23	4♃57	21°14	4°52	22°36	24°46	12°55	29°37	3°20	10°38
S 20	5 54 24	28°18'57	28°22	10°25	22°50	5°23	22°42	24°48	12°55	29°37	3°20	10°39
S 21	5 58 21	29°20'08	29°22	15°44	24°27	5°54	22°47	24°50	12°56	29°37	3°21	10°40
M22	6 2 17	0♃21'19	0♃21	20°53	26° 3	6°26	22°53	24°52	12°57	29°38	3°21	10°41
T 23	6 6 14	1°22'31	1°20	25°53	27°40	6°57	22°58	24°54	12°58	29°38	3°21	10°43
W24	6 10 10	2°23'42	2°19	0♃43	29°16	7°28	23° 4	24°56	12°58	29°39	3°21	10°44
T 25	6 14 7	3°24'53	3°19	5°23	0♃53	7°59	23° 9	24°58	12°59	29°39	3°21	10°45
F 26	6 18 3	4°26'05	4°19	9°55	2°29	8°30	23°15	25° 0	13° 0	29°39	3°21	10°46
S 27	6 22 0	5°27'16	5°19	14°18	4° 6	9° 1	23°20	25° 2	13° 1	29°40	3°22	10°47
S 28	6 25 57	6°28'26	6°20	18°33	5°42	9°31	23°26	25° 4	13° 1	29°40	3°22	10°48
M29	6 29 53	7°29'37	7°21	22°40	7°19	10° 2	23°31	25° 6	13° 2	29°40	3°22	10°49
T 30	6 33 50	8°30'47	8°22	26°39	8°56	10°33	23°37	25° 8	13° 3	29°41	3°22	10°51
W31	6 37 46	9♃31'57	9♃24	0♃31	10♃32	11♃ 4	23♃42	25♃10	13♃ 4	29♃41	3♃22	10♃52

Delta T = 55.33 sec.

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