

SWISS EPHEMERIS for the year 1630
heliocentric

JANUARY 1630 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♁	♂
T 1	6 42 17	10 ⁵ 42'18	10 ⁵ 46	12 ²¹ 31	24 ¹⁷ 58	11 ¹⁶ 2	16 ³³ 3	28 ² 40	12 ¹⁷ 35	1 ¹¹ 33	21 ¹⁸ 2	9 ¹⁷ 16
W 2	6 46 13	11 ⁰ 43'28	11 ⁰ 49	15 ⁰ 57	26 ⁰ 34	11 ⁰ 30	16 ⁰ 9	28 ⁰ 42	12 ⁰ 36	1 ⁰ 33	21 ⁰ 2	9 ⁰ 16
T 3	6 50 10	12 ⁰ 44'37	12 ⁰ 51	19 ⁰ 19	28 ⁰ 10	11 ⁰ 58	16 ⁰ 14	28 ⁰ 44	12 ⁰ 37	1 ⁰ 34	21 ⁰ 2	9 ⁰ 17
F 4	6 54 7	13 ⁰ 45'46	13 ⁰ 54	22 ⁰ 37	29 ⁰ 46	12 ⁰ 26	16 ⁰ 19	28 ⁰ 46	12 ⁰ 37	1 ⁰ 34	21 ⁰ 2	9 ⁰ 18
S 5	6 58 3	14 ⁰ 46'55	14 ⁰ 55	25 ⁰ 50	1 ¹⁸ 22	12 ⁰ 54	16 ⁰ 25	28 ⁰ 48	12 ⁰ 38	1 ⁰ 35	21 ⁰ 3	9 ⁰ 18
S 6	7 2 0	15 ⁰ 48'04	15 ⁰ 57	28 ⁰ 59	2 ⁰ 58	13 ⁰ 22	16 ⁰ 30	28 ⁰ 50	12 ⁰ 39	1 ⁰ 35	21 ⁰ 3	9 ⁰ 19
M 7	7 5 56	16 ⁰ 49'13	16 ⁰ 58	2 ¹¹ 5	4 ⁰ 34	13 ⁰ 50	16 ⁰ 35	28 ⁰ 52	12 ⁰ 40	1 ⁰ 35	21 ⁰ 3	9 ⁰ 19
T 8	7 9 53	17 ⁰ 50'22	17 ⁰ 58	5 ⁰ 8	6 ⁰ 10	14 ⁰ 17	16 ⁰ 41	28 ⁰ 53	12 ⁰ 40	1 ⁰ 36	21 ⁰ 3	9 ⁰ 20
W 9	7 13 49	18 ⁰ 51'31	18 ⁰ 59	8 ⁰ 8	7 ⁰ 46	14 ⁰ 45	16 ⁰ 46	28 ⁰ 55	12 ⁰ 41	1 ⁰ 36	21 ⁰ 3	9 ⁰ 21
T 10	7 17 46	19 ⁰ 52'40	19 ⁰ 58	11 ⁰ 6	9 ⁰ 22	15 ⁰ 13	16 ⁰ 51	28 ⁰ 57	12 ⁰ 42	1 ⁰ 36	21 ⁰ 3	9 ⁰ 21
F 11	7 21 42	20 ⁰ 53'49	20 ⁰ 58	14 ⁰ 1	10 ⁰ 58	15 ⁰ 41	16 ⁰ 57	28 ⁰ 59	12 ⁰ 43	1 ⁰ 37	21 ⁰ 4	9 ⁰ 22
S 12	7 25 39	21 ⁰ 54'57	21 ⁰ 58	16 ⁰ 54	12 ⁰ 34	16 ⁰ 8	17 ⁰ 2	29 ⁰ 1	12 ⁰ 44	1 ⁰ 37	21 ⁰ 4	9 ⁰ 23
S 13	7 29 36	22 ⁰ 56'04	22 ⁰ 57	19 ⁰ 45	14 ⁰ 11	16 ⁰ 36	17 ⁰ 7	29 ⁰ 3	12 ⁰ 44	1 ⁰ 37	21 ⁰ 4	9 ⁰ 23
M14	7 33 32	23 ⁰ 57'11	23 ⁰ 56	22 ⁰ 34	15 ⁰ 47	17 ⁰ 4	17 ⁰ 13	29 ⁰ 5	12 ⁰ 45	1 ⁰ 38	21 ⁰ 4	9 ⁰ 24
T 15	7 37 29	24 ⁰ 58'18	24 ⁰ 55	25 ⁰ 23	17 ⁰ 23	17 ⁰ 31	17 ⁰ 18	29 ⁰ 7	12 ⁰ 46	1 ⁰ 38	21 ⁰ 4	9 ⁰ 24
W16	7 41 25	25 ⁰ 59'23	25 ⁰ 55	28 ⁰ 10	18 ⁰ 59	17 ⁰ 59	17 ⁰ 23	29 ⁰ 9	12 ⁰ 47	1 ⁰ 38	21 ⁰ 4	9 ⁰ 25
T 17	7 45 22	27 ⁰ 0'28	26 ⁰ 55	0 ²⁷ 56	20 ⁰ 36	18 ⁰ 26	17 ⁰ 28	29 ⁰ 11	12 ⁰ 47	1 ⁰ 39	21 ⁰ 5	9 ⁰ 26
F 18	7 49 18	28 ⁰ 1'31	27 ⁰ 54	3 ⁰ 41	22 ⁰ 12	18 ⁰ 54	17 ⁰ 34	29 ⁰ 12	12 ⁰ 48	1 ⁰ 39	21 ⁰ 5	9 ⁰ 26
S 19	7 53 15	29 ⁰ 2'34	28 ⁰ 54	6 ⁰ 26	23 ⁰ 48	19 ⁰ 21	17 ⁰ 39	29 ⁰ 14	12 ⁰ 49	1 ⁰ 40	21 ⁰ 5	9 ⁰ 27
S 20	7 57 11	0 ⁰ 3'36	29 ⁰ 55	9 ⁰ 11	25 ⁰ 25	19 ⁰ 49	17 ⁰ 44	29 ⁰ 16	12 ⁰ 50	1 ⁰ 40	21 ⁰ 5	9 ⁰ 27
M21	8 1 8	1 ⁰ 4'36	0 ⁰ 5'55	11 ⁰ 56	27 ⁰ 1	20 ⁰ 16	17 ⁰ 50	29 ⁰ 18	12 ⁰ 51	1 ⁰ 40	21 ⁰ 5	9 ⁰ 28
T 22	8 5 5	2 ⁰ 5'36	1 ⁰ 56	14 ⁰ 40	28 ⁰ 38	20 ⁰ 44	17 ⁰ 55	29 ⁰ 20	12 ⁰ 51	1 ⁰ 41	21 ⁰ 5	9 ⁰ 29
W23	8 9 1	3 ⁰ 6'34	2 ⁰ 58	17 ⁰ 25	0 ¹¹ 14	21 ⁰ 11	18 ⁰ 0	29 ⁰ 22	12 ⁰ 52	1 ⁰ 41	21 ⁰ 5	9 ⁰ 29
T 24	8 12 58	4 ⁰ 7'31	4 ⁰ 0	20 ⁰ 11	1 ⁰ 51	21 ⁰ 38	18 ⁰ 6	29 ⁰ 24	12 ⁰ 53	1 ⁰ 41	21 ⁰ 6	9 ⁰ 30
F 25	8 16 54	5 ⁰ 8'26	5 ⁰ 2	22 ⁰ 57	3 ⁰ 27	22 ⁰ 6	18 ⁰ 11	29 ⁰ 26	12 ⁰ 54	1 ⁰ 42	21 ⁰ 6	9 ⁰ 31
S 26	8 20 51	6 ⁰ 9'21	6 ⁰ 4	25 ⁰ 45	5 ⁰ 4	22 ⁰ 33	18 ⁰ 16	29 ⁰ 28	12 ⁰ 54	1 ⁰ 42	21 ⁰ 6	9 ⁰ 31
S 27	8 24 47	7 ⁰ 10'14	7 ⁰ 7	28 ⁰ 33	6 ⁰ 41	23 ⁰ 0	18 ⁰ 22	29 ⁰ 30	12 ⁰ 55	1 ⁰ 42	21 ⁰ 6	9 ⁰ 32
M28	8 28 44	8 ⁰ 11'06	8 ⁰ 10	1 ³ 23	8 ⁰ 17	23 ⁰ 28	18 ⁰ 27	29 ⁰ 31	12 ⁰ 56	1 ⁰ 43	21 ⁰ 6	9 ⁰ 32
T 29	8 32 40	9 ⁰ 11'57	9 ⁰ 13	4 ⁰ 15	9 ⁰ 54	23 ⁰ 55	18 ⁰ 32	29 ⁰ 33	12 ⁰ 57	1 ⁰ 43	21 ⁰ 6	9 ⁰ 33
W30	8 36 37	10 ⁰ 12'47	10 ⁰ 16	7 ⁰ 8	11 ⁰ 31	24 ⁰ 22	18 ⁰ 38	29 ⁰ 35	12 ⁰ 58	1 ⁰ 43	21 ⁰ 7	9 ⁰ 34
T 31	8 40 34	11 ⁰ 13'35	11 ⁰ 18	10 ⁰ 3	13 ⁰ 11	24 ⁰ 49	18 ⁰ 43	29 ⁰ 37	12 ⁰ 58	1 ⁰ 44	21 ⁰ 7	9 ⁰ 34

Delta T = 78.65 sec. Greg. Calendar

FEBRUARY 1630 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♁	♂
F 1	8 44 30	12 ⁰ 14'23	12 ⁰ 21	13 ⁰ 3	14 ⁰ 11	25 ⁰ 16	18 ⁰ 48	29 ⁰ 39	12 ⁰ 59	1 ⁰ 44	21 ⁰ 7	9 ⁰ 35
S 2	8 48 27	13 ⁰ 15'09	13 ⁰ 23	16 ⁰ 1	16 ⁰ 21	25 ⁰ 44	18 ⁰ 54	29 ⁰ 41	13 ⁰ 0	1 ⁰ 45	21 ⁰ 7	9 ⁰ 35
S 3	8 52 23	14 ⁰ 15'54	14 ⁰ 24	19 ⁰ 4	17 ⁰ 58	26 ⁰ 11	18 ⁰ 59	29 ⁰ 43	13 ⁰ 1	1 ⁰ 45	21 ⁰ 7	9 ⁰ 36
M 4	8 56 20	15 ⁰ 16'39	15 ⁰ 25	22 ⁰ 10	19 ⁰ 35	26 ⁰ 38	19 ⁰ 4	29 ⁰ 45	13 ⁰ 1	1 ⁰ 45	21 ⁰ 7	9 ⁰ 37
T 5	9 0 16	16 ⁰ 17'22	16 ⁰ 26	25 ⁰ 19	21 ⁰ 12	27 ⁰ 5	19 ⁰ 10	29 ⁰ 47	13 ⁰ 2	1 ⁰ 46	21 ⁰ 7	9 ⁰ 37
W 6	9 4 13	17 ⁰ 18'05	17 ⁰ 27	28 ⁰ 32	22 ⁰ 49	27 ⁰ 32	19 ⁰ 15	29 ⁰ 49	13 ⁰ 3	1 ⁰ 46	21 ⁰ 8	9 ⁰ 38
T 7	9 8 9	18 ⁰ 18'46	18 ⁰ 27	1 ³³ 49	24 ⁰ 26	27 ⁰ 59	19 ⁰ 20	29 ⁰ 50	13 ⁰ 4	1 ⁰ 46	21 ⁰ 8	9 ⁰ 38
F 8	9 12 6	19 ⁰ 19'26	19 ⁰ 26	5 ⁰ 10	26 ⁰ 3	28 ⁰ 26	19 ⁰ 26	29 ⁰ 52	13 ⁰ 4	1 ⁰ 47	21 ⁰ 8	9 ⁰ 39
S 9	9 16 3	20 ⁰ 20'05	20 ⁰ 25	8 ⁰ 36	27 ⁰ 40	28 ⁰ 53	19 ⁰ 31	29 ⁰ 54	13 ⁰ 5	1 ⁰ 47	21 ⁰ 8	9 ⁰ 40
S 10	9 19 59	21 ⁰ 20'42	21 ⁰ 25	12 ⁰ 6	29 ⁰ 17	29 ⁰ 20	19 ⁰ 36	29 ⁰ 56	13 ⁰ 6	1 ⁰ 47	21 ⁰ 8	9 ⁰ 40
M11	9 23 56	22 ⁰ 21'19	22 ⁰ 23	15 ⁰ 42	0 ⁵ 54	29 ⁰ 47	19 ⁰ 42	29 ⁰ 58	13 ⁰ 7	1 ⁰ 48	21 ⁰ 8	9 ⁰ 41
T 12	9 27 52	23 ⁰ 21'53	23 ⁰ 22	19 ⁰ 23	2 ⁰ 31	0 ⁰ 14	19 ⁰ 47	29 ⁰ 59	13 ⁰ 8	1 ⁰ 48	21 ⁰ 9	9 ⁰ 42
W13	9 31 49	24 ⁰ 22'26	24 ⁰ 21	23 ⁰ 11	4 ⁰ 8	0 ⁰ 40	19 ⁰ 52	0 ¹¹ 2	13 ⁰ 8	1 ⁰ 48	21 ⁰ 9	9 ⁰ 42
T 14	9 35 45	25 ⁰ 22'57	25 ⁰ 20	27 ⁰ 4	5 ⁰ 45	1 ⁰ 7	19 ⁰ 58	0 ⁰ 4	13 ⁰ 9	1 ⁰ 49	21 ⁰ 9	9 ⁰ 43
F 15	9 39 42	26 ⁰ 23'27	26 ⁰ 19	1 ¹ 5	7 ⁰ 22	1 ⁰ 34	20 ⁰ 3	0 ⁰ 6	13 ⁰ 10	1 ⁰ 49	21 ⁰ 9	9 ⁰ 43
S 16	9 43 38	27 ⁰ 23'55	27 ⁰ 18	5 ⁰ 12	8 ⁰ 59	2 ⁰ 1	20 ⁰ 8	0 ⁰ 8	13 ⁰ 11	1 ⁰ 49	21 ⁰ 9	9 ⁰ 44
S 17	9 47 35	28 ⁰ 24'21	28 ⁰ 17	9 ⁰ 27	10 ⁰ 37	2 ⁰ 28	20 ⁰ 14	0 ⁰ 9	13 ⁰ 11	1 ⁰ 50	21 ⁰ 9	9 ⁰ 45
M18	9 51 32	29 ⁰ 24'45	29 ⁰ 17	13 ⁰ 49	12 ⁰ 14	2 ⁰ 55	20 ⁰ 19	0 ⁰ 11	13 ⁰ 12	1 ⁰ 50	21 ⁰ 9	9 ⁰ 45
T 19	9 55 28	0 ¹¹ 25'07	0 ¹¹ 16	18 ⁰ 20	13 ⁰ 51	3 ⁰ 21	20 ⁰ 24	0 ⁰ 13	13 ⁰ 13	1 ⁰ 51	21 ⁰ 10	9 ⁰ 46
W20	9 59 25	1 ⁰ 25'28	1 ⁰ 16	22 ⁰ 59	15 ⁰ 29	3 ⁰ 48	20 ⁰ 30	0 ⁰ 15	13 ⁰ 14	1 ⁰ 51	21 ⁰ 10	9 ⁰ 46
T 21	10 3 21	2 ⁰ 25'46	2 ⁰ 17	27 ⁰ 47	17 ⁰ 6	4 ⁰ 15	20 ⁰ 35	0 ⁰ 17	13 ⁰ 15	1 ⁰ 51	21 ⁰ 10	9 ⁰ 47
F 22	10 7 18	3 ⁰ 26'02	3 ⁰ 18	2 ¹⁷ 44	18 ⁰ 43	4 ⁰ 42	20 ⁰ 40	0 ⁰ 19	13 ⁰ 15	1 ⁰ 52	21 ⁰ 10	9 ⁰ 48
S 23	10 11 14	4 ⁰ 26'17	4 ⁰ 19	7 ⁰ 50	20 ⁰ 21	5 ⁰ 8	20 ⁰ 46	0 ⁰ 21	13 ⁰ 16	1 ⁰ 52	21 ⁰ 10	9 ⁰ 48
S 24	10 15 11	5 ⁰ 26'29	5 ⁰ 21	13 ⁰ 5	21 ⁰ 58	5 ⁰ 35	20 ⁰ 51	0 ⁰ 23	13 ⁰ 17	1 ⁰ 52	21 ⁰ 10	9 ⁰ 49
M25	10 19 7	6 ⁰ 26'39	6 ⁰ 23	18 ⁰ 29	23 ⁰ 35	6 ⁰ 2	20 ⁰ 56	0 ⁰ 25	13 ⁰ 18	1 ⁰ 53	21 ⁰ 11	9 ⁰ 50
T 26	10 23 4	7 ⁰ 26'47	7 ⁰ 25	24 ⁰ 2	25 ⁰ 13	6 ⁰ 28	21 ⁰ 2	0 ⁰ 27	13 ⁰ 18	1 ⁰ 53	21 ⁰ 11	9 ⁰ 50
W27	10 27 1	8 ⁰ 26'53	8 ⁰ 27	29 ⁰ 44	26 ⁰ 50	6 ⁰ 55	21 ⁰ 7	0 ⁰ 28	13 ⁰ 19	1 ⁰ 53	21 ⁰ 11	9 ⁰ 51
T 28	10 30 57	9 ⁰ 26'57	9 ⁰ 29	5 ⁰ 33	28 ⁰ 28	7 ⁰ 22	21 ⁰ 12	0 ⁰ 30	13 ⁰ 20	1 ⁰ 54	21 ⁰ 11	9 ⁰ 5

SWISS EPHEMERIS for the year 1630
heliocentric

MARCH 1630 GC

00:00 UT

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

Delta T = 78.41 sec.

Greg. Calendar

APRIL 1630 GC

00:00 UT

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

Delta T = 78.28 sec.

Greg. Calendar

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SWISS EPHEMERIS for the year 1630
heliocentric

MAY 1630 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♁	♂
W 1	14 35 23	10M.27°50	10M.35	16♁ 7	8M.48	4M.34	26♁44	2M.28	14M.8	2M.16	21♁21	10Y.29
T 2	14 39 20	11°25'52	11°34	19°10	10°24	5° 0	26°50	2°30	14° 9	2°16	21°21	10°30
F 3	14 43 17	12°23'52	12°33	22°16	12° 0	5°26	26°55	2°31	14° 9	2°16	21°21	10°31
S 4	14 47 13	13°21'51	13°31	25°25	13°36	5°53	27° 0	2°33	14°10	2°17	21°21	10°31
S 5	14 51 10	14°19'49	14°29	28°38	15°12	6°19	27° 6	2°35	14°11	2°17	21°21	10°32
M 6	14 55 6	15°17'45	15°26	1♁55	16°47	6°45	27°11	2°37	14°12	2°18	21°21	10°33
T 7	14 59 3	16°15'40	16°24	5°16	18°23	7°11	27°17	2°39	14°13	2°18	21°21	10°33
W 8	15 2 59	17°13'33	17°20	8°42	19°59	7°38	27°22	2°41	14°13	2°18	21°22	10°34
T 9	15 6 56	18°11'26	18°17	12°13	21°35	8° 4	27°27	2°43	14°14	2°19	21°22	10°34
F 10	15 10 52	19° 9'17	19°13	15°49	23°10	8°30	27°33	2°45	14°15	2°19	21°22	10°35
S 11	15 14 49	20° 7'06	20° 9	19°30	24°46	8°56	27°38	2°47	14°16	2°19	21°22	10°36
S 12	15 18 45	21° 4'54	21° 5	23°18	26°21	9°23	27°44	2°48	14°16	2°20	21°22	10°36
M13	15 22 42	22° 2'41	22° 1	27°12	27°57	9°49	27°49	2°50	14°17	2°20	21°22	10°37
T 14	15 26 39	23° 0'27	22°57	1♁12	29°32	10°15	27°54	2°52	14°18	2°20	21°23	10°37
W15	15 30 35	23°58'11	23°53	5°20	1♁ 8	10°42	28° 0	2°54	14°19	2°21	21°23	10°38
T 16	15 34 32	24°55'54	24°50	9°35	2°43	11° 8	28° 5	2°56	14°20	2°21	21°23	10°39
F 17	15 38 28	25°53'35	25°46	13°58	4°19	11°34	28°10	2°58	14°20	2°21	21°23	10°39
S 18	15 42 25	26°51'14	26°43	18°29	5°54	12° 1	28°16	3° 0	14°21	2°22	21°23	10°40
S 19	15 46 21	27°48'52	27°41	23° 8	7°29	12°27	28°21	3° 2	14°22	2°22	21°23	10°41
M20	15 50 18	28°46'28	28°38	27°56	9° 4	12°53	28°27	3° 4	14°23	2°22	21°23	10°41
T 21	15 54 15	29°44'03	29°36	2Y.54	10°40	13°20	28°32	3° 5	14°23	2°23	21°24	10°42
W22	15 58 11	0♁41'36	0♁35	8° 0	12°15	13°46	28°37	3° 7	14°24	2°23	21°24	10°42
T 23	16 2 8	1°39'08	1°34	13°15	13°50	14°13	28°43	3° 9	14°25	2°24	21°24	10°43
F 24	16 6 4	2°36'38	2°33	18°39	15°25	14°39	28°48	3°11	14°26	2°24	21°24	10°44
S 25	16 10 1	3°34'08	3°32	24°13	17° 0	15° 5	28°54	3°13	14°26	2°24	21°24	10°44
S 26	16 13 57	4°31'36	4°31	29°55	18°35	15°32	28°59	3°15	14°27	2°25	21°24	10°45
M27	16 17 54	5°29'03	5°31	5♁45	20°11	15°58	29° 4	3°17	14°28	2°25	21°25	10°45
T 28	16 21 50	6°26'29	6°30	11°42	21°46	16°25	29°10	3°19	14°29	2°25	21°25	10°46
W29	16 25 47	7°23'55	7°29	17°46	23°21	16°51	29°15	3°21	14°30	2°26	21°25	10°47
T 30	16 29 44	8°21'19	8°28	23°55	24°56	17°18	29°20	3°22	14°30	2°26	21°25	10°47
F 31	16 33 40	9♁18'43	9♁26	0II.9	26♁31	17M.44	29♁26	3M.24	14M.31	2M.26	21♁25	10Y.48

Delta T = 78.16 sec. Greg. Calendar

JUNE 1630 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♁	♂
S 1	16 37 37	10♁16'06	10♁25	6II.27	28♁ 5	18M.11	29♁31	3M.26	14M.32	2M.27	21♁25	10Y.49
S 2	16 41 33	11°13'28	11°22	12°45	29°40	18°37	29°37	3°28	14°33	2°27	21°26	10°49
M 3	16 45 30	12°10'50	12°20	19° 4	1♁15	19° 4	29°42	3°30	14°33	2°27	21°26	10°50
T 4	16 49 26	13° 8'11	13°17	25°22	2°50	19°30	29°47	3°32	14°34	2°28	21°26	10°50
W 5	16 53 23	14° 5'32	14°14	1♁37	4°25	19°57	29°53	3°34	14°35	2°28	21°26	10°51
T 6	16 57 19	15° 2'52	15°10	7°48	6° 0	20°23	29°58	3°36	14°36	2°29	21°26	10°52
F 7	17 1 16	16° 0'12	16° 7	13°53	7°35	20°50	0♁ 4	3°38	14°37	2°29	21°26	10°52
S 8	17 5 13	16°57'31	17° 2	19°52	9°10	21°16	0° 9	3°39	14°37	2°29	21°26	10°53
S 9	17 9 9	17°54'50	17°58	25°43	10°45	21°43	0°14	3°41	14°38	2°30	21°27	10°54
M10	17 13 6	18°52'08	18°54	1♁26	12°19	22°10	0°20	3°43	14°39	2°30	21°27	10°54
T 11	17 17 2	19°49'26	19°49	7° 0	13°54	22°36	0°25	3°45	14°40	2°30	21°27	10°55
W12	17 20 59	20°46'43	20°44	12°24	15°29	23° 3	0°31	3°47	14°40	2°31	21°27	10°55
T 13	17 24 55	21°44'00	21°40	17°39	17° 4	23°30	0°36	3°49	14°41	2°31	21°27	10°56
F 14	17 28 52	22°41'16	22°36	22°44	18°39	23°56	0°41	3°51	14°42	2°31	21°27	10°57
S 15	17 32 48	23°38'31	23°32	27°40	20°13	24°23	0°47	3°53	14°43	2°32	21°28	10°57
S 16	17 36 45	24°35'45	24°28	2M.26	21°48	24°50	0°52	3°54	14°44	2°32	21°28	10°58
M17	17 40 42	25°32'59	25°25	7° 3	23°23	25°17	0°58	3°56	14°44	2°32	21°28	10°58
T 18	17 44 38	26°30'12	26°22	11°31	24°58	25°43	1° 3	3°58	14°45	2°33	21°28	10°59
W19	17 48 35	27°27'25	27°19	15°51	26°33	26°10	1° 8	4° 0	14°46	2°33	21°28	11° 0
T 20	17 52 31	28°24'36	28°17	20° 2	28° 8	26°37	1°14	4° 2	14°47	2°34	21°28	11° 0
F 21	17 56 28	29°21'48	29°16	24° 6	29°42	27° 4	1°19	4° 4	14°47	2°34	21°28	11° 1
S 22	18 0 24	0♁18'58	0♁14	28° 2	1♁17	27°31	1°25	4° 6	14°48	2°34	21°29	11° 2
S 23	18 4 21	1°16'09	1°13	1♁52	2°52	27°57	1°30	4° 8	14°49	2°35	21°29	11° 2
M24	18 8 17	2°13'19	2°12	5°35	4°27	28°24	1°35	4°10	14°50	2°35	21°29	11° 3
T 25	18 12 14	3°10'29	3°11	9°12	6° 2	28°51	1°41	4°11	14°51	2°35	21°29	11° 3
W26	18 16 11	4° 7'40	4°10	12°44	7°36	29°18	1°46	4°13	14°51	2°36	21°29	11° 4
T 27	18 20 7	5° 4'50	5° 9	16°10	9°11	29°45	1°52	4°15	14°52	2°36	21°29	11° 5
F 28	18 24 4	6° 2'00	6° 8	19°32	10°46	0♁12	1°57	4°17	14°53	2°36	21°30	11° 5
S 29	18 28 0	6°59'10	7° 6	22°49	12°21	0°39	2° 2	4°19	14°54	2°37	21°30	11° 6
S 30	18 31 57	7♁56'20	8♁ 4	26♁ 2	13♁56	1♁ 6	2♁ 8	4M.21	14M.54	2M.37	21♁30	11Y.6

Delta T = 78.03 sec. Greg. Calendar created from Swiss Ephemeris, Copyright Astrodienst AG [13.11.2015]

SWISS EPHEMERIS for the year 1630
heliocentric

JULY 1630 GC

00:00 UT

Day	Sid.t	Terra	☾	♃	♄	♅	♆	♁	♂	♆	♁	♂
M 1	18 35 53	8 ³⁵ 53'31	9 ³ 2	29 ²¹ 11	15 ²⁸ 31	1 ² 33	2 ¹³ 13	4 ¹¹ 23	14 ¹¹ 55	2 ¹¹ 37	21 ¹⁸ 30	11 ¹⁷ 7
T 2	18 39 50	9°50'42	10° 0	2 ¹¹ 17	17° 6	2° 0	2°19	4°25	14°56	2°38	21°30	11° 8
W 3	18 43 46	10°47'53	10°57	5°20	18°41	2°27	2°24	4°27	14°57	2°38	21°30	11° 8
T 4	18 47 43	11°45'04	11°54	8°20	20°16	2°54	2°29	4°28	14°57	2°39	21°30	11° 9
F 5	18 51 40	12°42'17	12°50	11°17	21°51	3°21	2°35	4°30	14°58	2°39	21°31	11°10
S 6	18 55 36	13°39'29	13°46	14°12	23°26	3°49	2°40	4°32	14°59	2°39	21°31	11°10
S 7	18 59 33	14°36'42	14°42	17° 5	25° 1	4°16	2°46	4°34	15° 0	2°40	21°31	11°11
M 8	19 3 29	15°33'56	15°38	19°56	26°36	4°43	2°51	4°36	15° 1	2°40	21°31	11°11
T 9	19 7 26	16°31'10	16°33	22°45	28°11	5°10	2°56	4°38	15° 1	2°40	21°31	11°12
W10	19 11 22	17°28'25	17°29	25°33	29°46	5°38	3° 2	4°40	15° 2	2°41	21°31	11°13
T 11	19 15 19	18°25'40	18°24	28°20	1 ¹¹ 21	6° 5	3° 7	4°42	15° 3	2°41	21°32	11°13
F 12	19 19 16	19°22'55	19°19	1 ¹¹ 7 6	2°56	6°32	3°13	4°43	15° 4	2°41	21°32	11°14
S 13	19 23 12	20°20'11	20°15	3°52	4°31	6°59	3°18	4°45	15° 4	2°42	21°32	11°15
S 14	19 27 9	21°17'27	21°11	6°37	6° 6	7°27	3°24	4°47	15° 5	2°42	21°32	11°15
M15	19 31 5	22°14'42	22° 7	9°22	7°41	7°54	3°29	4°49	15° 6	2°42	21°32	11°16
T 16	19 35 2	23°11'59	23° 4	12° 6	9°16	8°22	3°34	4°51	15° 7	2°43	21°32	11°16
W17	19 38 58	24° 9'15	24° 1	14°51	10°52	8°49	3°40	4°53	15° 8	2°43	21°33	11°17
T 18	19 42 55	25° 6'32	24°58	17°36	12°27	9°16	3°45	4°55	15° 8	2°43	21°33	11°18
F 19	19 46 51	26° 3'49	25°56	20°22	14° 2	9°44	3°51	4°57	15° 9	2°44	21°33	11°18
S 20	19 50 48	27° 1'07	26°55	23° 8	15°37	10°11	3°56	4°59	15°10	2°44	21°33	11°19
S 21	19 54 45	27°58'25	27°53	25°56	17°13	10°39	4° 1	5° 0	15°11	2°45	21°33	11°19
M22	19 58 41	28°55'43	28°52	28°44	18°48	11° 7	4° 7	5° 2	15°11	2°45	21°33	11°20
T 23	20 2 38	29°53'03	29°51	1 ¹³ 34	20°23	11°34	4°12	5° 4	15°12	2°45	21°33	11°21
W24	20 6 34	0 ²² 50'23	0 ²² 50	4°26	21°59	12° 2	4°18	5° 6	15°13	2°46	21°34	11°21
T 25	20 10 31	1°47'43	1°49	7°19	23°34	12°29	4°23	5° 8	15°14	2°46	21°34	11°22
F 26	20 14 27	2°45'05	2°48	10°14	25° 9	12°57	4°29	5°10	15°15	2°46	21°34	11°23
S 27	20 18 24	3°42'27	3°47	13°12	26°45	13°25	4°34	5°12	15°15	2°47	21°34	11°23
S 28	20 22 20	4°39'51	4°46	16°12	28°20	13°53	4°39	5°14	15°16	2°47	21°34	11°24
M29	20 26 17	5°37'16	5°45	19°16	29°56	14°20	4°45	5°15	15°17	2°47	21°34	11°24
T 30	20 30 14	6°34'41	6°43	22°22	1 ¹⁷ 31	14°48	4°50	5°17	15°18	2°48	21°35	11°25
W31	20 34 10	7 ³² 32'08	7 ³² 41	25 ³ 31	3 ¹⁷ 7	15 ¹⁶ 16	4 ¹¹ 56	5 ¹¹ 19	15 ¹⁸ 18	2 ¹¹ 48	21 ¹⁸ 35	11 ¹⁷ 26

Delta T = 77.90 sec. Greg. Calendar

AUGUST 1630 GC

00:00 UT

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

Delta T = 77.78 sec. Greg. Calendar created from Swiss Ephemeris, Copyright Astrodienst AG [13.11.2015]

SWISS EPHEMERIS for the year 1630
heliocentric

SEPTEMBER 1630 GC

00:00 UT

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

Delta T = 77.65 sec.

Greg. Calendar

OCTOBER 1630 GC

00:00 UT

Day	Sid.t	Terra	☾	♁	♂	♄	♃	♅	♁	♆	♁	♁
T 1	0 38 36	7 ^h 43'15"	7 ^h 51'	11 ^h 11'22"	12 ^h 54'33"	15 ^h 11'17"	10 ^h 32'	7 ^h 16'	16 ^h 6'	3 ^h 10'	21 ^h 44'	12 ^h 4'
W 2	0 42 33	8°42'29"	8°50'	14°17'	14°21'	15°48'	10°38'	7°18'	16° 7'	3°10'	21°44'	12° 5'
T 3	0 46 30	9°41'46"	9°48'	17°10'	15°58'	16°18'	10°43'	7°19'	16° 8'	3°11'	21°45'	12° 5'
F 4	0 50 26	10°41'04"	10°45'	20° 1'	17°35'	16°49'	10°49'	7°21'	16° 9'	3°11'	21°45'	12° 6'
S 5	0 54 23	11°40'25"	11°43'	22°51'	19°13'	17°19'	10°54'	7°23'	16° 9'	3°12'	21°45'	12° 6'
S 6	0 58 19	12°39'48"	12°40'	25°39'	20°50'	17°50'	11° 0'	7°25'	16°10'	3°12'	21°45'	12° 7'
M 7	1 2 16	13°39'13"	13°37'	28°26'	22°27'	18°21'	11° 5'	7°27'	16°11'	3°12'	21°45'	12° 8'
T 8	1 6 12	14°38'40"	14°35'	1 ^h 17'12"	24° 5'	18°52'	11°11'	7°29'	16°12'	3°13'	21°45'	12° 8'
W 9	1 10 9	15°38'09"	15°33'	3°57'	25°42'	19°22'	11°16'	7°31'	16°13'	3°13'	21°45'	12° 9'
T 10	1 14 5	16°37'39"	16°31'	6°42'	27°20'	19°53'	11°21'	7°32'	16°13'	3°13'	21°46'	12°10'
F 11	1 18 2	17°37'12"	17°29'	9°27'	28°57'	20°24'	11°27'	7°34'	16°14'	3°14'	21°46'	12°10'
S 12	1 21 59	18°36'47"	18°28'	12°11'	0 ^h 13'35"	20°55'	11°32'	7°36'	16°15'	3°14'	21°46'	12°11'
S 13	1 25 55	19°36'23"	19°27'	14°56'	2°12'	21°26'	11°38'	7°38'	16°16'	3°14'	21°46'	12°11'
M 14	1 29 52	20°36'01"	20°27'	17°41'	3°50'	21°57'	11°43'	7°40'	16°16'	3°15'	21°46'	12°12'
T 15	1 33 48	21°35'40"	21°27'	20°27'	5°27'	22°28'	11°49'	7°42'	16°17'	3°15'	21°46'	12°13'
W 16	1 37 45	22°35'22"	22°28'	23°13'	7° 5'	22°59'	11°54'	7°44'	16°18'	3°15'	21°47'	12°13'
T 17	1 41 41	23°35'05"	23°28'	26° 1'	8°42'	23°31'	12° 0'	7°46'	16°19'	3°16'	21°47'	12°14'
F 18	1 45 38	24°34'49"	24°29'	28°49'	10°20'	24° 2'	12° 5'	7°47'	16°19'	3°16'	21°47'	12°14'
S 19	1 49 34	25°34'36"	25°31'	1 ^h 13'39"	11°57'	24°33'	12°10'	7°49'	16°20'	3°16'	21°47'	12°15'
S 20	1 53 31	26°34'25"	26°32'	4°31'	13°35'	25° 5'	12°16'	7°51'	16°21'	3°17'	21°47'	12°16'
M 21	1 57 28	27°34'15"	27°34'	7°24'	15°12'	25°36'	12°21'	7°53'	16°22'	3°17'	21°47'	12°16'
T 22	2 1 24	28°34'07"	28°36'	10°20'	16°50'	26° 8'	12°27'	7°55'	16°23'	3°18'	21°47'	12°17'
W 23	2 5 21	29°34'02"	29°37'	13°18'	18°28'	26°39'	12°32'	7°57'	16°23'	3°18'	21°48'	12°18'
T 24	2 9 17	0 ^h 33'58"	0 ^h 39'	16°18'	20° 5'	27°11'	12°38'	7°59'	16°24'	3°18'	21°48'	12°18'
F 25	2 13 14	1°33'57"	1°40'	19°21'	21°43'	27°42'	12°43'	8° 1'	16°25'	3°19'	21°48'	12°19'
S 26	2 17 10	2°33'58"	2°41'	22°28'	23°20'	28°14'	12°49'	8° 2'	16°26'	3°19'	21°48'	12°19'
S 27	2 21 7	3°34'00"	3°42'	25°37'	24°58'	28°46'	12°54'	8° 4'	16°26'	3°19'	21°48'	12°20'
M 28	2 25 3	4°34'05"	4°43'	28°51'	26°35'	29°18'	13° 0'	8° 6'	16°27'	3°20'	21°48'	12°21'
T 29	2 29 0	5°34'13"	5°43'	2 ^h 28'8"	28°13'	29°49'	13° 5'	8° 8'	16°28'	3°20'	21°49'	12°21'
W 30	2 32 57	6°34'22"	6°43'	5°29'	29°50'	0 ^h 21'	13°10'	8°10'	16°29'	3°20'	21°49'	12°22'
T 31	2 36 53	7 ^h 34'33"	7 ^h 42'	8 ^h 55'6"	1 ^h 11'28"	0 ^h 21'53"	13 ^h 16'	8 ^h 12'	16 ^h 30'	3 ^h 21'	21 ^h 49'	12 ^h 23'

Delta T = 77.52 sec.

Greg. Calendar

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SWISS EPHEMERIS for the year 1630
heliocentric

NOVEMBER 1630 GC

00:00 UT

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

Delta T = 77.39 sec.

Greg. Calendar

DECEMBER 1630 GC

00:00 UT

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

Delta T = 77.27 sec.

Greg. Calendar

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