

SWISS EPHEMERIS for the year 1680

JANUARY 1680 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁
M 1	6 41 52	10°34'09	29°14	29°39	28°59	20°47	0°52	4°R27	12°Y 9	19°12	12°R30	14°R29	14°10	22°39	12°Y52
T 2	6 45 48	11°35'20	12°318	0°24	29°37	21°34	0°54	4°22	12°10	19°14	12°28	14°15	14° 7	22°46	12°52
W 3	6 49 45	12°36'32	25°38	1°36	0°15	22°21	0°55	4°17	12°10	19°15	12°27	14° 1	14° 4	22°52	12°53
T 4	6 53 41	13°37'43	9°10	2°43	0°55	23° 8	0°57	4°12	12°11	19°17	12°26	13°49	14° 1	22°59	12°54
F 5	6 57 38	14°38'53	22°53	3°45	1°36	23°55	0°59	4° 8	12°12	19°19	12°25	13°40	13°58	23° 6	12°54
S 6	7 1 35	15°40'03	6°43	4°40	2°19	24°42	1° 1	4° 3	12°12	19°21	12°23	13°33	13°54	23°12	12°55
S 7	7 5 31	16°41'13	20°39	5°27	3° 2	25°29	1° 4	3°58	12°13	19°23	12°22	13°30	13°51	23°19	12°56
M 8	7 9 28	17°42'22	4°38	6° 7	3°46	26°16	1° 6	3°53	12°14	19°25	12°21	13°28	13°48	23°26	12°57
T 9	7 13 24	18°43'30	18°41	6°38	4°32	27° 3	1° 9	3°48	12°15	19°27	12°20	13°28	13°45	23°32	12°58
W10	7 17 21	19°44'38	2°47	6°59	5°18	27°50	1°12	3°44	12°16	19°29	12°18	13°28	13°42	23°39	12°59
T 11	7 21 17	20°45'44	16°54	7°R 9	6° 5	28°37	1°15	3°39	12°17	19°31	12°17	13°26	13°38	23°46	13° 0
F 12	7 25 14	21°46'50	1°II 2	7° 8	6°53	29°24	1°18	3°34	12°18	19°33	12°16	13°21	13°35	23°52	13° 1
S 13	7 29 10	22°47'56	15° 8	6°55	7°42	0°11	1°22	3°30	12°19	19°35	12°15	13°14	13°32	23°59	13° 2
S 14	7 33 7	23°49'00	29° 8	6°31	8°32	0°58	1°26	3°25	12°21	19°38	12°13	13° 4	13°29	24° 5	13° 3
M15	7 37 4	24°50'04	12°58	5°55	9°23	1°45	1°30	3°21	12°22	19°40	12°12	12°51	13°26	24°12	13° 4
T 16	7 41 0	25°51'07	26°35	5° 9	10°14	2°33	1°34	3°17	12°23	19°42	12°11	12°39	13°23	24°19	13° 6
W17	7 44 57	26°52'09	9°25	4°12	11° 6	3°20	1°38	3°12	12°24	19°44	12°10	12°26	13°19	24°25	13° 7
T 18	7 48 53	27°53'11	22°55	3° 8	11°59	4° 7	1°43	3° 8	12°26	19°46	12° 8	12°16	13°16	24°32	13° 8
F 19	7 52 50	28°54'12	5°36	1°58	12°52	4°54	1°47	3° 4	12°27	19°48	12° 7	12° 8	13°13	24°39	13°10
S 20	7 56 46	29°55'13	17°58	0°43	13°47	5°42	1°52	3° 0	12°29	19°50	12° 6	12° 2	13°10	24°45	13°11
S 21	8 0 43	0°56'12	0° 5	29°37	14°41	6°29	1°57	2°56	12°30	19°53	12° 5	12° 0	13° 7	24°52	13°13
M22	8 4 39	1°57'11	12° 1	28°11	15°37	7°16	2° 3	2°52	12°32	19°55	12° 4	11°D59	13° 4	24°59	13°14
T 23	8 8 36	2°58'10	23°50	26°58	16°33	8° 3	2° 8	2°48	12°34	19°57	12° 2	11°59	13° 0	25° 5	13°16
W24	8 12 33	3°59'08	5°37	25°49	17°29	8°51	2°14	2°44	12°35	19°59	12° 1	12°R 0	12°57	25°12	13°18
T 25	8 16 29	5° 0'05	17°30	24°47	18°26	9°38	2°19	2°40	12°37	20° 1	12° 0	11°59	12°54	25°19	13°20
F 26	8 20 26	6° 1'01	29°32	23°52	19°24	10°26	2°25	2°36	12°39	20° 4	11°59	11°56	12°51	25°25	13°21
S 27	8 24 22	7° 1'57	11°49	23° 4	20°22	11°13	2°31	2°32	12°40	20° 6	11°58	11°51	12°48	25°32	13°23
S 28	8 28 19	8° 2'52	24°24	22°26	21°21	12° 0	2°38	2°29	12°42	20° 8	11°57	11°43	12°44	25°39	13°25
M29	8 32 15	9° 3'46	7°21	21°56	22°20	12°48	2°44	2°25	12°44	20°10	11°56	11°33	12°41	25°45	13°27
T 30	8 36 12	10° 4'39	20°39	21°34	23°19	13°35	2°51	2°22	12°46	20°13	11°54	11°22	12°38	25°52	13°29
W31	8 40 8	11° 5'31	4°18	21°31	24°19	14°22	2°58	2°19	12°48	20°15	11°53	11°11	12°35	25°58	13°31

Day	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁	♁									
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat									
M 1	23s 3	18s39	4n50	21s45	1s26	15s46	4n18	22s54	1s 2	10n41	1s12	22n38	0s46	4n13	0s39	15s26	0s22	21n47	1s 7	5s43	5s36	8s 7	6n18	1n19
T 2	22 58	17 56	5 0	21 20	1 16	15 52	4 20	22 47	1 3	10 42	1 11	22 39	0 46	4 13	0 39	15 26	0 22	21 47	1 7	5 38	5 35	8 9	6 18	1 19
W 3	22 53	16 14	4 54	20 55	1 6	15 59	4 21	22 39	1 3	10 42	1 11	22 39	0 46	4 13	0 39	15 25	0 22	21 47	1 7	5 32	5 33	8 10	6 18	1 18
T 4	22 47	13 37	4 32	20 29	0 55	16 6	4 22	22 32	1 3	10 43	1 11	22 39	0 45	4 13	0 39	15 25	0 22	21 47	1 7	5 28	5 32	8 12	6 18	1 18
F 5	22 40	10 14	3 53	20 3	0 43	16 13	4 23	22 24	1 3	10 44	1 10	22 39	0 45	4 14	0 39	15 24	0 22	21 47	1 7	5 24	5 31	8 14	6 18	1 18
S 6	22 33	6 15	3 1	19 37	0 30	16 20	4 24	22 15	1 3	10 45	1 10	22 40	0 45	4 14	0 39	15 23	0 22	21 47	1 7	5 21	5 30	8 15	6 18	1 18
S 7	22 26	1 55	1 58	19 11	0 16	16 28	4 24	22 7	1 3	10 46	1 10	22 40	0 45	4 14	0 39	15 23	0 22	21 48	1 7	5 20	5 28	8 17	6 19	1 18
M 8	22 18	2n34	0 47	18 47	0 1	16 36	4 25	21 58	1 4	10 48	1 9	22 40	0 45	4 15	0 39	15 22	0 22	21 48	1 7	5 20	5 27	8 19	6 19	1 18
T 9	22 10	6 55	0s28	18 24	0n16	16 45	4 25	21 49	1 4	10 49	1 9	22 41	0 45	4 15	0 39	15 22	0 22	21 48	1 7	5 19	5 26	8 20	6 19	1 17
W10	22 1	10 53	1 40	18 2	0 33	16 53	4 24	21 40	1 4	10 50	1 9	22 41	0 45	4 16	0 39	15 21	0 22	21 48	1 7	5 19	5 25	8 22	6 19	1 17
T 11	21 52	14 15	2 47	17 42	0 50	17 2	4 24	21 31	1 4	10 52	1 8	22 41	0 45	4 16	0 39	15 20	0 22	21 48	1 7	5 19	5 23	8 24	6 19	1 17
F 12	21 43	16 45	3 43	17 25	1 9	17 10	4 23	21 21	1 4	10 53	1 8	22 41	0 44	4 17	0 39	15 20	0 22	21 49	1 6	5 17	5 22	8 25	6 20	1 17
S 13	21 33	18 14	4 26	17 10	1 27	17 19	4 22	21 11	1 4	10 55	1 8	22 42	0 44	4 17	0 39	15 19	0 22	21 49	1 6	5 14	5 21	8 27	6 20	1 17
S 14	21 23	18 36	4 52	16 58	1 46	17 28	4 21	21 1	1 4	10 56	1 8	22 42	0 44	4 18	0 39	15 18	0 22	21 49	1 6	5 10	5 20	8 29	6 20	1 17
M15	21 12	17 51	5 1	16 49	2 4	17 37	4 20	20 51	1 4	10 58	1 7	22 42	0 44	4 18	0 39	15 18	0 22	21 49	1 6	5 5	5 19	8 30	6 21	1 17
T 16	21 1	16 5	4 52	16 43	2 22	17 46	4 18	20 40	1 4	10 59	1 7	22 42	0 44	4 19	0 39	15 17	0 22	21 49	1 6	5 0	5 17	8 32	6 21	1 16
W17	20 49	13 30	4 28	16 41	2 38	17 55	4 16	20 29	1 5	11 1	1 7	22 43	0 44	4 19	0 39	15 16	0 22	21 49	1 6	4 55	5 16	8 33	6 21	1 16
T 18	20 37	10 17	3 49	16 41	2 53	18 3	4 15	20 18	1 5	11 3	1 6	22 43	0 44	4 20	0 38	15 16	0 22	21 50	1 6	4 51	5 15	8 35	6 22	1 16
F 19	20 25	6 41	3 1	16 44	3 6	18 12	4 13	20 7	1 5	11 5	1 6	22 43	0 43	4 20	0 38	15 15	0 22	21 50	1 6	4 48	5 14	8 37	6 22	1 16
S 20	20 12	2 52	2 4	16 50	3 17	18 21	4 11	19 55	1 5	11 7	1 6	22 43	0 43	4 21	0 38	15 14	0 22	21 50	1 6	4 46	5 12	8 38	6 23	1 16
S 21	19 59	1s 0	1 3	16 57	3 25	18 29	4 8	19 44	1 5	11 9	1 5	22 44	0 43	4 22	0 38	15 14	0 22	21 50	1 6	4 45	5 11	8 40	6 23	1 16
M22	19 45	4 45	0n 0	17 7	3 31	18 38	4 6	19 32	1 5	11 11	1 5	22 44	0 43	4 22	0 38	15 13	0 22	21 50	1 6	4 45	5 10	8 42	6 24	1 16
T 23	19 32	8 17	1 3	17 17	3 35	18 46	4 3	19 20	1 5	11 13	1 5	22 44	0 43	4 23	0 38	15 12	0 22	21 51	1 6	4 45	5 9	8 43	6 24	1 15
W24	19 17	11 29	2 3	17 29	3 36	18 54	4 1	19 7	1 5	11 15	1 5	22 44	0 43	4 24	0 38	15 12	0 22	21 51	1 6	4 45	5 7	8 45	6 25	1 15
T 25	19 3	14 14	2 58	17 41	3 34	19 2	3 58	18 55	1 5	11 18	1 4	22 44	0 43	4 24	0 38	15 11	0 22	21 51	1 6	4 45	5 6	8 46	6 25	1 15
F 26	18 48	16 25	3 45	17 54	3 31	19 9	3 55	18 42	1 5	11 20	1 4	22 45	0 42	4 25	0 38	15 10	0 22	21 51	1 5	4 43	5 5	8 48	6 26	1 15
S 27	18 33	17 53	4 24	18 7	3 26	19 17	3 52	18 29	1 5	11 22	1 4	22 45	0 42	4 26	0 38	15 10	0 22	21 51	1 5	4 41	5 4	8 50	6 27	1 15
S 28	18 17	18 31	4 50	18 20	3 19	19 24	3 49	18 16	1 5	11 25	1 3	22 45	0 42	4 27	0 38	15 9	0 22	21 51	1 5	4 38	5 2	8 51	6 27	1 15
M29	18 1	18 14	5 3	18 33	3 11	19 30	3 45	18 2	1 5	11 27	1 3	22 45	0 42	4 27	0 38	15 8	0 22	21 52	1					

SWISS EPHEMERIS for the year 1680

FEBRUARY 1680 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁
T 1	8 44 5	12♈6'22	18♋15	21°D16	25♉19	15♈10	3♃4	2°R15	12♃50	20♈17	11°R52	11°R 2	12♈32	26♁5	13♃33
F 2	8 48 2	13° 7'12	2♃24	21♉18	26°20	15°57	3°12	2♁12	12°52	20°19	11♁51	10♁54	12°29	26°12	13°36
S 3	8 51 58	14° 8'00	16°42	21°27	27°21	16°45	3°19	2° 9	12°54	20°22	11°50	10°49	12°25	26°18	13°38
S 4	8 55 55	15° 8'46	1♃3	21°43	28°22	17°32	3°26	2° 6	12°56	20°24	11°49	10°46	12°22	26°25	13°40
M 5	8 59 51	16° 9'32	15°22	22° 5	29°24	18°20	3°34	2° 3	12°59	20°26	11°48	10°D46	12°19	26°32	13°42
T 6	9 3 48	17°10'15	29°37	22°33	0♃26	19° 7	3°41	2° 1	13° 1	20°28	11°47	10°47	12°16	26°38	13°45
W 7	9 7 44	18°10'57	13♃45	23° 6	1°28	19°54	3°49	1°58	13° 3	20°31	11°46	10°R48	12°13	26°45	13°47
T 8	9 11 41	19°11'37	27°47	23°44	2°31	20°42	3°57	1°55	13° 5	20°33	11°45	10°47	12°10	26°52	13°50
F 9	9 15 37	20°12'16	11♁40	24°26	3°34	21°29	4° 5	1°53	13° 8	20°35	11°44	10°45	12° 6	26°58	13°52
S 10	9 19 34	21°12'53	25°24	25°12	4°37	22°17	4°14	1°51	13°10	20°37	11°43	10°41	12° 3	27° 5	13°55
S 11	9 23 31	22°13'28	8♁58	26° 1	5°41	23° 4	4°22	1°48	13°13	20°40	11°42	10°35	12° 0	27°12	13°57
M12	9 27 27	23°14'01	22°22	26°54	6°45	23°52	4°31	1°46	13°15	20°42	11°41	10°27	11°57	27°18	14° 0
T 13	9 31 24	24°14'33	5♁33	27°50	7°49	24°39	4°40	1°44	13°18	20°44	11°40	10°18	11°54	27°25	14° 2
W14	9 35 20	25°15'03	18°30	28°49	8°53	25°26	4°48	1°42	13°20	20°47	11°40	10°10	11°50	27°32	14° 5
T 15	9 39 17	26°15'31	1♃13	29°51	9°58	26°14	4°57	1°40	13°23	20°49	11°39	10° 3	11°47	27°38	14° 8
F 16	9 43 13	27°15'58	13°41	0♁55	11° 3	27° 1	5° 6	1°39	13°25	20°51	11°38	9°58	11°44	27°45	14°10
S 17	9 47 10	28°16'23	25°56	2° 2	12° 8	27°49	5°16	1°37	13°28	20°53	11°37	9°55	11°41	27°52	14°13
S 18	9 51 6	29°16'47	7♁59	3°10	13°13	28°36	5°25	1°35	13°31	20°56	11°36	9°D53	11°38	27°58	14°16
M19	9 55 3	0♃17°09	19°53	4°21	14°19	29°23	5°34	1°34	13°33	20°58	11°35	9°54	11°35	28° 5	14°19
T 20	9 59 0	1°17'30	1♁42	5°34	15°25	0♃11	5°44	1°33	13°36	21° 0	11°35	9°55	11°31	28°11	14°22
W21	10 2 56	2°17'49	13°30	6°48	16°31	0°58	5°54	1°32	13°39	21° 2	11°34	9°57	11°28	28°18	14°25
T 22	10 6 53	3°18'07	25°22	8° 4	17°37	1°45	6° 4	1°30	13°41	21° 5	11°33	9°59	11°25	28°25	14°28
F 23	10 10 49	4°18'23	7♁24	9°22	18°43	2°33	6°14	1°29	13°44	21° 7	11°33	9°R59	11°22	28°31	14°31
S 24	10 14 46	5°18'38	19°39	10°41	19°50	3°20	6°24	1°29	13°47	21° 9	11°32	9°58	11°19	28°38	14°34
S 25	10 18 42	6°18'52	2♃14	12° 1	20°57	4° 7	6°34	1°28	13°50	21°11	11°31	9°55	11°15	28°45	14°37
M26	10 22 39	7°19'03	15°11	13°24	22° 4	4°55	6°44	1°27	13°53	21°14	11°31	9°51	11°12	28°51	14°40
T 27	10 26 35	8°19'14	28°33	14°47	23°11	5°42	6°55	1°27	13°56	21°16	11°30	9°46	11° 9	28°58	14°43
W28	10 30 32	9°19'22	12♁20	16°12	24°18	6°29	7° 5	1°26	13°59	21°18	11°29	9°41	11° 6	29° 5	14°46
T 29	10 34 29	10♃19'29	26♁31	17♁38	25♃26	7♃17	7♃16	1♁26	14♃ 2	21♁20	11♁29	9♁37	11♁ 3	29♁11	14♃49

Day	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁	♁									
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat									
T 1	17s12	11s32	4n 3	19s 8	2n42	19s49	3n35	17s21	1s 5	11n35	1s 2	22n46	0s42	4n30	0s38	15s 6	0s22	21n52	1s 5	4s22	4s57	8s58	6n30	1n14
F 2	16 54	7 40	3 10	19 19	2 31	19 55	3 31	17 7	1 5	11 37	1 2	22 46	0 41	4 31	0 38	15 5	0 22	21 52	1 5	4 19	4 56	8 59	6 31	1 14
S 3	16 37	3 20	2 5	19 28	2 19	20 0	3 27	16 52	1 5	11 40	1 2	22 46	0 41	4 31	0 38	15 5	0 22	21 52	1 5	4 17	4 55	9 1	6 31	1 14
S 4	16 19	1n13	0 52	19 37	2 8	20 4	3 24	16 38	1 5	11 43	1 2	22 47	0 41	4 32	0 38	15 4	0 22	21 53	1 5	4 16	4 54	9 3	6 32	1 14
M 5	16 1 5 41	0s25	19 45	1 56	20 9	3 20	16 23	1 5	11 46	1 1	22 47	0 41	4 33	0 38	15 3	0 22	21 53	1 5	4 16	4 53	9 4	6 33	1 14	
T 6	15 43 9 48	1 40	19 53	1 44	20 13	3 16	16 8	1 5	11 49	1 1	22 47	0 41	4 34	0 38	15 2	0 22	21 53	1 5	4 16	4 51	9 6	6 34	1 14	
W 7	15 24 13 19	2 48	19 59	1 32	20 16	3 12	15 53	1 5	11 52	1 1	22 47	0 41	4 35	0 38	15 2	0 22	21 53	1 5	4 17	4 50	9 7	6 34	1 13	
T 8	15 5 16 2	3 45	20 4	1 21	20 20	3 8	15 38	1 5	11 54	1 1	22 47	0 40	4 36	0 38	15 1	0 22	21 53	1 4	4 17	4 49	9 9	6 35	1 13	
F 9	14 46 17 46	4 29	20 8	1 9	20 22	3 3	15 23	1 5	11 57	1 0	22 48	0 40	4 37	0 38	15 0	0 22	21 53	1 4	4 16	4 48	9 11	6 36	1 13	
S 10	14 27 18 27	4 57	20 11	0 58	20 25	2 59	15 7	1 4	12 0	1 0	22 48	0 40	4 38	0 38	15 0	0 22	21 54	1 4	4 14	4 46	9 12	6 37	1 13	
S 11	14 8 18 4	5 7	20 12	0 47	20 27	2 55	14 52	1 4	12 4	1 0	22 48	0 40	4 39	0 38	14 59	0 22	21 54	1 4	4 12	4 45	9 14	6 38	1 13	
M12	13 48 16 40	5 1	20 13	0 36	20 28	2 51	14 36	1 4	12 7	1 0	22 48	0 40	4 40	0 38	14 58	0 22	21 54	1 4	4 8	4 44	9 15	6 39	1 13	
T 13	13 28 14 24	4 39	20 13	0 26	20 29	2 46	14 20	1 4	12 10	0 59	22 48	0 40	4 41	0 38	14 57	0 22	21 54	1 4	4 5	4 43	9 17	6 40	1 13	
W14	13 8 11 28	4 2	20 11	0 15	20 29	2 42	14 4	1 4	12 13	0 59	22 49	0 39	4 42	0 38	14 57	0 22	21 54	1 4	4 2	4 41	9 18	6 41	1 13	
T 15	12 47 8 2	3 14	20 8	0 5	20 29	2 37	13 48	1 4	12 16	0 59	22 49	0 39	4 43	0 38	14 56	0 22	21 54	1 4	3 59	4 40	9 20	6 42	1 12	
F 16	12 26 4 19	2 17	20 3	0s 4	20 29	2 33	13 31	1 4	12 19	0 59	22 49	0 39	4 44	0 38	14 55	0 22	21 54	1 4	3 57	4 39	9 22	6 42	1 12	
S 17	12 6 0 28	1 15	19 58	0 14	20 28	2 29	13 15	1 4	12 23	0 58	22 49	0 39	4 45	0 37	14 55	0 22	21 55	1 4	3 56	4 38	9 23	6 43	1 12	
S 18	11 45 3s20	0 10	19 51	0 23	20 26	2 24	12 58	1 4	12 26	0 58	22 49	0 39	4 46	0 37	14 54	0 22	21 55	1 4	3 55	4 36	9 25	6 44	1 12	
M19	11 23 6 57	0n54	19 43	0 32	20 24	2 19	12 42	1 3	12 29	0 58	22 50	0 39	4 47	0 37	14 53	0 22	21 55	1 4	3 56	4 35	9 26	6 45	1 12	
T 20	11 2 10 16	1 56	19 34	0 40	20 21	2 15	12 25	1 3	12 33	0 58	22 50	0 38	4 48	0 37	14 52	0 22	21 55	1 4	3 56	4 34	9 28	6 46	1 12	
W21	10 40 13 10	2 53	19 23	0 48	20 18	2 10	12 8	1 3	12 36	0 57	22 50	0 38	4 49	0 37	14 52	0 22	21 55	1 3	3 57	4 33	9 30	6 48	1 12	
T 22	10 19 15 32	3 43	19 11	0 56	20 14	2 6	11 51	1 3	12 40	0 57	22 50	0 38	4 50	0 37	14 51	0 22	21 55	1 3	3 57	4 31	9 31	6 49	1 12	
F 23	9 57 17 15	4 24	18 58	1 4	20 10	2 1	11 34	1 3	12 43	0 57	22 50	0 38	4 51	0 37	14 50	0 23	21 56	1 3	3 58	4 30	9 33	6 50	1 11	
S 24	9 35 18 12	4 53	18 43	1 11	20 5	1 56	11 16	1 3	12 47	0 57	22 50	0 38	4 52	0 37	14 50	0 23	21 56	1 3	3 57	4 29	9 34	6 51	1 11	
S 25	9 13 18 18	5 10	18 27	1 18	20 0	1 52	10 59	1 2	12 50	0 57	22 51	0 38	4 54	0 37	14 49	0 23	21 56	1 3	3 56	4 28	9 36	6 52	1 11	
M26	8 50 17 27	5 11	18 10	1 24	19 54	1 47	10 41	1 2	12 54	0 56	22 51	0 37	4 55	0 37	14 48	0 23	21 56	1 3	3 54	4 26	9 37	6 53	1 11	
T 27	8 28 15 39	4 56	17 52	1 30	19 48	1 42	10 24	1 2	12 58	0 56	22 51	0 37	4 56	0 37	14 48	0 23	21 56	1 3	3 53	4 25	9 39	6 54	1 11	
W28	8 5 12 54	4 24	17 32	1 36	19 41	1 38	10 6	1 2	13 1	0 56	22 51	0 37	4 57	0 37	14 47	0 23	21 56	1 3	3 51	4 24	9 41	6 55	1 11	
T 29	7s43	9s20	3n34	17s11	1s41	19s34	1n33	9s48	1s 2	13n 5	0s56	22n51	0s37	4n58	0s37	14s46	0s23	21n56	1s 3	3s49	4s23	9s42	6n56	1n11

Julian Day Number = 2334698.5, Delta T = 14.54 sec
 Ecliptic obliquity = 23°28'42", Nutation = 0°00'05"
 Ayanamsha: Fagan/Bradley = 20°16'29", Lahiri = 19°23'29"Greg. Calendar

SWISS EPHEMERIS for the year 1680

MARCH 1680 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁
F 1	10 38 25	11 ^h 19'34"	11 ^h 0'	19 [°] 55'	26 [°] 33'	8 ^h 4'	7 ^h 26'	1 [°] R26	14 [°] Y 5	21 [°] 22'	11 [°] R28	9 [°] R33	11 [°] 0'	29 [°] 18'	14 [°] Y53
S 2	10 42 22	12 [°] 19'37"	25 [°] 42'	20 [°] 34'	27 [°] 41'	8 [°] 51'	7 [°] 37'	1 [°] D26	14 [°] 8	21 [°] 25'	11 [°] 28'	9 [°] 31'	10 [°] 56'	29 [°] 25'	14 [°] 56'
S 3	10 46 18	13 [°] 19'38"	10 ^h Y29	22 [°] 4'	28 [°] 49'	9 ^h 38'	7 ^h 48'	1 [°] 26'	14 [°] 11'	21 [°] 27'	11 [°] 27'	9 [°] D31	10 [°] 53'	29 [°] 31'	14 [°] 59'
M 4	10 50 15	14 [°] 19'37"	25 [°] 15'	23 [°] 35'	29 [°] 57'	10 ^h 26'	7 ^h 59'	1 [°] 26'	14 [°] 14'	21 [°] 29'	11 [°] 27'	9 [°] 31'	10 [°] 50'	29 [°] 38'	15 [°] 2'
T 5	10 54 11	15 [°] 19'34"	9 ^h 52'	25 [°] 7'	1 ^h 55'	11 ^h 13'	8 ^h 10'	1 [°] 26'	14 [°] 17'	21 [°] 31'	11 [°] 26'	9 [°] 33'	10 [°] 47'	29 [°] 45'	15 [°] 6'
W 6	10 58 8	16 [°] 19'29"	24 [°] 17'	26 [°] 40'	2 [°] 13'	12 ^h 0'	8 ^h 22'	1 [°] 27'	14 [°] 20'	21 [°] 33'	11 [°] 26'	9 [°] 34'	10 [°] 44'	29 [°] 51'	15 [°] 9'
T 7	11 2 4	17 [°] 19'22"	8 ^h II27	28 [°] 15'	3 ^h 21'	12 ^h 47'	8 ^h 33'	1 [°] 27'	14 [°] 23'	21 [°] 35'	11 [°] 25'	9 [°] 35'	10 [°] 41'	29 [°] 58'	15 [°] 12'
F 8	11 6 1	18 [°] 19'12"	22 [°] 19'	29 [°] 51'	4 ^h 30'	13 ^h 34'	8 ^h 44'	1 [°] 28'	14 [°] 26'	21 [°] 37'	11 [°] 25'	9 [°] R35	10 [°] 37'	0 ^h 5'	15 [°] 16'
S 9	11 9 58	19 [°] 19'00"	5 ^h 55'	1 ^h X28	5 ^h 38'	14 ^h 21'	8 ^h 56'	1 [°] 28'	14 [°] 30'	21 [°] 39'	11 [°] 25'	9 [°] 34'	10 [°] 34'	0 ^h 11'	15 [°] 19'
S 10	11 13 54	20 [°] 18'46"	19 [°] 14'	3 [°] 6'	6 ^h 47'	15 ^h 8'	9 ^h 8'	1 [°] 29'	14 [°] 33'	21 [°] 41'	11 [°] 24'	9 [°] 33'	10 [°] 31'	0 ^h 18'	15 [°] 23'
M11	11 17 51	21 [°] 18'29"	2 ^h Ω17	4 ^h 45'	7 ^h 56'	15 ^h 56'	9 ^h 19'	1 [°] 30'	14 [°] 36'	21 [°] 43'	11 [°] 24'	9 [°] 30'	10 [°] 28'	0 ^h 24'	15 [°] 26'
T 12	11 21 47	22 [°] 18'11"	15 [°] 6'	6 ^h 26'	9 ^h 5'	16 ^h 43'	9 ^h 31'	1 [°] 31'	14 [°] 39'	21 [°] 45'	11 [°] 24'	9 [°] 28'	10 [°] 25'	0 ^h 31'	15 [°] 30'
W13	11 25 44	23 [°] 17'50"	27 [°] 41'	8 ^h 8'	10 ^h 14'	17 ^h 30'	9 ^h 43'	1 [°] 32'	14 [°] 42'	21 [°] 48'	11 [°] 23'	9 [°] 25'	10 [°] 21'	0 ^h 38'	15 [°] 33'
T 14	11 29 40	24 [°] 17'27"	10 ^h 5'	9 ^h 51'	11 ^h 23'	18 ^h 17'	9 ^h 55'	1 [°] 34'	14 [°] 46'	21 [°] 50'	11 [°] 23'	9 [°] 23'	10 [°] 18'	0 ^h 44'	15 [°] 37'
F 15	11 33 37	25 [°] 17'01"	22 [°] 18'	11 ^h 35'	12 ^h 32'	19 ^h 3'	10 ^h 7'	1 [°] 35'	14 [°] 49'	21 [°] 52'	11 [°] 23'	9 [°] 22'	10 [°] 15'	0 ^h 51'	15 [°] 40'
S 16	11 37 33	26 [°] 16'34"	4 ^h 22'	13 ^h 21'	13 ^h 41'	19 ^h 50'	10 ^h 19'	1 [°] 36'	14 [°] 52'	21 [°] 53'	11 [°] 23'	9 [°] D21	10 [°] 12'	0 ^h 58'	15 [°] 44'
S 17	11 41 30	27 [°] 16'05"	16 [°] 18'	15 ^h 8'	14 ^h 51'	20 ^h 37'	10 ^h 31'	1 [°] 38'	14 [°] 56'	21 [°] 55'	11 [°] 22'	9 [°] 21'	10 ^h 9'	1 ^h 4'	15 [°] 47'
M18	11 45 26	28 [°] 15'34"	28 ^h 9'	16 ^h 56'	16 ^h 0'	21 ^h 24'	10 ^h 43'	1 [°] 40'	14 [°] 59'	21 [°] 57'	11 [°] 22'	9 [°] 22'	10 ^h 6'	1 ^h 11'	15 [°] 51'
T 19	11 49 23	29 [°] 15'00"	9 ^h 58'	18 ^h 45'	17 ^h 10'	22 ^h 11'	10 ^h 55'	1 [°] 42'	15 ^h 2'	21 [°] 59'	11 [°] 22'	9 [°] 23'	10 ^h 2'	1 ^h 18'	15 [°] 54'
W20	11 53 20	0 ^h Y14'26"	21 [°] 47'	20 ^h 36'	18 ^h 19'	22 ^h 58'	11 ^h 8'	1 [°] 43'	15 ^h 6'	22 ^h 1'	11 [°] 22'	9 [°] 24'	9 ^h 59'	1 ^h 24'	15 [°] 58'
T 21	11 57 16	1 ^h 13'49"	3 ^h 740	22 ^h 28'	19 ^h 29'	23 ^h 45'	11 ^h 20'	1 [°] 45'	15 ^h 9'	22 ^h 3'	11 [°] 22'	9 [°] 24'	9 ^h 56'	1 ^h 31'	16 ^h 2'
F 22	12 1 13	2 ^h 13'10"	15 ^h 41'	24 ^h 22'	20 ^h 39'	24 ^h 31'	11 ^h 33'	1 [°] 48'	15 ^h 12'	22 ^h 5'	11 [°] 22'	9 [°] 25'	9 ^h 53'	1 ^h 38'	16 ^h 5'
S 23	12 5 9	3 ^h 12'30"	27 ^h 55'	26 ^h 16'	21 ^h 49'	25 ^h 18'	11 ^h 45'	1 [°] 50'	15 ^h 16'	22 ^h 7'	11 [°] 22'	9 [°] R25	9 ^h 50'	1 ^h 44'	16 ^h 9'
S 24	12 9 6	4 ^h 11'48"	10 ^h 36'	28 ^h 12'	22 ^h 59'	26 ^h 5'	11 ^h 58'	1 [°] 52'	15 ^h 19'	22 ^h 9'	11 [°] D22	9 ^h 25'	9 ^h 47'	1 ^h 51'	16 ^h 13'
M25	12 13 2	5 ^h 11'04"	23 ^h 19'	0 ^h Y 9'	24 ^h 9'	26 ^h 51'	12 ^h 11'	1 [°] 55'	15 ^h 22'	22 ^h 10'	11 [°] 22'	9 ^h 25'	9 ^h 43'	1 ^h 58'	16 ^h 16'
T 26	12 16 59	6 ^h 10'18"	6 ^h 36'	2 ^h 8'	25 ^h 19'	27 ^h 38'	12 ^h 23'	1 [°] 57'	15 ^h 26'	22 ^h 12'	11 [°] 22'	9 ^h 25'	9 ^h 40'	2 ^h 4'	16 ^h 20'
W27	12 20 55	7 ^h 9'31"	20 ^h 19'	4 ^h 8'	26 ^h 29'	28 ^h 25'	12 ^h 36'	2 ^h 0'	15 ^h 29'	22 ^h 14'	11 [°] 22'	9 ^h 25'	9 ^h 37'	2 ^h 11'	16 ^h 24'
T 28	12 24 52	8 ^h 8'41"	4 ^h X29	6 ^h 8'	27 ^h 40'	29 ^h 11'	12 ^h 49'	2 ^h 3'	15 ^h 33'	22 ^h 16'	11 [°] 22'	9 ^h 24'	9 ^h 34'	2 ^h 18'	16 ^h 27'
F 29	12 28 49	9 ^h 7'50"	19 ^h 2'	8 ^h 10'	28 ^h 50'	29 ^h 58'	13 ^h 2'	2 ^h 5'	15 ^h 36'	22 ^h 17'	11 [°] 22'	9 ^h D24	9 ^h 31'	2 ^h 24'	16 ^h 31'
S 30	12 32 45	10 ^h 6'57"	3 ^h Y56	10 ^h 13'	0 ^h X 0'	0 ^h Y44	13 ^h 15'	2 ^h 8'	15 ^h 39'	22 ^h 19'	11 [°] 22'	9 ^h R24	9 ^h 27'	2 ^h 31'	16 ^h 35'
S 31	12 36 42	11 ^h Y 6'02"	19 ^h Y 1'	12 ^h Y17	1 ^h X11	1 ^h Y31	13 ^h 28'	2 ^h 8'	15 ^h Y43	22 ^h 21'	11 [°] 22'	9 ^h 24'	9 ^h 24'	2 ^h 31'	16 ^h Y38

Day	☉			☽			♀		♁		♂		♃		♅		♁		♁		♁		♁	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
F 1	7s20	5s 8	2n30	16s48	1s46	19s26	1n29	9s30	1s 1	13n 9	0s56	22n51	0s37	4n59	0s37	14s45	0s23	21n57	1s 3	3s47	4s21	9s44	6n57	1n11
S 2	6 57	0 34	1 15	16 24	1 51	19 17	1 24	9 12	1 1	13 12	0 55	22 52	0 37	5 1	0 37	14 45	0 23	21 57	1 3	3 47	4 20	9 45	6 59	1 11
S 3	6 34	4n 5	0s 5	15 59	1 55	19 8	1 19	8 54	1 1	13 16	0 55	22 52	0 36	5 2	0 37	14 44	0 23	21 57	1 3	3 46	4 19	9 47	7 0	1 10
M 4	6 11	8 27	1 26	15 33	1 59	18 59	1 15	8 36	1 1	13 20	0 55	22 52	0 36	5 3	0 37	14 43	0 23	21 57	1 2	3 47	4 18	9 48	7 1	1 10
T 5	5 48	12 16	2 40	15 5	2 2	18 49	1 10	8 18	1 0	13 24	0 55	22 52	0 36	5 4	0 37	14 43	0 23	21 57	1 2	3 47	4 16	9 50	7 2	1 10
W 6	5 24	15 17	3 42	14 36	2 5	18 38	1 6	8 0	1 0	13 27	0 55	22 52	0 36	5 5	0 37	14 42	0 23	21 57	1 2	3 48	4 15	9 51	7 3	1 10
T 7	5 1	17 18	4 30	14 6	2 8	18 27	1 1	7 42	1 0	13 31	0 54	22 52	0 36	5 7	0 37	14 41	0 23	21 57	1 2	3 48	4 14	9 53	7 4	1 10
F 8	4 38	18 14	5 2	13 34	2 10	18 15	0 57	7 23	1 0	13 35	0 54	22 53	0 36	5 8	0 37	14 41	0 23	21 57	1 2	3 48	4 13	9 55	7 6	1 10
S 9	4 14	18 6	5 15	13 1	2 12	18 3	0 52	7 5	0 59	13 39	0 54	22 53	0 35	5 9	0 37	14 40	0 23	21 57	1 2	3 48	4 11	9 56	7 7	1 10
S 10	3 51	16 58	5 11	12 27	2 13	17 50	0 48	6 46	0 59	13 43	0 54	22 53	0 35	5 10	0 37	14 39	0 23	21 58	1 2	3 47	4 10	9 58	7 8	1 10
M11	3 27	14 57	4 51	11 52	2 14	17 37	0 43	6 28	0 59	13 47	0 54	22 53	0 35	5 12	0 37	14 39	0 23	21 58	1 2	3 46	4 9	9 59	7 9	1 10
T 12	3 4	12 14	4 17	11 15	2 14	17 24	0 39	6 9	0 59	13 50	0 53	22 53	0 35	5 13	0 37	14 38	0 23	21 58	1 2	3 45	4 8	10 1	7 11	1 9
W13	2 40	9 0	3 31	10 37	2 14	17 9	0 34	5 51	0 58	13 54	0 53	22 53	0 35	5 14	0 37	14 38	0 23	21 58	1 2	3 44	4 6	10 2	7 12	1 9
T 14	2 16	5 24	2 35	9 57	2 14	16 55	0 30	5 32	0 58	13 58	0 53													

SWISS EPHEMERIS for the year 1680

APRIL 1680 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♁	♃	♄
M 1	12 40 38	12°Y 5'04	4♃ 8	14°Y21	2♃21	2°Y17	13♃41	2♃15	15°Y46	22♃22	11♃22	9°R24	9♂21	2♃44	16°Y42
T 2	12 44 35	13° 4'05	19° 8	16°26	3°32	3° 4	13°54	2°18	15°50	22°24	11°23	9♂24	9°18	2°51	16°46
W 3	12 48 31	14° 3'03	3♂54	18°31	4°43	3°50	14° 8	2°21	15°53	22°26	11°23	9°23	9°15	2°58	16°50
T 4	12 52 28	15° 1'59	18°20	20°37	5°53	4°36	14°21	2°25	15°57	22°27	11°23	9°23	9°12	3° 4	16°53
F 5	12 56 24	16° 0'53	2♃22	22°42	7° 4	5°22	14°34	2°28	16° 0	22°29	11°23	9°22	9° 8	3°11	16°57
S 6	13 0 21	16°59'45	16° 0	24°46	8°15	6° 9	14°48	2°32	16° 4	22°30	11°24	9°D22	9° 5	3°18	17° 1
S 7	13 4 18	17°58'34	29°15	26°50	9°25	6°55	15° 1	2°36	16° 7	22°32	11°24	9°22	9° 2	3°24	17° 4
M 8	13 8 14	18°57'21	12♂ 9	28°53	10°36	7°41	15°14	2°39	16°10	22°33	11°24	9°23	8°59	3°31	17° 8
T 9	13 12 11	19°56'05	24°45	0♃54	11°47	8°27	15°28	2°43	16°14	22°35	11°25	9°24	8°56	3°37	17°12
W10	13 16 7	20°54'48	7♃ 6	2°54	12°58	9°13	15°41	2°47	16°17	22°36	11°25	9°25	8°52	3°44	17°16
T 11	13 20 4	21°53'28	19°15	4°52	14° 9	9°59	15°55	2°51	16°21	22°37	11°25	9°26	8°49	3°51	17°19
F 12	13 24 0	22°52'06	1♂15	6°47	15°20	10°45	16° 9	2°56	16°24	22°39	11°26	9°27	8°46	3°57	17°23
S 13	13 27 57	23°50'42	13°10	8°39	16°31	11°31	16°22	3° 0	16°28	22°40	11°26	9°R27	8°43	4° 4	17°27
S 14	13 31 53	24°49'16	25° 0	10°28	17°42	12°17	16°36	3° 4	16°31	22°41	11°27	9°26	8°40	4°11	17°30
M15	13 35 50	25°47'48	6♃49	12°14	18°54	13° 3	16°50	3° 9	16°34	22°43	11°27	9°25	8°37	4°17	17°34
T 16	13 39 46	26°46'18	18°38	13°56	20° 5	13°49	17° 3	3°13	16°38	22°44	11°28	9°23	8°33	4°24	17°38
W17	13 43 43	27°44'47	0♃30	15°35	21°16	14°34	17°17	3°18	16°41	22°45	11°28	9°20	8°30	4°31	17°42
T 18	13 47 40	28°43'14	12°28	17° 9	22°27	15°20	17°31	3°23	16°45	22°46	11°29	9°17	8°27	4°37	17°45
F 19	13 51 36	29°41'39	24°33	18°40	23°39	16° 6	17°45	3°27	16°48	22°47	11°30	9°14	8°24	4°44	17°49
S 20	13 55 33	0♃40'02	6♃49	20° 6	24°50	16°51	17°59	3°32	16°51	22°49	11°30	9°11	8°21	4°51	17°53
S 21	13 59 29	1°38'24	19°19	21°27	26° 1	17°37	18°12	3°37	16°55	22°50	11°31	9°10	8°18	4°57	17°56
M22	14 3 26	2°36'44	2♃ 8	22°44	27°13	18°23	18°26	3°42	16°58	22°51	11°32	9°D 9	8°14	5° 4	18° 0
T 23	14 7 22	3°35'03	15°18	23°57	28°24	19° 8	18°40	3°47	17° 1	22°52	11°32	9°10	8°11	5°11	18° 3
W24	14 11 19	4°33'20	28°53	25° 5	29°36	19°54	18°54	3°52	17° 5	22°53	11°33	9°11	8° 8	5°17	18° 7
T 25	14 15 15	5°31'36	12♃53	26° 7	0°Y47	20°39	19° 8	3°58	17° 8	22°54	11°34	9°12	8° 5	5°24	18°11
F 26	14 19 12	6°29'50	27°19	27° 5	1°59	21°24	19°22	4° 3	17°11	22°55	11°34	9°13	8° 2	5°31	18°14
S 27	14 23 9	7°28'02	12°Y 7	27°58	3°11	22°10	19°36	4° 8	17°14	22°56	11°35	9°R14	7°58	5°37	18°18
S 28	14 27 5	8°26'13	27°12	28°46	4°22	22°55	19°50	4°14	17°18	22°57	11°36	9°13	7°55	5°44	18°21
M29	14 31 2	9°24'23	12♃25	29°29	5°34	23°40	20° 4	4°19	17°21	22°57	11°37	9°10	7°52	5°51	18°25
T 30	14 34 58	10♃22'30	27♃37	0♂ 7	6°Y46	24°Y25	20♃18	4♃25	17°Y24	22♃58	11♃38	9♂ 7	7♂49	5♃57	18°Y28

Day	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♁	♃	♄	♅									
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat									
M 1	4n47	10n49	2s13	5n 2	0s41	11s15	0s39	0n 8	0s51	15n11	0s50	22n56	0s32	5n39	0s37	14s27	0s23	22n 0	1s 0	3s44	3s43	10s31	7n37	1n 8
T 2	5 10	14 16	3 24	5 59	0 31	10 53	0 42	0 26	0 51	15 15	0 50	22 56	0 32	5 40	0 37	14 26	0 23	22 0	1 0	3 44	3 41	10 33	7 38	1 8
W 3	5 33	16 43	4 19	6 57	0 21	10 30	0 45	0 45	0 51	15 19	0 50	22 56	0 31	5 42	0 37	14 26	0 23	22 0	1 0	3 44	3 40	10 34	7 40	1 8
T 4	5 56	18 2	4 57	7 54	0 11	10 7	0 48	1 4	0 50	15 23	0 50	22 56	0 31	5 43	0 37	14 25	0 23	22 0	1 0	3 43	3 39	10 36	7 41	1 8
F 5	6 19	18 12	5 15	8 50	0 0	9 43	0 51	1 23	0 50	15 27	0 50	22 56	0 31	5 44	0 37	14 25	0 23	22 0	1 0	3 43	3 38	10 37	7 42	1 7
S 6	6 41	17 18	5 16	9 47	0n11	9 20	0 54	1 41	0 49	15 31	0 49	22 56	0 31	5 46	0 37	14 24	0 23	22 0	1 0	3 43	3 36	10 39	7 44	1 7
S 7	7 4	15 28	4 59	10 42	0 22	8 56	0 57	2 0	0 49	15 35	0 49	22 56	0 31	5 47	0 37	14 24	0 23	22 0	1 0	3 43	3 35	10 40	7 45	1 7
M 8	7 26	12 54	4 27	11 37	0 33	8 31	1 0	2 19	0 48	15 39	0 49	22 56	0 31	5 48	0 37	14 23	0 23	22 0	0 59	3 43	3 34	10 42	7 47	1 7
T 9	7 48	9 47	3 44	12 30	0 44	8 7	1 3	2 37	0 48	15 43	0 49	22 56	0 31	5 50	0 37	14 23	0 23	22 0	0 59	3 44	3 33	10 43	7 48	1 7
W10	8 11	6 17	2 50	13 22	0 55	7 42	1 5	2 56	0 47	15 47	0 49	22 57	0 30	5 51	0 37	14 22	0 23	22 0	0 59	3 44	3 31	10 45	7 49	1 7
T 11	8 33	2 35	1 50	14 12	1 6	7 17	1 8	3 15	0 47	15 51	0 49	22 57	0 30	5 52	0 37	14 22	0 23	22 0	0 59	3 45	3 30	10 46	7 51	1 7
F 12	8 54	1s12	0 45	15 1	1 17	6 52	1 10	3 33	0 46	15 55	0 49	22 57	0 30	5 54	0 37	14 21	0 23	22 0	0 59	3 45	3 29	10 48	7 52	1 7
S 13	9 16	4 53	0n21	15 47	1 27	6 27	1 13	3 51	0 46	15 59	0 49	22 57	0 30	5 55	0 37	14 21	0 23	22 0	0 59	3 45	3 28	10 49	7 53	1 7
S 14	9 38	8 22	1 25	16 32	1 37	6 1	1 15	4 10	0 46	16 3	0 48	22 57	0 30	5 56	0 37	14 21	0 23	22 0	0 59	3 45	3 26	10 51	7 55	1 7
M15	9 59	11 31	2 26	17 14	1 47	5 35	1 17	4 28	0 45	16 7	0 48	22 57	0 30	5 58	0 37	14 20	0 23	22 0	0 59	3 44	3 25	10 52	7 56	1 7
T 16	10 20	14 11	3 20	17 53	1 56	5 9	1 19	4 46	0 45	16 11	0 48	22 57	0 30	5 59	0 37	14 20	0 23	22 0	0 59	3 43	3 24	10 53	7 57	1 7
W17	10 41	16 17	4 6	18 31	2 4	4 43	1 21	5 5	0 44	16 15	0 48	22 57	0 29	6 0	0 37	14 19	0 24	22 0	0 59	3 42	3 23	10 55	7 59	1 7
T 18	11 2	17 40	4 42	19 5	2 12	4 17	1 23	5 23	0 44	16 19	0 48	22 57	0 29	6 2	0 37	14 19	0 24	22 0	0 59	3 41	3 21	10 56	8 0	1 7
F 19	11 23	18 17	5 5	19 38	2 19	3 50	1 25	5 41	0 43	16 23	0 48	22 57	0 29	6 3	0 37	14 19	0 24	22 1	0 59	3 40	3 20	10 58	8 1	1 6
S 20	11 43	18 4	5 15	20 7	2 25	3 23	1 27	5 59	0 43	16 27	0 48	22 57	0 29	6 4	0 37	14 18	0 24	22 1	0 58	3 39	3 19	10 59	8 3	1 6
S 21	12 4	16 58	5 10	20 34	2 30	2 57	1 29	6 17	0 42	16 31	0 48	22 57	0 29	6 5	0 37	14 18	0 24	22 1	0 58	3 38	3 18	11 1	8 4	1 6
M22	12 24	15 0	4 50	20 59	2 34	2 30	1 31	6 35	0 42	16 35	0 47	22 57	0 29	6 7	0 37	14 18	0 24	22 1	0 58	3 38	3 16	11 2	8 6	1 6
T 23	12 44	12 13	4 15	21 20	2 38	2 3	1 32	6 52	0 41	16 39	0 47	22 57	0 29	6 8	0 37	14 17	0 24	22 1	0 58	3 38	3 15	11 4	8 7	1 6
W24	13 4	8 41	3 24	21 40	2 41	1 36	1 34	7 10	0 40	16 43	0 47	22 57	0 28	6 9	0 37	14 17	0 24	22 1	0 58	3 39	3 14	11 5	8 8	1 6
T 25	13 23	4 35	2 20	21 56	2 42	1 8	1 35	7 28	0 40	16 47	0 47	22 57	0 28	6 10	0 37	14 17	0 24	22 1	0 58	3 39	3 13	11 7	8 9	1 6
F 26	13 42	0 5	1 5	22 11	2 43	0 41	1 36	7 45	0 39	16 51	0 47	22 57	0 28	6 12	0 37	14 16	0 24	22 1	0 58	3 40	3 11	11 8	8 11	1 6
S 27	14 2	4n33	0s16	22 22	2 42	0 14	1 38	8 2	0 39	16 55	0 47	22 57	0 28	6 13	0 37	14 16	0 24	22 1	0 58	3 40	3 10	11 10	8 12	1 6
S 28	14 20	8 59	1 37	22 32	2 41	0n14	1 39	8 20	0 38	16 58	0 47	22 57	0 28	6 14	0 37	14 16	0 24	22 1	0 58	3 39	3 9	11 11	8 13	1 6
M29	14 39	12 51	2 52	22 39	2 38	0 41	1 40	8 37	0 38	17 2	0 47	22 57	0 28	6 15	0 37	14 16	0 24	22 1	0 58	3 39	3 8	11 13	8 15	1 6
T 30	14n57	15n51	3s55	22n43	2n34	1n 9	1s41	8n54	0s37	17n 6	0s47	22n57	0s2											

SWISS EPHEMERIS for the year 1680

MAY 1680 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
W 1	14 38 55	11♂20'36	12♂38	0♂40	7♂57	25♂10	20♂32	4♂31	17♂27	22♂59	11♂38	9°R 2	7♂46	6♂4	18♂32	
T 2	14 42 51	12°18'40	27°18	1° 7	9° 9	25°55	20°47	4°36	17°31	23° 0	11°39	8♂58	7°43	6°11	18°35	
F 3	14 46 48	13°16'43	11♂33	1°29	10°21	26°40	21° 1	4°42	17°34	23° 1	11°40	8°54	7°39	6°17	18°39	
S 4	14 50 44	14°14'43	25°20	1°46	11°33	27°25	21°15	4°48	17°37	23° 1	11°41	8°51	7°36	6°24	18°42	
S 5	14 54 41	15°12'41	8♂38	1°58	12°44	28°10	21°29	4°54	17°40	23° 2	11°42	8°49	7°33	6°31	18°46	
M 6	14 58 38	16°10'38	21°32	2° 5	13°56	28°55	21°43	5° 0	17°43	23° 3	11°43	8°D49	7°30	6°37	18°49	
T 7	15 2 34	17° 8'33	4♂3	2°R 7	15° 8	29°40	21°57	5° 6	17°46	23° 3	11°44	8°50	7°27	6°44	18°53	
W 8	15 6 31	18° 6'25	16°18	2° 3	16°20	0♂25	22°11	5°12	17°50	23° 4	11°45	8°52	7°24	6°51	18°56	
T 9	15 10 27	19° 4'17	28°19	1°55	17°32	1° 9	22°25	5°18	17°53	23° 4	11°46	8°53	7°20	6°57	18°59	
F 10	15 14 24	20° 2'06	10♂13	1°43	18°44	1°54	22°39	5°25	17°56	23° 5	11°47	8°R54	7°17	7° 4	19° 3	
S 11	15 18 20	20°59'54	22° 2	1°26	19°56	2°39	22°54	5°31	17°59	23° 5	11°48	8°53	7°14	7°11	19° 6	
S 12	15 22 17	21°57'40	3♂50	1° 6	21° 7	3°23	23° 8	5°37	18° 2	23° 6	11°49	8°50	7°11	7°17	19° 9	
M13	15 26 13	22°55'25	15°39	0°42	22°19	4° 8	23°22	5°44	18° 5	23° 6	11°50	8°45	7° 8	7°24	19°12	
T 14	15 30 10	23°53'08	27°32	0°15	23°31	4°52	23°36	5°50	18° 8	23° 7	11°51	8°38	7° 4	7°31	19°16	
W15	15 34 7	24°50'50	9♂31	29♂45	24°43	5°37	23°50	5°57	18°10	23° 7	11°52	8°30	7° 1	7°37	19°19	
T 16	15 38 3	25°48'31	21°36	29°13	25°56	6°21	24° 4	6° 3	18°13	23° 7	11°53	8°21	6°58	7°44	19°22	
F 17	15 42 0	26°46'10	3♂50	28°40	27° 8	7° 5	24°18	6°10	18°16	23° 7	11°55	8°13	6°55	7°51	19°25	
S 18	15 45 56	27°43'49	16°15	28° 6	28°20	7°49	24°33	6°16	18°19	23° 8	11°56	8° 5	6°52	7°57	19°28	
S 19	15 49 53	28°41'26	28°51	27°32	29°32	8°33	24°47	6°23	18°22	23° 8	11°57	7°59	6°49	8° 4	19°31	
M20	15 53 49	29°39'03	11♂42	26°58	0♂44	9°18	25° 1	6°30	18°25	23° 8	11°58	7°56	6°45	8°11	19°34	
T 21	15 57 46	0♂36'38	24°51	26°25	1°56	10° 2	25°15	6°37	18°27	23° 8	11°59	7°D54	6°42	8°17	19°37	
W22	16 1 42	1°34'13	8♂19	25°53	3° 8	10°46	25°29	6°44	18°30	23° 8	12° 1	7°54	6°39	8°24	19°40	
T 23	16 5 39	2°31'46	22° 8	25°24	4°20	11°30	25°43	6°50	18°33	23° 8	12° 2	7°55	6°36	8°31	19°43	
F 24	16 9 36	3°29'19	6♂20	24°56	5°33	12°14	25°57	6°57	18°36	23° 9	12° 3	7°R56	6°33	8°37	19°46	
S 25	16 13 32	4°26'51	20°54	24°32	6°45	12°57	26°11	7° 4	18°38	23°R 9	12° 4	7°55	6°29	8°44	19°49	
S 26	16 17 29	5°24'22	5♂46	24°11	7°57	13°41	26°25	7°11	18°41	23° 9	12° 6	7°52	6°26	8°51	19°52	
M27	16 21 25	6°21'52	20°50	23°54	9°10	14°25	26°39	7°18	18°43	23° 8	12° 7	7°47	6°23	8°57	19°55	
T 28	16 25 22	7°19'22	5♂57	23°40	10°22	15° 9	26°53	7°26	18°46	23° 8	12° 8	7°40	6°20	9° 4	19°58	
W29	16 29 18	8°16'50	20°57	23°31	11°34	15°52	27° 7	7°33	18°48	23° 8	12°10	7°31	6°17	9°11	20° 0	
T 30	16 33 15	9°14'17	5♂41	23°26	12°47	16°36	27°21	7°40	18°51	23° 8	12°11	7°22	6°14	9°17	20° 3	
F 31	16 37 11	10♂11'44	20♂2	23°D25	13♂59	17♂19	27♂35	7♂47	18♂53	23♂8	12♂12	7♂13	6♂10	9♂24	20♂6	

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂								
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl								
W 1	15n15	17n43	4s40	22n46	2n29	1n36	1s42	9n11	0s37	17n10	0s47	22n57	0s28	6n18	0s37	14s15	0s24	22n 1	0s58	3s35	3s 5	11s15	8n17	1n 6
T 2	15 33	18 21	5 6	22 45	2 24	2 4	1 43	9 28	0 36	17 14	0 46	22 56	0 27	6 19	0 37	14 15	0 24	22 1	0 57	3 33	3 4	11 17	8 19	1 6
F 3	15 51	17 48	5 12	22 43	2 16	2 31	1 43	9 45	0 36	17 18	0 46	22 56	0 27	6 20	0 37	14 15	0 24	22 1	0 57	3 32	3 3	11 18	8 20	1 6
S 4	16 8	16 12	5 0	22 39	2 8	2 59	1 44	10 2	0 35	17 21	0 46	22 56	0 27	6 22	0 37	14 15	0 24	22 1	0 57	3 31	3 1	11 20	8 21	1 6
S 5	16 25	13 46	4 31	22 32	1 59	3 26	1 45	10 18	0 34	17 25	0 46	22 56	0 27	6 23	0 37	14 14	0 24	22 1	0 57	3 30	3 0	11 21	8 22	1 6
M 6	16 42	10 43	3 50	22 23	1 48	3 54	1 45	10 35	0 34	17 29	0 46	22 56	0 27	6 24	0 37	14 14	0 24	22 1	0 57	3 30	2 59	11 23	8 24	1 6
T 7	16 59	7 16	2 59	22 12	1 37	4 21	1 45	10 51	0 33	17 33	0 46	22 56	0 27	6 25	0 37	14 14	0 24	22 1	0 57	3 30	2 58	11 24	8 25	1 6
W 8	17 15	3 34	2 0	21 59	1 24	4 48	1 46	11 7	0 33	17 36	0 46	22 56	0 27	6 26	0 37	14 14	0 24	22 1	0 57	3 31	2 56	11 26	8 26	1 5
T 9	17 31	0s13	0 57	21 44	1 11	5 15	1 46	11 24	0 32	17 40	0 46	22 56	0 27	6 27	0 37	14 14	0 24	22 1	0 57	3 32	2 55	11 27	8 27	1 5
F 10	17 47	3 56	0n 7	21 27	0 56	5 43	1 46	11 40	0 32	17 44	0 46	22 56	0 26	6 29	0 37	14 13	0 24	22 1	0 57	3 32	2 54	11 28	8 29	1 5
S 11	18 2	7 30	1 11	21 9	0 41	6 10	1 46	11 56	0 31	17 47	0 46	22 55	0 26	6 30	0 37	14 13	0 24	22 1	0 57	3 31	2 53	11 30	8 30	1 5
S 12	18 17	10 45	2 11	20 49	0 25	6 37	1 46	12 11	0 30	17 51	0 46	22 55	0 26	6 31	0 37	14 13	0 24	22 1	0 57	3 30	2 51	11 31	8 31	1 5
M13	18 32	13 35	3 6	20 28	0 9	7 4	1 46	12 27	0 30	17 55	0 46	22 55	0 26	6 32	0 37	14 13	0 24	22 1	0 57	3 28	2 50	11 33	8 32	1 5
T 14	18 46	15 52	3 53	20 6	0s 8	7 30	1 46	12 42	0 29	17 58	0 45	22 55	0 26	6 33	0 37	14 13	0 24	22 1	0 57	3 26	2 49	11 34	8 33	1 5
W15	19 1	17 28	4 29	19 43	0 26	7 57	1 46	12 58	0 29	18 2	0 45	22 55	0 26	6 34	0 37	14 13	0 24	22 1	0 56	3 23	2 47	11 36	8 35	1 5
T 16	19 14	18 19	4 55	19 19	0 43	8 23	1 46	13 13	0 28	18 5	0 45	22 55	0 26	6 35	0 37	14 13	0 24	22 1	0 56	3 19	2 46	11 37	8 36	1 5
F 17	19 28	18 19	5 6	18 54	1 1	8 50	1 45	13 28	0 27	18 9	0 45	22 54	0 26	6 36	0 37	14 13	0 24	22 1	0 56	3 16	2 45	11 38	8 37	1 5
S 18	19 41	17 27	5 4	18 30	1 18	9 16	1 45	13 43	0 27	18 12	0 45	22 54	0 25	6 37	0 37	14 13	0 24	22 1	0 56	3 13	2 44	11 40	8 38	1 5
S 19	19 54	15 44	4 47	18 6	1 35	9 42	1 44	13 58	0 26	18 16	0 45	22 54	0 25	6 39	0 37	14 13	0 24	22 0	0 56	3 10	2 42	11 41	8 39	1 5
M20	20 7	13 12	4 16	17 42	1 52	10 8	1 44	14 13	0 26	18 19	0 45	22 54	0 25	6 40	0 37	14 13	0 24	22 0	0 56	3 9	2 41	11 43	8 40	1 5
T 21	20 19	9 57	3 30	17 19	2 8	10 33	1 43	14 27	0 25	18 23	0 45	22 54	0 25	6 41	0 37	14 13	0 24	22 0	0 56	3 8	2 40	11 44	8 41	1 5
W22	20 31	6 7	2 32	16 56	2 23	10 59	1 42	14 42	0 24	18 26	0 45	22 53	0 25	6 42	0 37	14 13	0 24	22 0	0 56	3 8	2 39	11 45	8 43	1 5
T 23	20 42	1 50	1 24	16 35	2 38	11 24	1 41	14 56	0 24	18 30	0 45	22 53	0 25	6 43	0 37	14 13	0 24	22 0	0 56	3 9	2 37	11 47	8 44	1 5
F 24	20 53	2n39	0 9	16 16	2 51	11 49	1 41	15 10	0 23	18 33	0 45	22 53	0 25	6 44	0 37	14 13	0 24	22 0	0 56	3 9	2 36	11 48	8 45	1 5
S 25	21 4	7 6	1s 9	15 58	3 3	12 13	1 40	15 24	0 22	18 36	0 45	22 53	0 25	6 45	0 37	14 13	0 24	22 0	0 56	3 9	2 35	11 50	8 46	1 5
S 26	21 14	11 13	2 24	15 42	3 15	12 38	1 39	15 38	0 22	18 40	0 45	22 52	0 25	6 46	0 37	14 13	0 24	22 0	0 56	3 8	2 34	11 51	8 47	1 5
M27	21 24	14 38	3 29	15 28	3 25	13 2	1 37	15 51	0 21	18 43	0 45	22 52	0 24	6 47	0 37	14 13	0 24	22 0	0 56	3 6	2 32	11 52	8 48	1 5
T 28	21 34	17 4	4 20	15 16	3 34	13 26	1 36	16 5	0 21	18 46	0 45	22 52	0 24	6 48	0 37	14 13	0 24	22 0	0 55	3 3	2 31	11 54	8 49	1 5
W29	21 43	18 19	4 52	15 6	3 41	13 49	1 35	16 18	0 20	18 50	0 4													

SWISS EPHEMERIS for the year 1680

JUNE 1680 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♆	♁	
S 1	16 41 8	11II 9'09	3Ω54	23♁28	15♁11	18♁ 3	27♁49	7♁54	18♁56	23°R 8	12♁14	7°R 6	6♁ 7	9♁31	20♁ 8
S 2	16 45 5	12° 6'33	17°18	23°37	16°24	18°46	28° 3	8° 2	18°58	23≈ 8	12°15	7♁ 2	6° 4	9°37	20°11
M 3	16 49 1	13° 3'56	0♁15	23°49	17°36	19°29	28°17	8° 9	19° 0	23° 7	12°16	6°59	6° 1	9°44	20°14
T 4	16 52 58	14° 1'18	12°48	24° 6	18°49	20°13	28°31	8°16	19° 3	23° 7	12°18	6°D58	5°58	9°51	20°16
W 5	16 56 54	14°58'38	25° 2	24°28	20° 1	20°56	28°45	8°24	19° 5	23° 7	12°19	6°58	5°55	9°57	20°19
T 6	17 0 51	15°55'58	7♁ 2	24°54	21°13	21°39	28°58	8°31	19° 7	23° 6	12°20	6°R59	5°51	10° 4	20°21
F 7	17 4 47	16°53'17	18°53	25°24	22°26	22°22	29°12	8°39	19° 9	23° 6	12°22	6°58	5°48	10°11	20°24
S 8	17 8 44	17°50'34	0♁41	25°59	23°38	23° 5	29°26	8°46	19°12	23° 5	12°23	6°56	5°45	10°17	20°26
S 9	17 12 40	18°47'51	12°30	26°38	24°51	23°48	29°40	8°54	19°14	23° 5	12°25	6°51	5°42	10°24	20°28
M10	17 16 37	19°45'08	24°22	27°21	26° 3	24°31	29°53	9° 1	19°16	23° 5	12°26	6°43	5°39	10°31	20°30
T 11	17 20 34	20°42'23	6♁22	28° 8	27°16	25°14	0II 7	9° 9	19°18	23° 4	12°28	6°33	5°35	10°37	20°33
W12	17 24 30	21°39'38	18°30	28°59	28°29	25°57	0°20	9°16	19°20	23° 3	12°29	6°21	5°32	10°44	20°35
T 13	17 28 27	22°36'52	0♁47	29°53	29°41	26°40	0°34	9°24	19°22	23° 3	12°31	6° 8	5°29	10°51	20°37
F 14	17 32 23	23°34'06	13°16	0II52	0II54	27°22	0°48	9°31	19°24	23° 2	12°32	5°56	5°26	10°57	20°39
S 15	17 36 20	24°31'20	25°55	1°55	2° 7	28° 5	1° 1	9°39	19°26	23° 2	12°34	5°45	5°23	11° 4	20°41
S 16	17 40 16	25°28'33	8≈45	3° 1	3°19	28°47	1°15	9°47	19°27	23° 1	12°35	5°36	5°20	11°11	20°43
M17	17 44 13	26°25'46	21°47	4°11	4°32	29°30	1°28	9°54	19°29	23° 0	12°37	5°29	5°16	11°17	20°45
T 18	17 48 9	27°22'59	5♁ 2	5°24	5°45	0II12	1°41	10° 2	19°31	23° 0	12°38	5°26	5°13	11°24	20°47
W19	17 52 6	28°20'11	18°32	6°41	6°57	0°55	1°55	10°10	19°33	22°59	12°40	5°24	5°10	11°31	20°49
T 20	17 56 3	29°17'24	2°Y17	8° 2	8°10	1°37	2° 8	10°18	19°34	22°58	12°41	5°24	5° 7	11°37	20°51
F 21	17 59 59	0♁14'37	16°19	9°26	9°23	2°20	2°21	10°25	19°36	22°57	12°43	5°24	5° 4	11°44	20°53
S 22	18 3 56	1°11'50	0♁38	10°54	10°36	3° 2	2°34	10°33	19°38	22°56	12°44	5°23	5° 1	11°51	20°54
S 23	18 7 52	2° 9'02	15°11	12°25	11°49	3°44	2°48	10°41	19°39	22°56	12°46	5°19	4°57	11°57	20°56
M24	18 11 49	3° 6'15	29°55	13°59	13° 1	4°26	3° 1	10°49	19°41	22°55	12°47	5°13	4°54	12° 4	20°58
T 25	18 15 45	4° 3'28	14II43	15°36	14°14	5° 8	3°14	10°56	19°42	22°54	12°49	5° 4	4°51	12°11	20°59
W26	18 19 42	5° 0'41	29°28	17°17	15°27	5°50	3°27	11° 4	19°44	22°53	12°50	4°53	4°48	12°17	21° 1
T 27	18 23 38	5°57'54	14♁ 1	19° 1	16°40	6°32	3°40	11°12	19°45	22°52	12°52	4°42	4°45	12°24	21° 2
F 28	18 27 35	6°55'07	28°15	20°49	17°53	7°14	3°53	11°20	19°46	22°51	12°53	4°31	4°41	12°31	21° 4
S 29	18 31 32	7°52'20	12Ω 5	22°39	19° 6	7°56	4° 5	11°27	19°48	22°50	12°55	4°22	4°38	12°37	21° 5
S 30	18 35 28	8♁49'32	25Ω28	24II32	20II19	8II38	4II18	11♁35	19Y49	22≈49	12♁57	4♁15	4♁35	12♁44	21Y 7

Day	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♆	♁											
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat					
S 1	22n 9	14n54	4s32	14n51	3s57	14n58	1s31	16n57	0s18	18n59	0s44	22n51	0s24	6n51	0s37	14s13	0s25	22n 0	0s55	2s49	2s26	11s59	8n53	1n 5
S 2	22 17	11 58	3 53	14 50	4 0	15 20	1 30	17 9	0 17	19 2	0 44	22 50	0 24	6 52	0 37	14 13	0 25	22 0	0 55	2 48	2 25	12 1	8 54	1 5
M 3	22 24	8 33	3 3	14 51	4 2	15 42	1 28	17 22	0 17	19 5	0 44	22 50	0 24	6 53	0 37	14 13	0 25	22 0	0 55	2 47	2 24	12 2	8 55	1 5
T 4	22 31	4 50	2 5	14 54	4 3	16 3	1 27	17 34	0 16	19 9	0 44	22 50	0 24	6 54	0 37	14 13	0 25	22 0	0 55	2 46	2 22	12 4	8 56	1 5
W 5	22 38	1 1	1 3	15 0	4 2	16 25	1 25	17 46	0 15	19 12	0 44	22 49	0 24	6 55	0 37	14 13	0 25	22 0	0 55	2 46	2 21	12 5	8 57	1 5
T 6	22 44	2s47	0n 0	15 7	4 1	16 45	1 23	17 58	0 15	19 15	0 44	22 49	0 23	6 55	0 37	14 14	0 25	22 0	0 55	2 46	2 20	12 6	8 58	1 4
F 7	22 50	6 26	1 3	15 17	3 59	17 6	1 22	18 10	0 14	19 18	0 44	22 48	0 23	6 56	0 37	14 14	0 25	22 0	0 55	2 46	2 19	12 8	8 58	1 4
S 8	22 55	9 49	2 3	15 28	3 55	17 26	1 20	18 22	0 13	19 21	0 44	22 48	0 23	6 57	0 37	14 14	0 25	22 0	0 55	2 45	2 17	12 9	8 59	1 4
S 9	23 0	12 48	2 57	15 41	3 51	17 45	1 18	18 33	0 13	19 24	0 44	22 48	0 23	6 58	0 37	14 14	0 25	21 59	0 55	2 43	2 16	12 11	9 0	1 4
M10	23 05	15 17	3 44	15 55	3 47	18 4	1 16	18 44	0 12	19 27	0 44	22 47	0 23	6 59	0 37	14 14	0 25	21 59	0 55	2 40	2 15	12 12	9 1	1 4
T 11	23 9	17 7	4 21	16 11	3 41	18 23	1 14	18 55	0 11	19 30	0 44	22 47	0 23	6 59	0 37	14 14	0 25	21 59	0 54	2 36	2 13	12 13	9 2	1 4
W12	23 13	18 13	4 47	16 28	3 35	18 41	1 12	19 6	0 11	19 32	0 44	22 46	0 23	7 0	0 37	14 15	0 25	21 59	0 54	2 32	2 12	12 15	9 3	1 4
T 13	23 16	18 29	5 0	16 47	3 27	18 58	1 10	19 17	0 10	19 35	0 44	22 46	0 23	7 1	0 37	14 15	0 25	21 59	0 54	2 27	2 11	12 16	9 3	1 4
F 14	23 19	17 52	4 59	17 6	3 20	19 16	1 8	19 27	0 8	19 38	0 44	22 46	0 23	7 2	0 37	14 15	0 25	21 59	0 54	2 22	2 10	12 17	9 4	1 4
S 15	23 22	16 22	4 43	17 27	3 11	19 32	1 6	19 37	0 9	19 41	0 44	22 45	0 23	7 2	0 37	14 15	0 25	21 59	0 54	2 17	2 8	12 19	9 5	1 4
S 16	23 24	14 2	4 13	17 49	3 3	19 48	1 4	19 48	0 8	19 44	0 44	22 45	0 22	7 3	0 37	14 16	0 25	21 59	0 54	2 14	2 7	12 20	9 6	1 4
M17	23 26	10 58	3 29	18 11	2 53	20 4	1 2	19 57	0 7	19 46	0 44	22 44	0 22	7 4	0 37	14 16	0 25	21 59	0 54	2 11	2 6	12 21	9 6	1 4
T 18	23 27	7 18	2 33	18 34	2 43	20 19	1 0	20 7	0 7	19 49	0 44	22 44	0 22	7 4	0 37	14 16	0 25	21 59	0 54	2 10	2 5	12 23	9 7	1 4
W19	23 28	3 12	1 28	18 57	2 33	20 34	0 57	20 17	0 6	19 52	0 44	22 43	0 22	7 5	0 38	14 16	0 25	21 59	0 54	2 9	2 3	12 24	9 8	1 4
T 20	23 29	1n10	0 16	19 21	2 22	20 48	0 55	20 26	0 5	19 55	0 44	22 43	0 22	7 5	0 38	14 17	0 25	21 59	0 54	2 9	2 2	12 26	9 9	1 4
F 21	23 29	5 33	0s57	19 44	2 11	21 1	0 53	20 35	0 5	19 57	0 44	22 42	0 22	7 6	0 38	14 17	0 25	21 59	0 54	2 9	2 1	12 27	9 9	1 4
S 22	23 28	9 42	2 9	20 8	2 0	21 14	0 51	20 44	0 4	20 0	0 44	22 42	0 22	7 7	0 38	14 17	0 25	21 59	0 54	2 8	2 0	12 28	9 10	1 4
S 23	23 28	13 20	3 14	20 32	1 48	21 27	0 48	20 53	0 3	20 2	0 44	22 41	0 22	7 7	0 38	14 18	0 25	21 58	0 54	2 7	1 58	12 30	9 10	1 4
M24	23 26	16 9	4 6	20 55	1 36	21 38	0 46	21 1	0 2	20 5	0 43	22 41	0 22	7 8	0 38	14 18	0 25	21 58	0 54	2 4	1 57	12 31	9 11	1 4
T 25	23 25	17 56	4 42	21 18	1 24	21																		

SWISS EPHEMERIS for the year 1680

JULY 1680 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁
M 1	18 39 25	9 ^h 46'45"	8 ^m 26	26 ^{II} 27	21 ^{II} 32	9 ^{II} 19	4 ^{II} 31	11 [♁] 43	19 [♃] 50	22 [♁] R48	12 [♁] 58	4 [♁] R11	4 [♁] 32	12 [♁] M51	21 [♃] 8
T 2	18 43 21	10 ^h 43'57"	21 [°] 1	28 [°] 25	22 [°] 45	10 [°] 1	4 [°] 44	11 [°] 51	19 [°] 51	22 [°] 47	13 [°] 0	4 [°] D 9	4 [°] 29	12 [°] 57	21 [°] 9
W 3	18 47 18	11 ^h 41'09"	3 ^h 16	0 ^h 26	23 [°] 58	10 [°] 43	4 [°] 56	11 [°] 59	19 [°] 52	22 [°] 45	13 [°] 1	4 [°] D 8	4 [°] 26	13 [°] 4	21 [°] 10
T 4	18 51 14	12 ^h 38'20"	15 [°] 17	2 [°] 28	25 [°] 11	11 [°] 24	5 [°] 9	12 [°] 7	19 [°] 53	22 [°] 44	13 [°] 3	4 [°] R 8	4 [°] 22	13 [°] 11	21 [°] 12
F 5	18 55 11	13 ^h 35'32"	27 [°] 10	4 [°] 32	26 [°] 25	12 [°] 5	5 [°] 21	12 [°] 14	19 [°] 54	22 [°] 43	13 [°] 4	4 [°] 8	4 [°] 19	13 [°] 18	21 [°] 13
S 6	18 59 7	14 ^h 32'44"	8 ^m 59	6 [°] 38	27 [°] 38	12 [°] 47	5 [°] 34	12 [°] 22	19 [°] 55	22 [°] 42	13 [°] 6	4 [°] 6	4 [°] 16	13 [°] 24	21 [°] 14
S 7	19 3 4	15 ^h 29'55"	20 [°] 50	8 [°] 45	28 [°] 51	13 [°] 28	5 [°] 46	12 [°] 30	19 [°] 56	22 [°] 41	13 [°] 7	4 [°] 1	4 [°] 13	13 [°] 31	21 [°] 15
M 8	19 7 1	16 ^h 27'07"	2 ^m 47	10 [°] 53	0 ^h 4	14 [°] 9	5 [°] 58	12 [°] 38	19 [°] 57	22 [°] 40	13 [°] 9	3 [°] 54	4 [°] 10	13 [°] 38	21 [°] 16
T 9	19 10 57	17 ^h 24'19"	14 [°] 53	13 [°] 2	1 [°] 17	14 [°] 51	6 [°] 10	12 [°] 46	19 [°] 58	22 [°] 38	13 [°] 11	3 [°] 45	4 [°] 7	13 [°] 44	21 [°] 16
W10	19 14 54	18 ^h 21'31"	27 [°] 11	15 [°] 10	2 [°] 30	15 [°] 32	6 [°] 23	12 [°] 53	19 [°] 58	22 [°] 37	13 [°] 12	3 [°] 33	4 [°] 3	13 [°] 51	21 [°] 17
T 11	19 18 50	19 ^h 18'44"	9 ^h 34	17 [°] 19	3 [°] 44	16 [°] 13	6 [°] 35	13 [°] 1	19 [°] 59	22 [°] 36	13 [°] 14	3 [°] 21	4 [°] 0	13 [°] 58	21 [°] 18
F 12	19 22 47	20 ^h 15'56"	22 [°] 26	19 [°] 28	4 [°] 57	16 [°] 54	6 [°] 47	13 [°] 9	20 [°] 0	22 [°] 34	13 [°] 15	3 [°] 9	3 [°] 57	14 [°] 4	21 [°] 19
S 13	19 26 43	21 ^h 13'09"	5 ^m 24	21 [°] 36	6 [°] 10	17 [°] 35	6 [°] 59	13 [°] 17	20 [°] 0	22 [°] 33	13 [°] 17	2 [°] 58	3 [°] 54	14 [°] 11	21 [°] 19
S 14	19 30 40	22 ^h 10'23"	18 [°] 35	23 [°] 43	7 [°] 24	18 [°] 16	7 [°] 10	13 [°] 25	20 [°] 1	22 [°] 32	13 [°] 18	2 [°] 49	3 [°] 51	14 [°] 18	21 [°] 20
M15	19 34 36	23 [°] 7'37"	1 ^h 56	25 [°] 50	8 [°] 37	18 [°] 57	7 [°] 22	13 [°] 32	20 [°] 2	22 [°] 30	13 [°] 20	2 [°] 43	3 [°] 47	14 [°] 24	21 [°] 21
T 16	19 38 33	24 [°] 4'52"	15 [°] 28	27 [°] 55	9 [°] 50	19 [°] 38	7 [°] 34	13 [°] 40	20 [°] 2	22 [°] 29	13 [°] 21	2 [°] 40	3 [°] 44	14 [°] 31	21 [°] 21
W17	19 42 30	25 [°] 2'08"	29 [°] 10	29 [°] 59	11 [°] 4	20 [°] 18	7 [°] 46	13 [°] 48	20 [°] 2	22 [°] 28	13 [°] 23	2 [°] D39	3 [°] 41	14 [°] 38	21 [°] 22
T 18	19 46 26	25 ^h 59'24"	13 ^h 2	2 ^h 3	12 [°] 17	20 [°] 59	7 [°] 57	13 [°] 55	20 [°] 3	22 [°] 26	13 [°] 24	2 [°] 39	3 [°] 38	14 [°] 44	21 [°] 22
F 19	19 50 23	26 ^h 56'42"	27 [°] 3	4 [°] 4	13 [°] 31	21 [°] 40	8 [°] 9	14 [°] 3	20 [°] 3	22 [°] 25	13 [°] 26	2 [°] R39	3 [°] 35	14 [°] 51	21 [°] 22
S 20	19 54 19	27 ^h 54'00"	11 ^h 13	6 [°] 4	14 [°] 44	22 [°] 20	8 [°] 20	14 [°] 11	20 [°] 3	22 [°] 23	13 [°] 27	2 [°] 39	3 [°] 32	14 [°] 58	21 [°] 23
S 21	19 58 16	28 ^h 51'20"	25 [°] 30	8 [°] 2	15 [°] 58	23 [°] 1	8 [°] 31	14 [°] 18	20 [°] 4	22 [°] 22	13 [°] 29	2 [°] 36	3 [°] 28	15 [°] 4	21 [°] 23
M22	20 2 12	29 ^h 48'40"	9 ^h 13	9 [°] 59	17 [°] 11	23 [°] 41	8 [°] 42	14 [°] 26	20 [°] 4	22 [°] 20	13 [°] 30	2 [°] 31	3 [°] 25	15 [°] 11	21 [°] 23
T 23	20 6 9	0 ^h 46'02"	24 [°] 17	11 [°] 55	18 [°] 25	24 [°] 21	8 [°] 53	14 [°] 34	20 [°] 4	22 [°] 19	13 [°] 32	2 [°] 24	3 [°] 22	15 [°] 18	21 [°] 23
W24	20 10 5	1 ^h 43'25"	8 ^h 36	13 [°] 48	19 [°] 39	25 [°] 2	9 [°] 4	14 [°] 41	20 [°] 4	22 [°] 17	13 [°] 33	2 [°] 15	3 [°] 19	15 [°] 24	21 [°] 23
T 25	20 14 2	2 ^h 40'48"	22 [°] 46	15 [°] 40	20 [°] 52	25 [°] 42	9 [°] 15	14 [°] 49	20 [°] R 4	22 [°] 16	13 [°] 35	2 [°] 6	3 [°] 16	15 [°] 31	21 [°] R23
F 26	20 17 59	3 ^h 38'12"	6 ^h 42	17 [°] 30	22 [°] 6	26 [°] 22	9 [°] 26	14 [°] 57	20 [°] 4	22 [°] 14	13 [°] 36	1 [°] 57	3 [°] 13	15 [°] 38	21 [°] 23
S 27	20 21 55	4 ^h 35'37"	20 [°] 18	19 [°] 19	23 [°] 20	27 [°] 2	9 [°] 37	15 [°] 4	20 [°] 4	22 [°] 13	13 [°] 38	1 [°] 49	3 [°] 9	15 [°] 44	21 [°] 23
S 28	20 25 52	5 ^h 33'03"	3 ^h 2	21 [°] 6	24 [°] 33	27 [°] 42	9 [°] 48	15 [°] 12	20 [°] 4	22 [°] 11	13 [°] 39	1 [°] 43	3 [°] 6	15 [°] 51	21 [°] 23
M29	20 29 48	6 ^h 30'30"	16 [°] 25	22 [°] 51	25 [°] 47	28 [°] 22	9 [°] 58	15 [°] 19	20 [°] 4	22 [°] 10	13 [°] 41	1 [°] 40	3 [°] 3	15 [°] 58	21 [°] 23
T 30	20 33 45	7 ^h 27'57"	28 [°] 57	24 [°] 35	27 [°] 1	29 [°] 2	10 [°] 9	15 [°] 27	20 [°] 3	22 [°] 8	13 [°] 42	1 [°] D39	3 [°] 0	16 [°] 4	21 [°] 22
W31	20 37 41	8 ^h 25'25"	11 ^h 12	26 ^h 17	28 ^h 15	29 ^h 42	10 ^h 19	15 ^h 34	20 ^h 3	22 ^h 7	13 ^h 44	1 ^h 39	2 ^h 57	16 ^h 11	21 ^h 22

Day	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁	♁									
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat									
M 1	23n 7	6n23	2s12	23n15	0s11	22n44	0s29	21n55	0n 2	20n22	0s43	22n37	0s21	7n11	0s38	14s20	0s25	21n58	0s53	1s40	1s48	12s40	9n15	1n 4
T 2	23 3	2 31	1 9	23 28	0n 0	22 50	0 26	22 2	0 3	20 24	0 43	22 36	0 21	7 11	0 38	14 21	0 25	21 58	0 53	1 39	1 47	12 42	9 15	1 4
W 3	22 58	1s22	0 5	23 40	0 12	22 57	0 24	22 9	0 4	20 27	0 43	22 35	0 21	7 12	0 38	14 21	0 25	21 58	0 53	1 39	1 46	12 43	9 16	1 4
T 4	22 53	5 8	0n59	23 50	0 22	23 2	0 21	22 16	0 5	20 29	0 43	22 35	0 21	7 12	0 38	14 21	0 25	21 57	0 53	1 39	1 44	12 44	9 16	1 4
F 5	22 47	8 38	1 59	23 57	0 33	23 7	0 19	22 22	0 5	20 31	0 43	22 34	0 21	7 13	0 38	14 22	0 25	21 57	0 53	1 39	1 43	12 46	9 16	1 4
S 6	22 41	11 46	2 54	24 1	0 43	23 11	0 16	22 28	0 6	20 33	0 43	22 34	0 21	7 13	0 38	14 22	0 25	21 57	0 53	1 38	1 42	12 47	9 17	1 4
S 7	22 35	14 26	3 41	24 3	0 52	23 15	0 14	22 34	0 7	20 36	0 43	22 33	0 21	7 13	0 38	14 23	0 25	21 57	0 53	1 36	1 41	12 48	9 17	1 4
M 8	22 28	16 31	4 19	24 2	1 1	23 17	0 11	22 39	0 7	20 38	0 43	22 32	0 20	7 14	0 38	14 23	0 25	21 57	0 53	1 33	1 39	12 50	9 18	1 4
T 9	22 21	17 53	4 45	23 59	1 9	23 20	0 9	22 45	0 8	20 40	0 43	22 32	0 20	7 14	0 38	14 23	0 25	21 57	0 53	1 29	1 38	12 51	9 18	1 4
W10	22 13	18 27	4 59	23 52	1 16	23 21	0 6	22 50	0 9	20 42	0 43	22 31	0 20	7 14	0 38	14 24	0 25	21 57	0 53	1 25	1 37	12 52	9 18	1 4
T 11	22 5	18 9	5 0	23 43	1 23	23 22	0 4	22 55	0 10	20 44	0 43	22 30	0 20	7 14	0 38	14 24	0 25	21 57	0 53	1 20	1 36	12 54	9 18	1 4
F 12	21 57	16 55	4 45	23 31	1 29	23 22	0 1	23 0	0 10	20 46	0 43	22 30	0 20	7 15	0 38	14 25	0 26	21 57	0 53	1 15	1 34	12 55	9 19	1 4
S 13	21 48	14 49	4 15	23 17	1 34	23 21	0n 1	23 5	0 11	20 48	0 43	22 29	0 20	7 15	0 38	14 25	0 26	21 57	0 52	1 11	1 33	12 56	9 19	1 4
S 14	21 39	11 56	3 31	23 0	1 38	23 20	0 4	23 9	0 12	20 50	0 43	22 28	0 20	7 15	0 38	14 26	0 26	21 57	0 52	1 7	1 32	12 58	9 19	1 4
M15	21 30	8 23	2 36	22 40	1 41	23 18	0 6	23 13	0 12	20 52	0 43	22 28	0 20	7 15	0 38	14 26	0 26	21 56	0 52	1 5	1 31	12 59	9 19	1 4
T 16	21 20	4 21	1 30	22 19	1 44	23 16	0 9	23 17	0 13	20 54	0 43	22 27	0 20	7 15	0 38	14 27	0 26	21 56	0 52	1 4	1 29	13 0	9 19	1 4
W17	21 10	0 3	0 19	21 55	1 46	23 12	0 11	23 21	0 14	20 56	0 43	22 26	0 20	7 15	0 38	14 27	0 26	21 56	0 52	1 3	1 28	13 1	9 20	1 4
T 18	20 59	4n18	0s55	21 29	1 47	23 8	0 14	23 25	0															

SWISS EPHEMERIS for the year 1680

AUGUST 1680 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁
T 1	20 41 38	9♌22'54	23♋14	27♌58	29♋28	0♋22	10♌29	15♋41	20♌R 3	22♌R 5	13♋45	1♋40	2♋53	16♌18	21♌R22
F 2	20 45 34	10°20'24	5♌ 8	29°37	0♌42	1° 2	10°39	15°49	20♌Y 2	22♌≈ 4	13°47	1°R41	2°50	16°25	21♌Y21
S 3	20 49 31	11°17'54	16°59	1♌14	1°56	1°42	10°49	15°56	20° 2	22° 2	13°48	1°41	2°47	16°31	21°21
S 4	20 53 28	12°15'26	28°51	2°50	3°10	2°21	10°59	16° 3	20° 2	22° 0	13°49	1°39	2°44	16°38	21°20
M 5	20 57 24	13°12'58	10♌51	4°24	4°24	3° 1	11° 9	16°11	20° 1	21°59	13°51	1°36	2°41	16°45	21°20
T 6	21 1 21	14°10'31	23° 1	5°56	5°38	3°40	11°19	16°18	20° 0	21°57	13°52	1°31	2°38	16°51	21°19
W 7	21 5 17	15° 8'05	5♌26	7°27	6°52	4°20	11°28	16°25	20° 0	21°55	13°54	1°24	2°34	16°58	21°18
T 8	21 9 14	16° 5'41	18° 8	8°57	8° 6	4°59	11°38	16°32	19°59	21°54	13°55	1°16	2°31	17° 5	21°17
F 9	21 13 10	17° 3'17	1≈ 7	10°25	9°20	5°38	11°47	16°39	19°59	21°52	13°56	1° 8	2°28	17°11	21°17
S 10	21 17 7	18° 0'54	14°23	11°51	10°34	6°18	11°56	16°46	19°58	21°51	13°58	1° 2	2°25	17°18	21°16
S 11	21 21 3	18°58'33	27°56	13°15	11°48	6°57	12° 5	16°54	19°57	21°49	13°59	0°56	2°22	17°25	21°15
M12	21 25 0	19°56'13	11♌42	14°38	13° 2	7°36	12°14	17° 1	19°56	21°47	14° 0	0°53	2°19	17°31	21°14
T 13	21 28 57	20°53'54	25°38	15°59	14°16	8°15	12°23	17° 8	19°55	21°46	14° 2	0°D51	2°15	17°38	21°13
W14	21 32 53	21°51'37	9♌42	17°18	15°30	8°54	12°32	17°14	19°54	21°44	14° 3	0°51	2°12	17°45	21°12
T 15	21 36 50	22°49'22	23°51	18°36	16°44	9°33	12°41	17°21	19°53	21°42	14° 4	0°53	2° 9	17°51	21°11
F 16	21 40 46	23°47'08	8♌ 2	19°51	17°59	10°12	12°49	17°28	19°52	21°41	14° 5	0°54	2° 6	17°58	21° 9
S 17	21 44 43	24°44'56	22°14	21° 5	19°13	10°50	12°57	17°35	19°51	21°39	14° 7	0°R55	2° 3	18° 5	21° 8
S 18	21 48 39	25°42'46	6♌24	22°17	20°27	11°29	13° 6	17°42	19°50	21°37	14° 8	0°54	1°59	18°11	21° 7
M19	21 52 36	26°40'38	20°31	23°27	21°41	12° 8	13°14	17°48	19°49	21°36	14° 9	0°52	1°56	18°18	21° 6
T 20	21 56 32	27°38'31	4♋33	24°34	22°56	12°46	13°22	17°55	19°48	21°34	14°10	0°49	1°53	18°25	21° 4
W21	22 0 29	28°36'27	18°27	25°40	24°10	13°25	13°29	18° 2	19°47	21°33	14°11	0°45	1°50	18°32	21° 3
T 22	22 4 26	29°34'24	2♌ 9	26°43	25°24	14° 3	13°37	18° 8	19°45	21°31	14°13	0°40	1°47	18°38	21° 1
F 23	22 8 22	0♌32'22	15°39	27°43	26°39	14°42	13°45	18°15	19°44	21°29	14°14	0°35	1°44	18°45	21° 0
S 24	22 12 19	1°30'22	28°53	28°41	27°53	15°20	13°52	18°21	19°43	21°28	14°15	0°31	1°40	18°52	20°58
S 25	22 16 15	2°28'24	11♌51	29°37	29° 7	15°58	13°59	18°28	19°41	21°26	14°16	0°29	1°37	18°58	20°57
M26	22 20 12	3°26'28	24°32	0♋29	0♌22	16°37	14° 6	18°34	19°40	21°24	14°17	0°D27	1°34	19° 5	20°55
T 27	22 24 8	4°24'33	6♋57	1°18	1°36	17°15	14°13	18°40	19°38	21°23	14°18	0°27	1°31	19°12	20°53
W28	22 28 5	5°22'39	19° 9	2° 4	2°51	17°53	14°20	18°46	19°37	21°21	14°19	0°28	1°28	19°18	20°51
T 29	22 32 1	6°20'47	1♌ 9	2°47	4° 5	18°31	14°27	18°52	19°35	21°20	14°20	0°30	1°24	19°25	20°50
F 30	22 35 58	7°18'57	13° 2	3°25	5°20	19° 9	14°33	18°59	19°34	21°18	14°21	0°32	1°21	19°32	20°48
S 31	22 39 55	8♌17'08	24♌53	4♋ 0	6♌34	19°47	14°40	19°55	19°32	21°17	14°22	0♋33	1♋18	19♌38	20°46

Day	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁	♁
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	17n56	7s17	1n54	13n12	1n 4	21n 2	0n45	23n53	0n25	21n20	0s43	22n15	0s19	7n15	0s39
F 2	17 41	10 35	2 50	12 31	0 58	20 48	0 47	23 54	0 25	21 22	0 43	22 14	0 18	7 15	0 39
S 3	17 25	13 25	3 40	11 51	0 51	20 34	0 49	23 54	0 26	21 23	0 43	22 13	0 18	7 15	0 39
S 4	17 9	15 43	4 19	11 10	0 44	20 19	0 51	23 54	0 27	21 25	0 43	22 13	0 18	7 15	0 39
M 5	16 53	17 21	4 48	10 28	0 36	20 3	0 53	23 54	0 28	21 26	0 43	22 12	0 18	7 14	0 39
T 6	16 36	18 13	5 5	9 47	0 29	19 47	0 55	23 54	0 28	21 27	0 43	22 11	0 18	7 14	0 39
W 7	16 19	18 15	5 7	9 6	0 21	19 30	0 57	23 54	0 29	21 29	0 43	22 10	0 18	7 14	0 39
T 8	16 2	17 22	4 55	8 25	0 12	19 13	0 58	23 53	0 30	21 30	0 43	22 9	0 18	7 14	0 39
F 9	15 45	15 35	4 27	7 44	0 4	18 55	1 0	23 52	0 31	21 31	0 44	22 9	0 18	7 13	0 39
S 10	15 27	12 57	3 45	7 4	0s 4	18 36	1 2	23 51	0 32	21 32	0 44	22 8	0 18	7 13	0 39
S 11	15 10	9 34	2 49	6 23	0 13	18 17	1 3	23 50	0 31	21 33	0 44	22 7	0 18	7 13	0 39
M12	14 51	5 37	1 42	5 43	0 22	17 58	1 5	23 48	0 33	21 35	0 44	22 6	0 18	7 12	0 39
T 13	14 33	1 18	0 28	5 4	0 31	17 38	1 6	23 47	0 34	21 36	0 44	22 5	0 18	7 12	0 39
W14	14 15	3n 7	0s48	4 24	0 40	17 18	1 8	23 45	0 34	21 37	0 44	22 4	0 18	7 12	0 39
T 15	13 56	7 23	2 2	3 45	0 50	16 57	1 9	23 43	0 35	21 38	0 44	22 4	0 17	7 11	0 39
F 16	13 37	11 14	3 9	3 7	0 59	16 35	1 11	23 41	0 36	21 39	0 44	22 3	0 17	7 11	0 39
S 17	13 18	14 26	4 4	2 29	1 9	16 13	1 12	23 39	0 37	21 40	0 44	22 2	0 17	7 10	0 39
S 18	12 58	16 45	4 44	1 52	1 18	15 51	1 13	23 36	0 37	21 41	0 44	22 1	0 17	7 10	0 39
M19	12 39	18 2	5 7	1 16	1 28	15 28	1 14	23 33	0 38	21 42	0 44	22 0	0 17	7 10	0 39
T 20	12 19	18 13	5 11	0 40	1 38	15 5	1 15	23 31	0 39	21 43	0 44	22 0	0 17	7 9	0 39
W21	11 59	17 18	4 57	0 5	1 47	14 41	1 16	23 28	0 40	21 44	0 44	21 59	0 17	7 9	0 39
T 22	11 38	15 23	4 26	0s29	1 57	14 17	1 17	23 24	0 40	21 45	0 44	21 58	0 17	7 8	0 39
F 23	11 18	12 39	3 41	1 2	2 7	13 53	1 18	23 21	0 41	21 46	0 44	21 57	0 17	7 8	0 39
S 24	10 57	9 18	2 44	1 34	2 16	13 28	1 19	23 17	0 42	21 47	0 44	21 56	0 17	7 7	0 39
S 25	10 37	5 35	1 40	2 4	2 26	13 3	1 20	23 14	0 43	21 47	0 44	21 56	0 17	7 7	0 39
M26	10 16	1 41	0 32	2 34	2 35	12 37	1 21	23 10	0 44	21 48	0 44	21 55	0 17	7 6	0 39
T 27	9 55	2s13	0n36	3 2	2 44	12 11	1 21	23 6	0 44	21 49	0 44	21 54	0 17	7 5	0 39
W28	9 33	5 57	1 41	3 28	2 53	11 45	1 22	23 2	0 45	21 50	0 44	21 53	0 17	7 5	0 39
T 29	9 12	9 23	2 41	3 53	3 2	11 19	1 23	22 57	0 46	21 50	0 44	21 52	0 16	7 4	0 39
F 30	8 50	12 23	3 34	4 17	3 11	10 52	1 23	22 53	0 47	21 51	0 44	21 52	0 16	7 4	0 39
S 31	8n29	14s52	4n17	4s38	3s19	10n25	1n24	22n48	0n47	21n52	0s44	21n51	0s16	7n 3	0s39

Julian Day Number = 2334880.5, Delta T = 14.06 sec
 Ecliptic obliquity = 23°28'42", Nutation = 0°00'02"
 Ayanamsha: Fagan/Bradley = 20°16'54", Lahiri = 19°23'54"Greg. Calendar

SWISS EPHEMERIS for the year 1680

SEPTEMBER 1680 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♆	♁	
S 1	22 43 51	9♍15'20	6♌45	4♋30	7♎49	20♌24	14♏46	19♏11	19°R30	21°R15	14♌23	0°R34	1♌15	19♍45	20°R44
M 2	22 47 48	10°13'35	18°45	4°56	9° 3	21° 2	14°52	19°16	19°Y29	21°≈14	14°24	0♌33	1°12	19°52	20°Y42
T 3	22 51 44	11°11'50	0♌56	5°17	10°18	21°40	14°58	19°22	19°27	21°12	14°25	0°32	1° 9	19°58	20°40
W 4	22 55 41	12°10'07	13°22	5°32	11°32	22°17	15° 3	19°28	19°25	21°11	14°26	0°30	1° 5	20° 5	20°38
T 5	22 59 37	13° 8'26	26° 7	5°43	12°47	22°55	15° 9	19°34	19°23	21° 9	14°27	0°28	1° 2	20°12	20°36
F 6	23 3 34	14° 6'47	9♌14	5°R47	14° 1	23°32	15°14	19°39	19°22	21° 8	14°28	0°26	0°59	20°19	20°34
S 7	23 7 30	15° 5'09	22°43	5°45	15°16	24° 9	15°19	19°45	19°20	21° 6	14°29	0°23	0°56	20°25	20°32
S 8	23 11 27	16° 3'32	6♌33	5°37	16°31	24°47	15°24	19°50	19°18	21° 5	14°30	0°22	0°53	20°32	20°29
M 9	23 15 23	17° 1'58	20°42	5°22	17°45	25°24	15°29	19°56	19°16	21° 3	14°31	0°21	0°50	20°39	20°27
T 10	23 19 20	18° 0'25	5°Y 4	5° 0	19° 0	26° 1	15°34	20° 1	19°14	21° 2	14°31	0°D21	0°46	20°45	20°25
W 11	23 23 17	18°58'55	19°36	4°31	20°15	26°38	15°38	20° 6	19°12	21° 0	14°32	0°21	0°43	20°52	20°22
T 12	23 27 13	19°57'26	4♌10	3°56	21°29	27°15	15°43	20°12	19°10	20°59	14°33	0°22	0°40	20°59	20°20
F 13	23 31 10	20°56'00	18°42	3°14	22°44	27°52	15°47	20°17	19° 8	20°58	14°34	0°23	0°37	21° 5	20°18
S 14	23 35 6	21°54'36	3♏ 7	2°25	23°59	28°29	15°51	20°22	19° 6	20°56	14°34	0°24	0°34	21°12	20°15
S 15	23 39 3	22°53'14	17°21	1°31	25°13	29° 5	15°55	20°27	19° 4	20°55	14°35	0°R24	0°30	21°19	20°13
M 16	23 42 59	23°51'55	1♌23	0°33	26°28	29°42	15°58	20°32	19° 2	20°54	14°36	0°24	0°27	21°25	20°10
T 17	23 46 56	24°50'38	15°11	29♎30	27°43	0♌18	16° 2	20°37	18°59	20°52	14°37	0°24	0°24	21°32	20° 8
W 18	23 50 52	25°49'23	28°45	28°25	28°58	0°55	16° 5	20°41	18°57	20°51	14°37	0°23	0°21	21°39	20° 5
T 19	23 54 49	26°48'10	12♌ 4	27°20	0♌12	1°31	16° 8	20°46	18°55	20°50	14°38	0°23	0°18	21°46	20° 3
F 20	23 58 46	27°47'00	25° 9	26°14	1°27	2° 8	16°11	20°50	18°53	20°49	14°38	0°22	0°15	21°52	20° 0
S 21	0 2 42	28°45'51	8♎ 0	25°11	2°42	2°44	16°14	20°55	18°51	20°47	14°39	0°22	0°11	21°59	19°58
S 22	0 6 39	29°44'45	20°37	24°12	3°57	3°20	16°16	20°59	18°48	20°46	14°40	0°22	0° 8	22° 6	19°55
M 23	0 10 35	0♌43'41	3♌ 3	23°19	5°12	3°56	16°18	21° 4	18°46	20°45	14°40	0°22	0° 5	22°12	19°52
T 24	0 14 32	1°42'39	15°17	22°33	6°26	4°32	16°20	21° 8	18°44	20°44	14°41	0°22	0° 2	22°19	19°50
W 25	0 18 28	2°41'38	27°21	21°55	7°41	5° 8	16°22	21°12	18°41	20°43	14°41	0°22	29♎59	22°26	19°47
T 26	0 22 25	3°40'40	9♍18	21°26	8°56	5°44	16°24	21°16	18°39	20°42	14°42	0°22	29°55	22°32	19°44
F 27	0 26 21	4°39'44	21°10	21° 7	10°11	6°20	16°25	21°20	18°37	20°40	14°42	0°21	29°52	22°39	19°42
S 28	0 30 18	5°38'49	3♌ 0	20°D58	11°26	6°55	16°27	21°24	18°34	20°39	14°42	0°20	29°49	22°46	19°39
S 29	0 34 15	6°37'57	14°51	21° 0	12°41	7°31	16°28	21°28	18°32	20°38	14°43	0°20	29°46	22°52	19°36
M 30	0 38 11	7♌37'06	26♌49	21♎12	13♌56	8♌ 6	16♏29	21♌31	18°Y30	20°≈37	14♌43	0♌19	29♎43	22♍59	19°Y33

Day	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♆	♁											
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat							
S 1	8n 7	16s44	4n49	4s57	3s27	9n57	1n24	22n43	0n48	21n52	0s44	21n50	0s16	7n 2	0s39	14s51	0s26	21n52	0s50	0s13	0s30	13s59	9n 4	1n 3
M 2	7 45	17 52	5 9	5 14	3 34	9 29	1 24	22 38	0 49	21 53	0 44	21 49	0 16	7 2	0 39	14 52	0 26	21 52	0 50	0 13	0 29	14 0	9 4	1 2
T 3	7 23	18 13	5 16	5 29	3 41	9 1	1 24	22 33	0 50	21 54	0 44	21 49	0 16	7 1	0 39	14 52	0 26	21 52	0 50	0 13	0 27	14 2	9 3	1 2
W 4	7 0	17 42	5 8	5 41	3 47	8 33	1 25	22 28	0 51	21 54	0 44	21 48	0 16	7 0	0 39	14 53	0 26	21 52	0 50	0 12	0 26	14 3	9 2	1 2
T 5	6 38	16 18	4 45	5 50	3 53	8 5	1 25	22 22	0 51	21 55	0 44	21 47	0 16	7 0	0 39	14 53	0 26	21 52	0 50	0 11	0 25	14 4	9 1	1 2
F 6	6 16	14 1	4 6	5 56	3 58	7 36	1 25	22 17	0 52	21 55	0 44	21 46	0 16	6 59	0 39	14 54	0 26	21 52	0 50	0 10	0 24	14 5	9 0	1 2
S 7	5 53	10 55	3 13	5 59	4 2	7 7	1 25	22 11	0 53	21 56	0 44	21 46	0 16	6 58	0 39	14 54	0 26	21 52	0 50	0 9	0 22	14 6	8 59	1 2
S 8	5 30	7 8	2 8	5 58	4 4	6 38	1 25	22 5	0 54	21 57	0 44	21 45	0 16	6 57	0 39	14 55	0 26	21 52	0 50	0 9	0 21	14 7	8 59	1 2
M 9	5 8	2 53	0 53	5 54	4 6	6 9	1 25	21 59	0 54	21 57	0 44	21 44	0 16	6 57	0 39	14 55	0 26	21 52	0 50	0 8	0 20	14 9	8 58	1 2
T 10	4 45	1n37	0s26	5 45	4 6	5 39	1 24	21 53	0 55	21 57	0 44	21 43	0 16	6 56	0 39	14 56	0 26	21 52	0 50	0 8	0 18	14 10	8 57	1 2
W 11	4 22	6 4	1 45	5 33	4 5	5 10	1 24	21 47	0 56	21 58	0 45	21 43	0 16	6 55	0 39	14 56	0 26	21 52	0 50	0 9	0 17	14 11	8 56	1 2
T 12	3 59	10 9	2 57	5 16	4 2	4 40	1 24	21 40	0 57	21 58	0 45	21 42	0 16	6 54	0 39	14 56	0 26	21 52	0 50	0 9	0 16	14 12	8 55	1 2
F 13	3 36	13 37	3 57	4 55	3 58	4 10	1 23	21 34	0 58	21 59	0 45	21 41	0 15	6 54	0 40	14 57	0 26	21 52	0 49	0 9	0 15	14 13	8 54	1 2
S 14	3 13	16 12	4 42	4 30	3 52	3 40	1 23	21 27	0 58	21 59	0 45	21 41	0 15	6 53	0 40	14 57	0 26	21 52	0 49	0 9	0 13	14 15	8 53	1 2
S 15	2 50	17 45	5 9	4 1	3 44	3 10	1 22	21 20	0 59	21 59	0 45	21 40	0 15	6 52	0 40	14 58	0 26	21 52	0 49	0 10	0 12	14 16	8 52	1 2
M 16	2 26	18 11	5 17	3 29	3 33	2 39	1 22	21 14	1 0	22 0	0 45	21 39	0 15	6 51	0 40	14 58	0 26	21 52	0 49	0 10	0 11	14 17	8 51	1 2
T 17	2 3	17 32	5 7	2 53	3 21	2 9	1 21	21 6	1 1	22 0	0 45	21 39	0 15	6 50	0 40	14 59	0 26	21 52	0 49	0 9	0 10	14 18	8 50	1 2
W 18	1 40	15 53	4 39	2 14	3 7	1 39	1 20	20 59	1 2	22 0	0 45	21 38	0 15	6 50	0 40	14 59	0 26	21 52	0 49	0 9	0 8	14 19	8 49	1 2
T 19	1 16	13 24	3 57	1 34	2 52	1 8	1 20	20 52	1 2	22 1	0 45	21 37	0 15	6 49	0 40	14 59	0 26	21 51	0 49	0 9	0 7	14 20	8 48	1 2
F 20	0 53	10 17	3 3	0 52	2 35	0 37	1 19	20 45	1 3	22 1	0 45	21 37	0 15	6 48	0 40	15 0	0 26	21 51	0 49	0 9	0 6	14 22	8 47	1 2
S 21	0 30	6 43	2 1	0 10	2 16	0 7	1 18	20 37	1 4	22 1	0 45	21 36	0 15	6 47	0 40	15 0	0 26	21 51	0 49	0 9	0 5	14 23	8 46	1 2
S 22	0 6	2 54	0 54	0n31	1 57	0s24	1 17	20 30	1 5	22 1	0 45	21 36	0 15	6 46	0 40	15 1	0 26	21 51	0 49	0 9	0 3	14 24	8 45	1 1
M 23	0s17	0s59	0n15	1 10	1 37	0 54	1 16	20 22	1 6	22 2	0 45	21 35	0 15	6 45	0 40	15 1	0 26	21 51	0 49	0 9	0 2	14 25	8 44	1 1
T 24	0 41	4 46	1 22	1 47	1 17	1 25	1 15	20 14	1 7	22 2	0 45	21 34	0 15	6 44	0 40	15 1	0 26	21 51	0 49	0 9	0 1	14 26	8 43	1 1
W 25	1 4	8 18	2 24	2 21	0 56	1 56	1 14	20 6	1 7	22 2	0 45	21 34	0 15	6 43	0 40	15 2	0 26	21 51	0 49	0 9	0n 1	14 27	8 42	1 1
T 26	1 28	11 27	3 20	2 51	0 36	2 26	1 12	19 58	1 8	22 2	0 45	21 33	0 15	6 43	0 40	15 2	0 26	21 51	0 49	0 9	0 2	14 29	8 41	1 1
F 27	1 51	14 7	4 6	3 16	0 17	2 57	1 11	19 50	1 9	22 2	0 45	21 33	0 14	6 42	0 40	15 2	0 26	21 51	0 49	0 8	0 3	14 30	8 39	1 1
S 28	2 15	16 11	4 42	3 36	0n 1	3 28	1 10	19 42	1 10	22 2	0 45	21 32	0 14	6 41	0 40	15 3	0 26	21 51	0 49	0 8	0 4	14 31	8 38	1 1
S 29	2 38	17 33	5 6	3 51	0 18	3 58	1 8	19 34	1 11	22 2	0 45	21 32	0 14	6 40	0 40	15 3	0 26	21 51	0 49	0 8	0 6	14 32	8 37	1 1
M 30	3s 2	18s10	5n17	4n 1	0n34	4s28	1n 7	19n25	1n12	22n 3	0s45													

SWISS EPHEMERIS for the year 1680

OCTOBER 1680 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁
T 1	0 42 8	8♁36'17	8♁57	21♁35	15♁11	8♁42	16♁30	21♁35	18°R27	20°R36	14♁44	0°D19	29♁40	23♁6	19°R30
W 2	0 46 4	9°35'30	21°20	22° 7	16°25	9°17	16°30	21°38	18°Y25	20°R35	14°44	0♁19	29°36	23°13	19°Y28
T 3	0 50 1	10°34'45	4♁ 2	22°48	17°40	9°52	16°30	21°42	18°22	20°35	14°44	0°20	29°33	23°19	19°25
F 4	0 53 57	11°34'01	17° 7	23°38	18°55	10°27	16°R30	21°45	18°20	20°34	14°44	0°21	29°30	23°26	19°22
S 5	0 57 54	12°33'19	0♁38	24°36	20°10	11° 2	16°30	21°48	18°18	20°33	14°45	0°22	29°27	23°33	19°19
S 6	1 1 50	13°32'39	14°34	25°40	21°25	11°37	16°30	21°51	18°15	20°32	14°45	0°23	29°24	23°39	19°16
M 7	1 5 47	14°32'01	28°55	26°51	22°40	12°12	16°30	21°54	18°13	20°31	14°45	0°R23	29°21	23°46	19°13
T 8	1 9 43	15°31'25	13°Y36	28° 8	23°55	12°46	16°29	21°57	18°10	20°30	14°45	0°23	29°17	23°53	19°11
W 9	1 13 40	16°30'51	28°31	29°29	25°10	13°21	16°28	22° 0	18° 8	20°30	14°45	0°22	29°14	23°59	19° 8
T 10	1 17 37	17°30'19	13♁32	0♁54	26°25	13°55	16°27	22° 3	18° 5	20°29	14°46	0°20	29°11	24° 6	19° 5
F 11	1 21 33	18°29'49	28°30	2°22	27°40	14°30	16°26	22° 5	18° 3	20°28	14°46	0°18	29° 8	24°13	19° 2
S 12	1 25 30	19°29'22	13♁16	3°54	28°55	15° 4	16°24	22° 8	18° 1	20°28	14°46	0°15	29° 5	24°19	18°59
S 13	1 29 26	20°28'57	27°45	5°27	0♁ 9	15°38	16°22	22°10	17°58	20°27	14°46	0°13	29° 1	24°26	18°56
M14	1 33 23	21°28'34	11♁54	7° 3	1°24	16°12	16°21	22°12	17°56	20°26	14°46	0°12	28°58	24°33	18°53
T 15	1 37 19	22°28'13	25°40	8°40	2°39	16°46	16°18	22°15	17°53	20°26	14°R46	0°D12	28°55	24°40	18°50
W16	1 41 16	23°27'55	9♁ 4	10°19	3°54	17°20	16°16	22°17	17°51	20°25	14°46	0°13	28°52	24°46	18°48
T 17	1 45 12	24°27'39	22° 8	11°58	5° 9	17°54	16°14	22°19	17°48	20°25	14°46	0°14	28°49	24°53	18°45
F 18	1 49 9	25°27'26	4♁55	13°38	6°24	18°27	16°11	22°20	17°46	20°24	14°46	0°16	28°46	25° 0	18°42
S 19	1 53 6	26°27'14	17°27	15°18	7°39	19° 1	16° 8	22°22	17°44	20°24	14°46	0°17	28°42	25° 6	18°39
S 20	1 57 2	27°27'05	29°47	16°59	8°54	19°34	16° 5	22°24	17°41	20°23	14°46	0°R18	28°39	25°13	18°36
M21	2 0 59	28°26'58	11♁57	18°40	10° 9	20° 7	16° 2	22°25	17°39	20°23	14°45	0°17	28°36	25°20	18°33
T 22	2 4 55	29°26'52	24° 0	20°21	11°24	20°41	15°58	22°27	17°36	20°23	14°45	0°15	28°33	25°26	18°31
W23	2 8 52	0♁26'49	5♁57	22° 2	12°39	21°14	15°55	22°28	17°34	20°22	14°45	0°11	28°30	25°33	18°28
T 24	2 12 48	1°26'48	17°50	23°42	13°54	21°46	15°51	22°29	17°32	20°22	14°45	0° 6	28°26	25°40	18°25
F 25	2 16 45	2°26'49	29°40	25°23	15° 9	22°19	15°47	22°30	17°29	20°22	14°45	0° 0	28°23	25°47	18°22
S 26	2 20 41	3°26'51	11♁30	27° 3	16°24	22°52	15°43	22°31	17°27	20°22	14°44	29♁54	28°20	25°53	18°19
S 27	2 24 38	4°26'55	23°23	28°43	17°39	23°24	15°38	22°32	17°25	20°21	14°44	29°48	28°17	26° 0	18°17
M28	2 28 35	5°27'01	5♁20	0♁22	18°54	23°57	15°34	22°33	17°22	20°21	14°44	29°43	28°14	26° 7	18°14
T 29	2 32 31	6°27'09	17°27	2° 1	20° 9	24°29	15°29	22°33	17°20	20°21	14°43	29°39	28°11	26°13	18°11
W30	2 36 28	7°27'18	29°45	3°40	21°24	25° 1	15°24	22°34	17°18	20°21	14°43	29°38	28° 7	26°20	18° 9
T 31	2 40 24	8♁27'28	12♁21	5♁18	22♁39	25♁33	15♁19	22♁34	17°Y16	20°R21	14°R43	29°D37	28♁ 4	26♁27	18°Y 6

Day	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁	♁
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	3s25	17s58	5n14	4n 6	0n49	4s59	1n 6	19n17	1n12	22n 3	0s45	21n31	0s14	6n38	0s40
W 2	3 48	16 54	4 56	4 5	1 2	5 29	1 4	19 8	1 13	22 3	0 45	21 30	0 14	6 37	0 40
T 3	4 12	15 0	4 24	4 0	1 14	5 59	1 2	19 0	1 14	22 3	0 45	21 30	0 14	6 36	0 40
F 4	4 35	12 16	3 37	3 49	1 24	6 29	1 1	18 51	1 15	22 3	0 45	21 29	0 14	6 35	0 40
S 5	4 58	8 49	2 38	3 35	1 33	6 59	0 59	18 42	1 16	22 3	0 45	21 29	0 14	6 34	0 40
S 6	5 21	4 45	1 27	3 16	1 41	7 29	0 57	18 33	1 17	22 2	0 45	21 28	0 14	6 34	0 40
M 7	5 44	0 18	0 8	2 53	1 47	7 58	0 56	18 25	1 18	22 2	0 45	21 28	0 14	6 33	0 40
T 8	6 7	4n16	1s13	2 27	1 52	8 28	0 54	18 16	1 18	22 2	0 45	21 28	0 14	6 32	0 40
W 9	6 30	8 38	2 29	1 59	1 56	8 57	0 52	18 6	1 19	22 2	0 45	21 27	0 14	6 31	0 40
T 10	6 53	12 29	3 36	1 27	1 58	9 26	0 50	17 57	1 20	22 2	0 45	21 27	0 14	6 30	0 40
F 11	7 16	15 29	4 28	0 53	2 0	9 55	0 48	17 48	1 21	22 2	0 45	21 27	0 13	6 29	0 40
S 12	7 38	17 26	5 2	0 18	2 1	10 23	0 46	17 39	1 22	22 2	0 45	21 26	0 13	6 28	0 40
S 13	8 1	18 12	5 15	0s20	2 0	10 51	0 44	17 30	1 23	22 2	0 45	21 26	0 13	6 27	0 40
M14	8 23	17 49	5 9	0 58	2 0	11 20	0 42	17 20	1 24	22 1	0 45	21 26	0 13	6 26	0 40
T 15	8 46	16 23	4 45	1 38	1 58	11 47	0 40	17 11	1 25	22 1	0 45	21 25	0 13	6 25	0 40
W16	9 8	14 4	4 6	2 19	1 56	12 15	0 38	17 1	1 26	22 1	0 45	21 25	0 13	6 24	0 40
T 17	9 30	11 5	3 15	3 1	1 53	12 42	0 36	16 52	1 26	22 1	0 45	21 25	0 13	6 23	0 40
F 18	9 52	7 38	2 15	3 43	1 49	13 9	0 33	16 42	1 27	22 0	0 45	21 25	0 13	6 22	0 40
S 19	10 13	3 54	1 10	4 25	1 45	13 36	0 31	16 33	1 28	22 0	0 45	21 24	0 13	6 22	0 40
S 20	10 35	0 3	0 3	5 8	1 41	14 2	0 29	16 23	1 29	22 0	0 45	21 24	0 13	6 21	0 39
M21	10 56	3s45	1n 4	5 51	1 36	14 28	0 27	16 13	1 30	21 59	0 45	21 24	0 13	6 20	0 39
T 22	11 18	7 22	2 6	6 33	1 31	14 53	0 24	16 4	1 31	21 59	0 45	21 24	0 13	6 19	0 39
W23	11 39	10 39	3 3	7 16	1 26	15 19	0 22	15 54	1 32	21 59	0 45	21 24	0 13	6 18	0 39
T 24	12 0	13 28	3 51	7 58	1 20	15 44	0 20	15 44	1 33	21 58	0 45	21 24	0 12	6 17	0 39
F 25	12 21	15 44	4 29	8 40	1 15	16 8	0 17	15 34	1 34	21 58	0 45	21 24	0 12	6 16	0 39
S 26	12 41	17 19	4 55	9 22	1 9	16 32	0 15	15 25	1 35	21 57	0 45	21 23	0 12	6 15	0 39
S 27	13 1	18 10	5 9	10 4	1 2	16 56	0 12	15 15	1 36	21 57	0 45	21 23	0 12	6 14	0 39
M28	13 22	18 13	5 10	10 45	0 56	17 19	0 10	15 5	1 37	21 57	0 45	21 23	0 12	6 14	0 39
T 29	13 42	17 26	4 56	11 25	0 50	17 41	0 7	14 55	1 38	21 56	0 45	21 23	0 12	6 13	0 39
W30	14 1	15 51	4 29	12 5	0 43	18 4	0 5	14 45	1 39	21 56	0 45	21 23	0 12	6 12	0 39
T 31	14s21	13s27	3n49	12s44	0n37	18s25	0n 3	14n35	1n40	21n55	0s45	21n23	0s12	6n11	0s39

Julian Day Number = 2334941.5, Delta T = 13.89 sec
 Ecliptic obliquity = 23°28'42", Nutation = - 0°00'01"
 Ayanamsha: Fagan/Bradley = 20°17'03", Lahiri = 19°24'03"Greg. Calendar

SWISS EPHEMERIS for the year 1680

NOVEMBER 1680 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
F 1	2 44 21	9♍27°40	25♋19	6♌56	23♍54	26♎5	15°R14	22♏35	17°R13	20°D21	14°R42	29♐38	28♑1	26♒33	18°R3	
S 2	2 48 17	10°27'54	8♌41	8°34	25°9	26°36	15II 8	22°35	17°V11	20°≈21	14°≈42	29°40	27°58	26°40	18°V1	
S 3	2 52 14	11°28'09	22°31	10°11	26°24	27°8	15°3	22°R35	17°9	20°21	14°41	29°R41	27°55	26°47	17°58	
M 4	2 56 10	12°28'26	6°V49	11°48	27°39	27°39	14°57	22°35	17°7	20°21	14°41	29°41	27°52	26°54	17°56	
T 5	3 0 7	13°28'44	21°33	13°24	28°54	28°10	14°51	22°35	17°5	20°21	14°40	29°39	27°48	27°0	17°53	
W 6	3 4 4	14°29'04	6♌38	15°0	0♌9	28°41	14°45	22°34	17°3	20°22	14°40	29°35	27°45	27°7	17°51	
T 7	3 8 0	15°29'25	21°55	16°36	1°24	29°12	14°39	22°34	17°1	20°22	14°39	29°29	27°42	27°14	17°48	
F 8	3 11 57	16°29'48	7II12	18°11	2°38	29°43	14°32	22°33	16°59	20°22	14°39	29°22	27°39	27°20	17°46	
S 9	3 15 53	17°30'13	22°20	19°47	3°53	0♍13	14°26	22°33	16°57	20°22	14°38	29°15	27°36	27°27	17°43	
S 10	3 19 50	18°30'40	7♌8	21°21	5°8	0°44	14°19	22°32	16°55	20°23	14°38	29°8	27°32	27°34	17°41	
M11	3 23 46	19°31'09	21°31	22°56	6°23	1°14	14°13	22°31	16°53	20°23	14°37	29°3	27°29	27°41	17°38	
T 12	3 27 43	20°31'39	5♌25	24°30	7°38	1°44	14°6	22°30	16°51	20°23	14°36	28°59	27°26	27°47	17°36	
W13	3 31 39	21°32'12	18°51	26°4	8°53	2°14	13°59	22°29	16°49	20°24	14°36	28°D58	27°23	27°54	17°34	
T 14	3 35 36	22°32'46	1♍52	27°38	10°8	2°44	13°52	22°28	16°47	20°24	14°35	28°58	27°20	28°1	17°32	
F 15	3 39 33	23°33'22	14°31	29°12	11°23	3°13	13°44	22°27	16°45	20°25	14°34	28°59	27°17	28°7	17°29	
S 16	3 43 29	24°33'59	26°53	0♌46	12°38	3°42	13°37	22°25	16°43	20°25	14°33	29°R0	27°13	28°14	17°27	
S 17	3 47 26	25°34'39	9♌2	2°19	13°53	4°12	13°30	22°24	16°42	20°26	14°33	29°0	27°10	28°21	17°25	
M18	3 51 22	26°35'20	21°1	3°52	15°8	4°41	13°22	22°22	16°40	20°26	14°32	28°57	27°7	28°27	17°23	
T 19	3 55 19	27°36'02	2♌56	5°25	16°23	5°9	13°15	22°21	16°38	20°27	14°31	28°52	27°4	28°34	17°21	
W20	3 59 15	28°36'46	14°47	6°58	17°38	5°38	13°7	22°19	16°37	20°27	14°30	28°44	27°1	28°41	17°19	
T 21	4 3 12	29°37'32	26°38	8°31	18°53	6°6	12°59	22°17	16°35	20°28	14°30	28°33	26°58	28°48	17°17	
F 22	4 7 8	0♌38'19	8♌29	10°3	20°8	6°34	12°51	22°15	16°33	20°29	14°29	28°21	26°54	28°54	17°15	
S 23	4 11 5	1°39'07	20°23	11°36	21°23	7°2	12°44	22°13	16°32	20°30	14°28	28°8	26°51	29°1	17°13	
S 24	4 15 2	2°39'56	2♌20	13°8	22°37	7°30	12°36	22°10	16°30	20°30	14°27	27°56	26°48	29°8	17°12	
M25	4 18 58	3°40'47	14°22	14°40	23°52	7°57	12°28	22°8	16°29	20°31	14°26	27°44	26°45	29°14	17°10	
T 26	4 22 55	4°41'38	26°32	16°12	25°7	8°25	12°20	22°6	16°28	20°32	14°25	27°36	26°42	29°21	17°8	
W27	4 26 51	5°42'30	8♌52	17°44	26°22	8°52	12°11	22°3	16°26	20°33	14°24	27°30	26°38	29°28	17°6	
T 28	4 30 48	6°43'24	21°26	19°16	27°37	9°18	12°3	22°0	16°25	20°34	14°23	27°26	26°35	29°35	17°5	
F 29	4 34 44	7°44'18	4♌17	20°47	28°52	9°45	11°55	21°58	16°24	20°35	14°22	27°D25	26°32	29°41	17°3	
S 30	4 38 41	8°45'12	17♌29	22♌19	0♌7	10♍11	11II47	21♏55	16°V22	20°≈36	14°≈21	27♐25	26♑29	29♒48	17°V2	

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
F 1	14s40	10s21	2n56	13s23	0n30	18s47	0n0	14n25	1n41	21n54	0s45	21n23	0s12	6n10	0s39	15s8
S 2	14 59	6 36	1 52	14 1	0 23	19 7	0s 2	14 16	1 42	21 54	0 45	21 23	0 12	6 9	0 39	15 8
S 3	15 18	2 23	0 39	14 38	0 16	19 28	0 5	14 6	1 43	21 53	0 45	21 23	0 12	6 9	0 39	15 8
M 4	15 36	2n 7	0s39	15 15	0 10	19 47	0 7	13 56	1 44	21 53	0 45	21 24	0 12	6 8	0 39	15 8
T 5	15 55	6 38	1 56	15 50	0 3	20 6	0 10	13 46	1 45	21 52	0 45	21 24	0 12	6 7	0 39	15 8
W 6	16 13	10 49	3 6	16 25	0s 4	20 25	0 13	13 36	1 46	21 51	0 45	21 24	0 11	6 6	0 39	15 8
T 7	16 30	14 20	4 4	16 59	0 15	20 43	0 15	13 26	1 47	21 51	0 45	21 24	0 11	6 5	0 39	15 8
F 8	16 48	16 52	4 45	17 33	0 17	21 1	0 18	13 16	1 48	21 50	0 45	21 24	0 11	6 5	0 39	15 8
S 9	17 5	18 10	5 5	18 5	0 24	21 17	0 20	13 6	1 49	21 49	0 45	21 24	0 11	6 4	0 39	15 8
S 10	17 22	18 13	5 5	18 37	0 30	21 34	0 23	12 57	1 50	21 49	0 45	21 24	0 11	6 3	0 39	15 8
M11	17 38	17 4	4 44	19 8	0 37	21 49	0 25	12 47	1 51	21 48	0 45	21 25	0 11	6 2	0 39	15 8
T 12	17 55	14 56	4 8	19 37	0 43	22 4	0 28	12 37	1 52	21 47	0 45	21 25	0 11	6 2	0 39	15 8
W13	18 11	12 3	3 19	20 6	0 49	22 19	0 30	12 27	1 53	21 47	0 45	21 25	0 11	6 1	0 39	15 8
T 14	18 26	8 38	2 21	20 34	0 55	22 32	0 32	12 17	1 54	21 46	0 45	21 25	0 11	6 0	0 39	15 7
F 15	18 42	4 55	1 17	21 1	1 1	22 45	0 35	12 8	1 55	21 45	0 45	21 26	0 11	6 0	0 39	15 7
S 16	18 57	1 4	0 11	21 26	1 7	22 58	0 37	11 58	1 56	21 44	0 44	21 26	0 11	5 59	0 39	15 7
S 17	19 11	2s46	0n54	21 51	1 13	23 10	0 40	11 48	1 57	21 43	0 44	21 26	0 11	5 58	0 39	15 7
M18	19 25	6 26	1 55	22 15	1 19	23 21	0 42	11 39	1 58	21 43	0 44	21 27	0 10	5 58	0 39	15 7
T 19	19 39	9 50	2 51	22 37	1 24	23 31	0 44	11 29	1 59	21 42	0 44	21 27	0 10	5 57	0 39	15 7
W20	19 53	12 48	3 39	22 59	1 29	23 41	0 47	11 20	2 1	21 41	0 44	21 28	0 10	5 56	0 39	15 6
T 21	20 6	15 15	4 18	23 19	1 35	23 50	0 49	11 10	2 2	21 40	0 44	21 28	0 10	5 56	0 39	15 6
F 22	20 19	17 4	4 45	23 38	1 39	23 58	0 51	11 1	2 3	21 39	0 44	21 28	0 10	5 55	0 39	15 6
S 23	20 32	18 9	5 0	23 56	1 44	24 5	0 54	10 52	2 4	21 38	0 44	21 29	0 10	5 55	0 39	15 6
S 24	20 44	18 26	5 2	24 12	1 49	24 12	0 56	10 42	2 5	21 37	0 44	21 29	0 10	5 54	0 39	15 5
M25	20 55	17 54	4 50	24 28	1 53	24 18	0 58	10 33	2 6	21 36	0 44	21 30	0 10	5 54	0 39	15 5
T 26	21 7	16 32	4 25	24 42	1 57	24 24	1 0	10 24	2 7	21 35	0 44	21 30	0 10	5 53	0 39	15 5
W27	21 18	14 24	3 48	24 55	2 1	24 28	1 2	10 15	2 9	21 34	0 43	21 31	0 10	5 53	0 39	15 5
T 28	21 28	11 34	2 59	25 6	2 4	24 32	1 5	10 6	2 10	21 33	0 43	21 31	0 10	5 52	0 39	15 4
F 29	21 38	8 6	2 0	25 16	2 7	24 35	1 7	9 57	2 11	21 33	0 43	21 32	0 9	5 52	0 39	15 4
S 30	21s48	4s 9	0n53	25s25	2s10	24s37	1s 9	9n48	2n12	21n32	0s43	21n32	0s 9	5n51	0s39	15s 4

Julian Day Number = 2334972.5, Delta T = 13.80 sec
 Ecliptic obliquity = 23°28'42", Nutation = - 0°00'02"
 Ayanamsha: Fagan/Bradley = 20°17'07", Lahiri = 19°24'07"Greg. Calendar

SWISS EPHEMERIS for the year 1680

DECEMBER 1680 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♁	♁	♁	♁	♁	♁	♁
S 1	4 42 37	9♂46'08	1♂7	23♂50	1♂22	10♂37	11°R39	21°R52	16°R21	20♂37	14°R20	27°R25	26♂26	29♂55	17°R 0	
M 2	4 46 34	10°47'04	15°12	25°20	2°36	11° 3	11♂31	21♂49	16°Y20	20°38	14♂19	27♂24	26°23	0♂1	16°Y59	
T 3	4 50 31	11°48'01	29°44	26°51	3°51	11°28	11°23	21°46	16°19	20°39	14°18	27°21	26°19	0° 8	16°57	
W 4	4 54 27	12°48'59	14♂40	28°20	5° 6	11°54	11°14	21°42	16°18	20°40	14°17	27°15	26°16	0°15	16°56	
T 5	4 58 24	13°49'57	29°52	29°50	6°21	12°19	11° 6	21°39	16°17	20°41	14°16	27° 6	26°13	0°21	16°55	
F 6	5 2 20	14°50'56	15♂12	1♂19	7°36	12°43	10°58	21°36	16°16	20°42	14°15	26°55	26°10	0°28	16°54	
S 7	5 6 17	15°51'56	0♂28	2°47	8°51	13° 8	10°50	21°32	16°15	20°43	14°14	26°44	26° 7	0°35	16°52	
S 8	5 10 13	16°52'58	15°28	4°14	10° 5	13°32	10°42	21°29	16°14	20°45	14°13	26°33	26° 4	0°42	16°51	
M 9	5 14 10	17°53'59	0♂ 3	5°40	11°20	13°56	10°34	21°25	16°13	20°46	14°12	26°24	26° 0	0°48	16°50	
T 10	5 18 6	18°55'02	14° 9	7° 4	12°35	14°19	10°26	21°21	16°13	20°47	14°11	26°17	25°57	0°55	16°49	
W 11	5 22 3	19°56'06	27°45	8°28	13°50	14°43	10°18	21°18	16°12	20°48	14° 9	26°14	25°54	1° 2	16°48	
T 12	5 26 0	20°57'11	10♂51	9°49	15° 4	15° 6	10°10	21°14	16°11	20°50	14° 8	26°12	25°51	1° 8	16°47	
F 13	5 29 56	21°58'16	23°32	11° 9	16°19	15°28	10° 2	21°10	16°11	20°51	14° 7	26°12	25°48	1°15	16°47	
S 14	5 33 53	22°59'22	5♂53	12°26	17°34	15°51	9°54	21° 6	16°10	20°52	14° 6	26°12	25°44	1°22	16°46	
S 15	5 37 49	24° 0'29	17°59	13°40	18°48	16°12	9°47	21° 2	16°10	20°54	14° 5	26°10	25°41	1°29	16°45	
M 16	5 41 46	25° 1'37	29°55	14°51	20° 3	16°34	9°39	20°58	16° 9	20°55	14° 4	26° 7	25°38	1°35	16°44	
T 17	5 45 42	26° 2'46	11♂45	15°58	21°18	16°55	9°31	20°53	16° 9	20°57	14° 2	26° 0	25°35	1°42	16°44	
W 18	5 49 39	27° 3'55	23°34	17° 1	22°33	17°16	9°24	20°49	16° 8	20°58	14° 1	25°51	25°32	1°49	16°43	
T 19	5 53 35	28° 5'05	5♂25	17°58	23°47	17°37	9°16	20°45	16° 8	21° 0	14° 0	25°39	25°29	1°55	16°43	
F 20	5 57 32	29° 6'15	17°19	18°50	25° 2	17°57	9° 9	20°40	16° 8	21° 1	13°59	25°24	25°25	2° 2	16°42	
S 21	6 1 29	0♂ 7'26	29°19	19°35	26°16	18°17	9° 2	20°36	16° 8	21° 3	13°58	25° 9	25°22	2° 9	16°42	
S 22	6 5 25	1° 8'37	11♂35	20°12	27°31	18°36	8°55	20°32	16° 7	21° 5	13°56	24°54	25°19	2°16	16°42	
M 23	6 9 22	2° 9'48	23°38	20°41	28°46	18°55	8°48	20°27	16° 7	21° 6	13°55	24°41	25°16	2°22	16°41	
T 24	6 13 18	3°11'00	5♂59	21° 0	0♂0	19°14	8°41	20°22	16°D 7	21° 8	13°54	24°30	25°13	2°29	16°41	
W 25	6 17 15	4°12'11	18°29	21°R 9	1°15	19°32	8°35	20°18	16° 7	21° 9	13°53	24°23	25°10	2°36	16°41	
T 26	6 21 11	5°13'22	1♂10	21° 7	2°29	19°49	8°28	20°13	16° 7	21°11	13°51	24°18	25° 6	2°42	16°41	
F 27	6 25 8	6°14'33	14° 5	20°53	3°44	20° 7	8°22	20° 8	16° 7	21°13	13°50	24°16	25° 3	2°49	16°D41	
S 28	6 29 4	7°15'44	20°16	20°27	4°58	20°24	8°15	20° 4	16° 8	21°15	13°49	24°D16	25° 0	2°56	16°41	
S 29	6 33 1	8°16'54	10♂47	19°50	6°13	20°40	8° 9	19°59	16° 8	21°16	13°48	24°R16	24°57	3° 3	16°41	
M 30	6 36 58	9°18'04	24°39	19° 2	7°27	20°56	8° 3	19°54	16° 8	21°18	13°46	24°15	24°54	3° 9	16°41	
T 31	6 40 54	10♂19'14	8♂53	18♂ 3	8♂41	21♂11	7♂57	19♂49	16°Y 8	21♂20	13♂45	24♂12	24♂50	3♂16	16°Y41	

Day	☉	☽	♀	♁	♂	♃	♅	♁	♁	♁	♁	♁	♁	♁	♁	♁
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
S 1	21s57	0n 9	0s20	25s32	2s12	24s39	1s11	9n39	2n13	21n31	0s43	21n33	0s 9	5n51	0s38	15s 3
M 2	22 6	4 34	1 33	25 38	2 14	24 40	1 13	9 31	2 15	21 30	0 43	21 33	0 9	5 50	0 38	15 3
T 3	22 14	8 52	2 42	25 42	2 16	24 40	1 14	9 22	2 16	21 29	0 43	21 34	0 9	5 50	0 38	15 3
W 4	22 22	12 43	3 42	25 45	2 17	24 39	1 16	9 13	2 17	21 28	0 42	21 35	0 9	5 50	0 38	15 2
T 5	22 30	15 47	4 28	25 47	2 18	24 37	1 18	9 5	2 18	21 27	0 42	21 35	0 9	5 49	0 38	15 2
F 6	22 37	17 47	4 55	25 47	2 18	24 35	1 20	8 57	2 20	21 26	0 42	21 36	0 9	5 49	0 38	15 2
S 7	22 44	18 29	5 0	25 45	2 18	24 32	1 21	8 48	2 21	21 25	0 42	21 36	0 9	5 49	0 38	15 1
S 8	22 50	17 52	4 45	25 42	2 18	24 29	1 23	8 40	2 22	21 24	0 42	21 37	0 9	5 48	0 38	15 1
M 9	22 56	16 5	4 11	25 38	2 16	24 24	1 25	8 32	2 24	21 23	0 42	21 38	0 9	5 48	0 38	15 0
T 10	23 1	13 22	3 23	25 32	2 14	24 19	1 26	8 24	2 25	21 22	0 42	21 38	0 8	5 48	0 38	15 0
W 11	23 6	10 1	2 24	25 24	2 12	24 13	1 28	8 17	2 26	21 21	0 41	21 39	0 8	5 48	0 38	15 0
T 12	23 10	6 16	1 20	25 15	2 9	24 6	1 29	8 9	2 27	21 20	0 41	21 40	0 8	5 47	0 38	14 59
F 13	23 14	2 21	0 14	25 5	2 4	23 59	1 31	8 1	2 29	21 19	0 41	21 41	0 8	5 47	0 38	14 59
S 14	23 18	1s34	0n51	24 53	2 0	23 50	1 32	7 54	2 30	21 18	0 41	21 41	0 8	5 47	0 38	14 58
S 15	23 21	5 20	1 52	24 40	1 54	23 41	1 33	7 47	2 32	21 17	0 41	21 42	0 8	5 47	0 38	14 58
M 16	23 23	8 50	2 48	24 26	1 47	23 32	1 34	7 39	2 33	21 16	0 41	21 43	0 8	5 47	0 38	14 57
T 17	23 25	11 58	3 36	24 10	1 40	23 21	1 35	7 32	2 34	21 15	0 40	21 43	0 8	5 47	0 38	14 57
W 18	23 27	14 36	4 14	23 54	1 31	23 10	1 36	7 25	2 36	21 14	0 40	21 44	0 8	5 46	0 38	14 56
T 19	23 28	16 38	4 41	23 37	1 21	22 59	1 37	7 19	2 37	21 13	0 40	21 45	0 7	5 46	0 38	14 56
F 20	23 28	17 57	4 56	23 19	1 10	22 46	1 38	7 12	2 39	21 12	0 40	21 46	0 7	5 46	0 38	14 55
S 21	23 29	18 30	4 59	23 1	0 58	22 33	1 39	7 6	2 40	21 11	0 40	21 47	0 7	5 46	0 38	14 55
S 22	23 28	18 13	4 47	22 42	0 45	22 19	1 40	6 59	2 41	21 10	0 39	21 47	0 7	5 46	0 38	14 54
M 23	23 28	17 6	4 23	22 23	0 31	22 5	1 41	6 53	2 43	21 9	0 39	21 48	0 7	5 46	0 38	14 54
T 24	23 26	15 10	3 46	22 5	0 15	21 50	1 41	6 47	2 44	21 9	0 39	21 49	0 7	5 46	0 38	14 53
W 25	23 25	12 30	2 57	21 47	0n	21 34	1 42	6 42	2 46	21 8	0 39	21 50	0 7	5 46	0 38	14 53
T 26	23 22	9 13	1 59	21 30	0 19	21 18	1 42	6 36	2 47	21 7	0 39	21 50	0 7	5 46	0 38	14 52
F 27	23 20	5 27	0 54	21 14	0 38	21 1	1 43	6 31	2 49	21 6	0 38	21 51	0 7	5 46	0 38	14 52
S 28	23 17	1 20	0s16	20 59	0 57	20 43	1 43	6 25	2 50	21 5	0 38	21 52	0 7	5 47	0 38	14 51
S 29	23 13	2n57	1 26	20 45	1 16	20 25	1 43	6 20	2 52	21 5	0 38	21 53	0 6	5 47	0 37	14 51
M 30	23 9	7 11	2 34	20 33	1 36	20 6	1 44	6 15	2 53	21 4	0 38	21 54	0 6	5 47	0 37	14 50
T 31	23s 5	11n 7	3s33	20s22	1n55	19s47	1s44	6n11	2n55	21n 3	0s38	21n55	0s 6	5n47	0s37	14s49

Julian Day Number = 2335002.5, Delta T = 13.72 sec
 Ecliptic obliquity = 23°28'41", Nutation = - 0°00'02"
 Ayanamsha: Fagan/Bradley = 20°17'11", Lahiri = 19°24'11"Greg. Calendar