

SWISS EPHEMERIS for the year 1988

JANUARY 1988

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♁	♃	♄
F 1	6 39 30	9♄46'31	5♂ 0	14♂51	12♁ 1	24♂56	20♂14	25♂28	27♂40	7♂47	12♂ 0	26°R42	27♂10	15♂ 8	25°R 9
S 2	6 43 27	10°47'39	17°31	16°29	13°14	25°35	20°18	25°35	27°43	7°49	12° 1	26°R30	27° 7	15°15	25♂ 5
S 3	6 47 23	11°48'48	29°52	18° 6	14°28	26°15	20°21	25°42	27°47	7°52	12° 3	26°17	27° 4	15°21	25° 2
M 4	6 51 20	12°49'56	12♂ 3	19°44	15°42	26°55	20°25	25°49	27°50	7°54	12° 4	26° 3	27° 1	15°28	24°58
T 5	6 55 16	13°51'04	24° 7	21°23	16°56	27°35	20°29	25°56	27°54	7°56	12° 6	25°50	26°57	15°35	24°55
W 6	6 59 13	14°52'13	6♂ 4	23° 1	18°10	28°15	20°33	26° 2	27°58	7°59	12° 7	25°38	26°54	15°41	24°51
T 7	7 3 10	15°53'21	17°55	24°40	19°23	28°55	20°38	26° 9	28° 1	8° 1	12° 9	25°29	26°51	15°48	24°48
F 8	7 7 6	16°54'29	29°43	26°19	20°37	29°34	20°42	26°16	28° 5	8° 3	12°10	25°23	26°48	15°55	24°44
S 9	7 11 3	17°55'37	11♂31	27°58	21°50	0♂14	20°47	26°23	28° 8	8° 5	12°11	25°20	26°45	16° 1	24°41
S 10	7 14 59	18°56'45	23°23	29°37	23° 4	0°54	20°52	26°30	28°11	8° 8	12°12	25°D19	26°41	16° 8	24°38
M11	7 18 56	19°57'54	5♂23	1♁17	24°17	1°34	20°57	26°36	28°15	8°10	12°14	25°19	26°38	16°15	24°34
T 12	7 22 52	20°59'02	17°37	2°56	25°31	2°14	21° 3	26°43	28°18	8°12	12°15	25°R20	26°35	16°21	24°31
W13	7 26 49	22° 0'10	0♂11	4°34	26°44	2°54	21° 8	26°50	28°22	8°14	12°16	25°19	26°32	16°28	24°28
T 14	7 30 45	23° 1'18	13° 9	6°13	27°58	3°34	21°14	26°56	28°25	8°16	12°17	25°17	26°29	16°35	24°25
F 15	7 34 42	24° 2'26	26°35	7°50	29°11	4°14	21°20	27° 3	28°29	8°19	12°18	25°13	26°26	16°41	24°21
S 16	7 38 39	25° 3'34	10♂31	9°28	0♂24	4°54	21°26	27°10	28°32	8°21	12°19	25° 6	26°22	16°48	24°18
S 17	7 42 35	26° 4'42	24°56	11° 4	1°37	5°34	21°32	27°16	28°35	8°23	12°20	24°58	26°19	16°55	24°15
M18	7 46 32	27° 5'50	9♂47	12°39	2°51	6°14	21°39	27°23	28°39	8°25	12°21	24°48	26°16	17° 1	24°12
T 19	7 50 28	28° 6'57	24°54	14°12	4° 4	6°54	21°45	27°29	28°42	8°27	12°22	24°39	26°13	17° 8	24° 9
W20	7 54 25	29° 8'03	10♁ 9	15°43	5°17	7°34	21°52	27°35	28°45	8°30	12°23	24°31	26°10	17°15	24° 6
T 21	7 58 21	0♁ 9'09	25°20	17°12	6°30	8°14	21°59	27°42	28°48	8°32	12°24	24°25	26° 7	17°21	24° 4
F 22	8 2 18	1°10'14	10♂17	18°39	7°43	8°54	22° 6	27°48	28°52	8°34	12°25	24°22	26° 3	17°28	24° 1
S 23	8 6 14	2°11'18	24°55	20° 1	8°55	9°35	22°13	27°54	28°55	8°36	12°26	24°D21	26° 0	17°35	23°58
S 24	8 10 11	3°12'21	9♂ 7	21°20	10° 8	10°15	22°20	28° 1	28°58	8°38	12°27	24°22	25°57	17°41	23°55
M25	8 14 8	4°13'23	22°55	22°34	11°21	10°55	22°28	28° 7	29° 1	8°40	12°27	24°23	25°54	17°48	23°53
T 26	8 18 4	5°14'24	6♂19	23°43	12°34	11°35	22°36	28°13	29° 4	8°42	12°28	24°R24	25°51	17°55	23°50
W27	8 22 1	6°15'24	19°21	24°45	13°46	12°15	22°44	28°19	29° 7	8°44	12°29	24°23	25°47	18° 2	23°48
T 28	8 25 57	7°16'22	2♂ 5	25°41	14°59	12°55	22°52	28°25	29°10	8°46	12°30	24°20	25°44	18° 8	23°45
F 29	8 29 54	8°17'20	14°34	26°28	16°11	13°35	23° 0	28°31	29°13	8°48	12°30	24°14	25°41	18°15	23°43
S 30	8 33 50	9°18'17	26°52	27° 7	17°23	14°15	23° 8	28°37	29°16	8°51	12°31	24° 7	25°38	18°22	23°41
S 31	8 37 47	10♁19'12	8♂59	27♁36	18♂35	14♂56	23♂16	28♂43	29♂19	8♂53	12♂31	23♂59	25♂35	18♂28	23♂39

Delta T = 55.82 sec.

FEBRUARY 1988

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♁	♃	♄
M 1	8 41 43	11♁20'06	21♂ 0	27♁55	19♂48	15♂36	23♂25	28♂49	29♂22	8♂55	12♂32	23°R51	25♂32	18♂35	23°R36
T 2	8 45 40	12°20'59	2♂55	28°R 4	21° 0	16°16	23°34	28°55	29°25	8°57	12°32	23♂42	25°28	18°42	23♂34
W 3	8 49 37	13°21'51	14°47	28° 1	22°12	16°56	23°43	29° 1	29°28	8°58	12°33	23°35	25°25	18°48	23°32
T 4	8 53 33	14°22'42	26°36	27°47	23°23	17°37	23°52	29° 6	29°31	9° 0	12°33	23°30	25°22	18°55	23°30
F 5	8 57 30	15°23'32	8♂25	27°22	24°35	18°17	24° 1	29°12	29°34	9° 2	12°33	23°27	25°19	19° 2	23°28
S 6	9 1 26	16°24'21	20°16	26°47	25°47	18°57	24°10	29°18	29°37	9° 4	12°34	23°D25	25°16	19° 8	23°27
S 7	9 5 23	17°25'08	2♂12	26° 2	26°58	19°37	24°19	29°23	29°39	9° 6	12°34	23°26	25°13	19°15	23°25
M 8	9 9 19	18°25'55	14°16	25° 8	28°10	20°18	24°29	29°29	29°42	9° 8	12°34	23°27	25° 9	19°22	23°23
T 9	9 13 16	19°26'41	26°32	24° 7	29°21	20°58	24°38	29°34	29°45	9°10	12°35	23°29	25° 6	19°28	23°22
W10	9 17 12	20°27'25	9♂ 5	23° 1	0♂32	21°38	24°48	29°39	29°47	9°12	12°35	23°30	25° 3	19°35	23°20
T 11	9 21 9	21°28'09	21°58	21°52	1°44	22°19	24°58	29°45	29°50	9°14	12°35	23°R31	25° 0	19°42	23°19
F 12	9 25 6	22°28'52	5♂16	20°41	2°55	22°59	25° 8	29°50	29°53	9°15	12°35	23°30	24°57	19°48	23°17
S 13	9 29 2	23°29'34	19° 1	19°31	4° 6	23°39	25°18	29°55	29°55	9°17	12°35	23°28	24°53	19°55	23°16
S 14	9 32 59	24°30'14	3♂14	18°23	5°16	24°20	25°28	0♂ 0	29°58	9°19	12°35	23°25	24°50	20° 2	23°15
M15	9 36 55	25°30'54	17°53	17°19	6°27	25° 0	25°39	0° 5	29°59	9°21	12°R35	23°21	24°47	20° 8	23°14
T 16	9 40 52	26°31'32	2♁53	16°20	7°38	25°40	25°49	0°10	0♂ 2	9°22	12°35	23°17	24°44	20°15	23°13
W17	9 44 48	27°32'09	18° 5	15°27	8°48	26°21	26° 0	0°15	0° 5	9°24	12°35	23°13	24°41	20°22	23°12
T 18	9 48 45	28°32'44	3♂21	14°40	9°58	27° 1	26°11	0°20	0° 7	9°26	12°35	23°11	24°38	20°28	23°11
F 19	9 52 41	29°33'18	18°28	14° 2	11° 9	27°42	26°21	0°24	0° 9	9°27	12°35	23°D10	24°34	20°35	23°10
S 20	9 56 38	0♂33'50	3♂19	13°31	12°19	28°22	26°32	0°29	0°12	9°29	12°35	23°10	24°31	20°42	23° 9
S 21	10 0 35	1°34'20	17°48	13° 7	13°29	29° 2	26°43	0°34	0°14	9°30	12°34	23°11	24°28	20°48	23° 9
M22	10 4 31	2°34'49	1♂49	12°51	14°39	29°43	26°54	0°38	0°16	9°32	12°34	23°13	24°25	20°55	23° 8
T 23	10 8 28	3°35'15	15°24	12°43	15°48	0♂23	27° 6	0°43	0°18	9°33	12°34	23°14	24°22	21° 2	23° 8
W24	10 12 24	4°35'40	28°33	12°D41	16°58	1° 4	27°17	0°47	0°20	9°35	12°33	23°15	24°19	21° 8	23° 7
T 25	10 16 21	5°36'03	11♂19	12°46	18° 7	1°44	27°28	0°51	0°22	9°36	12°33	23°R15	24°15	21°15	23° 7
F 26	10 20 17	6°36'24	23°46	12°58	19°16	2°24	27°40	0°56	0°24	9°38	12°33	23°14	24°12	21°22	23° 7
S 27	10 24 14	7°36'43	5♂59	13°15	20°25	3° 5	27°51	1° 0	0°26	9°39	12°32	23°12	24° 9	21°28	23° 7
S 28	10 28 10	8°37'00	18° 0	13°38	21°34	3°45	28° 3	1° 4	0°28	9°41	12°32	23°10	24° 6	21°35	23°D 7
M29	10 32 7	9♂37'15	29♂54	14♁ 6	22♂43	4♂26	28♂15	1♂ 8	0♂30	9♂42	12♂31	23♂ 8	24♂ 3	21♂42	23♂ 7

Delta T = 55.86 sec.

created from Swiss Ephemeris, Copyright Astrodienst AG [13.11.2015]

SWISS EPHEMERIS for the year 1988

MARCH 1988

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♁	♃	♄
T 1	10 36 4	10 ^h 37'29	11 ^h 04'	14 ^h 39'	23 ^h 51'	5 ^h 06'	28 ^h 27'	1 ^h 01'	0 ^h 32'	9 ^h 43'	12 ^h R31	23 ^h R 6	23 ^h 59'	21 ^h 04'	23 ^h II 7
W 2	10 40 0	11 ^h 37'40	23 ^h 33'	15 ^h 16'	25 ^h 0'	5 ^h 47'	28 ^h 39'	1 ^h 15'	0 ^h 33'	9 ^h 45'	12 ^h M30	23 ^h 5	23 ^h 56'	21 ^h 55'	23 ^h 7
T 3	10 43 57	12 ^h 37'49	5 ^h 23'	15 ^h 57'	26 ^h 8'	6 ^h 27'	28 ^h 51'	1 ^h 19'	0 ^h 35'	9 ^h 46'	12 ^h 30	23 ^h 3	23 ^h 53'	22 ^h 2	23 ^h 7
F 4	10 47 53	13 ^h 37'56	17 ^h 16'	16 ^h 42'	27 ^h 16'	7 ^h 8'	29 ^h 3'	1 ^h 23'	0 ^h 37'	9 ^h 47'	12 ^h 29	23 ^h D 3	23 ^h 50'	22 ^h 8	23 ^h 8
S 5	10 51 50	14 ^h 38'02	29 ^h 14'	17 ^h 31'	28 ^h 23'	7 ^h 48'	29 ^h 15'	1 ^h 26'	0 ^h 38'	9 ^h 48'	12 ^h 28	23 ^h 3	23 ^h 47'	22 ^h 15'	23 ^h 8
S 6	10 55 46	15 ^h 38'06	11 ^h 19'	18 ^h 23'	29 ^h 31'	8 ^h 29'	29 ^h 27'	1 ^h 30'	0 ^h 40'	9 ^h 50'	12 ^h 28	23 ^h 3	23 ^h 44'	22 ^h 22'	23 ^h 9
M 7	10 59 43	16 ^h 38'08	23 ^h 34'	19 ^h 19'	0 ^h 38'	9 ^h 9'	29 ^h 39'	1 ^h 33'	0 ^h 41'	9 ^h 51'	12 ^h 27	23 ^h 4	23 ^h 40'	22 ^h 28'	23 ^h 9
T 8	11 3 39	17 ^h 38'08	6 ^h 11'	20 ^h 17'	1 ^h 45'	9 ^h 50'	29 ^h 52'	1 ^h 37'	0 ^h 43'	9 ^h 52'	12 ^h 26	23 ^h 5	23 ^h 37'	22 ^h 35'	23 ^h 10
W 9	11 7 36	18 ^h 38'07	18 ^h 42'	21 ^h 18'	2 ^h 52'	10 ^h 30'	0 ^h 4	1 ^h 40'	0 ^h 44'	9 ^h 53'	12 ^h 25	23 ^h 5	23 ^h 34'	22 ^h 42'	23 ^h 11
T 10	11 11 33	19 ^h 38'04	1 ^h 39'	22 ^h 21'	3 ^h 59'	11 ^h 11'	0 ^h 17'	1 ^h 43'	0 ^h 46'	9 ^h 54'	12 ^h 25	23 ^h 5	23 ^h 31'	22 ^h 48'	23 ^h 11
F 11	11 15 29	20 ^h 38'00	14 ^h 55'	23 ^h 27'	5 ^h 6'	11 ^h 51'	0 ^h 29'	1 ^h 46'	0 ^h 47'	9 ^h 55'	12 ^h 24	23 ^h 6	23 ^h 28'	22 ^h 55'	23 ^h 12
S 12	11 19 26	21 ^h 37'54	28 ^h 33'	24 ^h 35'	6 ^h 12'	12 ^h 32'	0 ^h 42'	1 ^h 49'	0 ^h 48'	9 ^h 56'	12 ^h 23	23 ^h R 6	23 ^h 24'	23 ^h 2	23 ^h 13
S 13	11 23 22	22 ^h 37'46	12 ^h 33'	25 ^h 45'	7 ^h 18'	13 ^h 12'	0 ^h 55'	1 ^h 52'	0 ^h 49'	9 ^h 57'	12 ^h 22	23 ^h D 6	23 ^h 21'	23 ^h 8	23 ^h 14
M14	11 27 19	23 ^h 37'37	26 ^h 53'	26 ^h 57'	8 ^h 24'	13 ^h 53'	1 ^h 8'	1 ^h 55'	0 ^h 50'	9 ^h 58'	12 ^h 21	23 ^h 6	23 ^h 18'	23 ^h 15'	23 ^h 16
T 15	11 31 15	24 ^h 37'26	11 ^h 33'	28 ^h 11'	9 ^h 29'	14 ^h 33'	1 ^h 21'	1 ^h 57'	0 ^h 52'	9 ^h 59'	12 ^h 20	23 ^h 6	23 ^h 15'	23 ^h 22'	23 ^h 17
W16	11 35 12	25 ^h 37'13	26 ^h 27'	29 ^h 27'	10 ^h 35'	15 ^h 14'	1 ^h 34'	2 ^h 0'	0 ^h 53'	10 ^h 0'	12 ^h 19	23 ^h 6	23 ^h 12'	23 ^h 28'	23 ^h 18
T 17	11 39 8	26 ^h 36'58	11 ^h 27'	0 ^h 45'	11 ^h 40'	15 ^h 54'	1 ^h 47'	2 ^h 2'	0 ^h 54'	10 ^h 1'	12 ^h 18	23 ^h 6	23 ^h 9	23 ^h 35'	23 ^h 19
F 18	11 43 5	27 ^h 36'42	26 ^h 26'	2 ^h 5'	12 ^h 45'	16 ^h 35'	2 ^h 0'	2 ^h 5'	0 ^h 55'	10 ^h 2'	12 ^h 17	23 ^h R 6	23 ^h 5	23 ^h 42'	23 ^h 21
S 19	11 47 2	28 ^h 36'23	11 ^h 15'	3 ^h 26'	13 ^h 49'	17 ^h 15'	2 ^h 13'	2 ^h 7'	0 ^h 55'	10 ^h 2'	12 ^h 16	23 ^h 6	23 ^h 2	23 ^h 48'	23 ^h 22
S 20	11 50 58	29 ^h 36'02	25 ^h 47'	4 ^h 48'	14 ^h 53'	17 ^h 56'	2 ^h 26'	2 ^h 9'	0 ^h 56'	10 ^h 3'	12 ^h 15	23 ^h 5	22 ^h 59'	23 ^h 55'	23 ^h 24
M21	11 54 55	0 ^h 35'40	9 ^h 56'	6 ^h 13'	15 ^h 57'	18 ^h 36'	2 ^h 39'	2 ^h 11'	0 ^h 57'	10 ^h 4'	12 ^h 14	23 ^h 5	22 ^h 56'	24 ^h 2	23 ^h 26
T 22	11 58 51	1 ^h 35'15	23 ^h 40'	7 ^h 38'	17 ^h 1'	19 ^h 17'	2 ^h 53'	2 ^h 13'	0 ^h 58'	10 ^h 5'	12 ^h 13	23 ^h 3	22 ^h 53'	24 ^h 8	23 ^h 28
W23	12 2 48	2 ^h 34'47	6 ^h 15'	9 ^h 6'	18 ^h 4'	19 ^h 57'	3 ^h 6'	2 ^h 15'	0 ^h 59'	10 ^h 5'	12 ^h 12	23 ^h 2	22 ^h 50'	24 ^h 15'	23 ^h 29
T 24	12 6 44	3 ^h 34'18	19 ^h 50'	10 ^h 34'	19 ^h 7'	20 ^h 38'	3 ^h 19'	2 ^h 17'	0 ^h 59'	10 ^h 6'	12 ^h 10	23 ^h 2	22 ^h 46'	24 ^h 22'	23 ^h 31
F 25	12 10 41	4 ^h 33'46	2 ^h 21'	12 ^h 4'	20 ^h 10'	21 ^h 18'	3 ^h 33'	2 ^h 19'	1 ^h 0'	10 ^h 7'	12 ^h 9	23 ^h D 1	22 ^h 43'	24 ^h 28'	23 ^h 33
S 26	12 14 37	5 ^h 33'12	14 ^h 34'	13 ^h 36'	21 ^h 12'	21 ^h 59'	3 ^h 46'	2 ^h 20'	1 ^h 0'	10 ^h 7'	12 ^h 8	23 ^h 2	22 ^h 40'	24 ^h 35'	23 ^h 35
S 27	12 18 34	6 ^h 32'36	26 ^h 35'	15 ^h 9'	22 ^h 15'	22 ^h 39'	4 ^h 0'	2 ^h 22'	1 ^h 1'	10 ^h 8'	12 ^h 7	23 ^h 2	22 ^h 37'	24 ^h 42'	23 ^h 38
M28	12 22 31	7 ^h 31'57	8 ^h 27'	16 ^h 43'	23 ^h 16'	23 ^h 20'	4 ^h 13'	2 ^h 23'	1 ^h 1'	10 ^h 8'	12 ^h 5	23 ^h 3	22 ^h 34'	24 ^h 48'	23 ^h 40
T 29	12 26 27	8 ^h 31'16	20 ^h 15'	18 ^h 19'	24 ^h 17'	24 ^h 0'	4 ^h 27'	2 ^h 25'	1 ^h 2'	10 ^h 9'	12 ^h 4	23 ^h 5	22 ^h 30'	24 ^h 55'	23 ^h 42
W30	12 30 24	9 ^h 30'33	2 ^h 22'	19 ^h 56'	25 ^h 18'	24 ^h 41'	4 ^h 41'	2 ^h 26'	1 ^h 2'	10 ^h 9'	12 ^h 3	23 ^h 6	22 ^h 27'	25 ^h 2	23 ^h 45
T 31	12 34 20	10 ^h 29'47	13 ^h 56'	21 ^h 35'	26 ^h 19'	25 ^h 21'	4 ^h 54'	2 ^h 27'	1 ^h 2'	10 ^h 9'	12 ^h 1	23 ^h 7	22 ^h 24'	25 ^h 8	23 ^h 47

Delta T = 55.90 sec.

APRIL 1988

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♁	♃	♄
F 1	12 38 17	11 ^h 28'59	25 ^h 56'	23 ^h 15'	27 ^h 19'	26 ^h 01'	5 ^h 8'	2 ^h 28'	1 ^h 2'	10 ^h 10'	12 ^h R 0	23 ^h R 7	22 ^h 21'	25 ^h 01'	23 ^h II50
S 2	12 42 13	12 ^h 28'10	8 ^h 4	24 ^h 56'	28 ^h 19'	26 ^h 42'	5 ^h 22'	2 ^h 29'	1 ^h 3'	10 ^h 10'	11 ^h M59	23 ^h 5	22 ^h 18'	25 ^h 22'	23 ^h 52
S 3	12 46 10	13 ^h 27'18	20 ^h 24'	26 ^h 39'	29 ^h 18'	27 ^h 22'	5 ^h 36'	2 ^h 30'	1 ^h 3'	10 ^h 10'	11 ^h 57	23 ^h 5	22 ^h 15'	25 ^h 28'	23 ^h 55
M 4	12 50 6	14 ^h 26'24	2 ^h 56'	28 ^h 23'	0 ^h 11'	28 ^h 3'	5 ^h 50'	2 ^h 31'	1 ^h 3'	10 ^h 11'	11 ^h 56	23 ^h 2	22 ^h 11'	25 ^h 35'	23 ^h 58
T 5	12 54 3	15 ^h 25'28	15 ^h 40'	0 ^h 9'	1 ^h 15'	28 ^h 43'	6 ^h 4'	2 ^h 31'	1 ^h R 3	10 ^h 11'	11 ^h 54	22 ^h 59	22 ^h 8	25 ^h 42'	24 ^h 0
W 6	12 58 0	16 ^h 24'30	28 ^h 39'	1 ^h 56'	2 ^h 13'	29 ^h 23'	6 ^h 18'	2 ^h 32'	1 ^h 3'	10 ^h 11'	11 ^h 53	22 ^h 55	22 ^h 5	25 ^h 48'	24 ^h 3
T 7	13 1 56	17 ^h 23'11	11 ^h 51'	3 ^h 44'	3 ^h 10'	0 ^h 4	6 ^h 31'	2 ^h 32'	1 ^h 3'	10 ^h 11'	11 ^h 51	22 ^h 52	22 ^h 2	25 ^h 55'	24 ^h 6
F 8	13 5 53	18 ^h 22'30	25 ^h 17'	5 ^h 34'	4 ^h 7'	0 ^h 44'	6 ^h 45'	2 ^h 33'	1 ^h 3'	10 ^h 11'	11 ^h 50	22 ^h 49	21 ^h 59	26 ^h 1	24 ^h 9
S 9	13 9 49	19 ^h 21'27	8 ^h 57'	7 ^h 26'	5 ^h 4'	1 ^h 25'	6 ^h 59'	2 ^h 33'	1 ^h 2'	10 ^h 12'	11 ^h 48	22 ^h 48	21 ^h 56	26 ^h 8	24 ^h 12
S 10	13 13 46	20 ^h 20'22	22 ^h 52'	9 ^h 18'	6 ^h 0'	2 ^h 5'	7 ^h 14'	2 ^h 33'	1 ^h 2'	10 ^h 12'	11 ^h 47	22 ^h D47	21 ^h 52	26 ^h 15'	24 ^h 15
M11	13 17 42	21 ^h 19'16	6 ^h 59'	11 ^h 13'	6 ^h 55'	2 ^h 45'	7 ^h 28'	2 ^h R33	1 ^h 2'	10 ^h 12'	11 ^h 45	22 ^h 48	21 ^h 49	26 ^h 21'	24 ^h 18
T 12	13 21 39	22 ^h 18'08	21 ^h 19'	13 ^h 9'	7 ^h 50'	3 ^h 25'	7 ^h 42'	2 ^h 33'	1 ^h 2'	10 ^h R12	11 ^h 44	22 ^h 49	21 ^h 46	26 ^h 28'	24 ^h 22
W13	13 25 35	23 ^h 16'58	5 ^h 49'	15 ^h 6'	8 ^h 44'	4 ^h 6'	7 ^h 56'	2 ^h 33'	1 ^h 1'	10 ^h 12'	11 ^h 42	22 ^h 51	21 ^h 43	26 ^h 35'	24 ^h 25
T 14	13 29 32	24 ^h 15'46	20 ^h 24'	17 ^h 5'	9 ^h 37'	4 ^h 46'	8 ^h 10'	2 ^h 33'	1 ^h 1'	10 ^h 12'	11 ^h 40	22 ^h R52	21 ^h 40	26 ^h 41'	24 ^h 28
F 15	13 33 29	25 ^h 14'33	5 ^h 9'	19 ^h 5'	10 ^h 30'	5 ^h 26'	8 ^h 24'	2 ^h 32'	1 ^h 0'	10 ^h 11'	11 ^h 39	22 ^h 51	21 ^h 36	26 ^h 48'	24 ^h 32
S 16	13 37 25	26 ^h 13'17	19 ^h 31'	21 ^h 7'	11 ^h 22'	6 ^h 6'	8 ^h 38'	2 ^h 32'	1 ^h 0'	10 ^h 11'	11 ^h 37	22 ^h 49	21 ^h 33	26 ^h 55'	24 ^h 35
S 17	13 41 22	27 ^h 12'00	3 ^h 51'	23 ^h 9'	12 ^h 14'	6 ^h 47'	8 ^h 53'	2							

SWISS EPHEMERIS for the year 1988

MAY 1988

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♆	♁	♂
S 1	14 36 33	10♄50'21	29♄ 7	22♄36	22♄48	16♄ 6	12♄13	2°R14	0°R46	10°R 6	11°R12	22°R12	20♄46	28♄35	25♄35
M 2	14 40 30	11°48'33	11♄58	24°36	23°26	16°46	12°27	2♄12	0♄44	10♄ 5	11♄11	22♄ 5	20°42	28°41	25°39
T 3	14 44 26	12°46'43	25° 5	26°33	24° 2	17°25	12°41	2°10	0°43	10° 4	11° 9	21°57	20°39	28°48	25°43
W 4	14 48 23	13°44'52	8♄27	28°28	24°37	18° 5	12°56	2° 8	0°42	10° 4	11° 7	21°48	20°36	28°55	25°48
T 5	14 52 20	14°42'59	22° 3	0♄20	25°11	18°44	13°10	2° 6	0°40	10° 3	11° 6	21°40	20°33	29° 1	25°52
F 6	14 56 16	15°41'05	5♄49	2° 9	25°43	19°24	13°24	2° 3	0°39	10° 2	11° 4	21°33	20°30	29° 8	25°57
S 7	15 0 13	16°39'09	19°43	3°55	26°14	20° 3	13°38	2° 1	0°37	10° 1	11° 2	21°28	20°27	29°15	26° 1
S 8	15 4 9	17°37'12	3♄44	5°37	26°44	20°43	13°53	1°59	0°36	10° 1	11° 0	21°25	20°23	29°21	26° 6
M 9	15 8 6	18°35'13	17°50	7°16	27°12	21°22	14° 7	1°56	0°34	10° 0	10°59	21°D24	20°20	29°28	26°11
T 10	15 12 2	19°33'13	1♄59	8°52	27°38	22° 1	14°21	1°53	0°33	9°59	10°57	21°24	20°17	29°35	26°15
W 11	15 15 59	20°31'12	16°10	10°23	28° 2	22°41	14°36	1°51	0°31	9°58	10°55	21°R25	20°14	29°41	26°20
T 12	15 19 56	21°29'10	0♄22	11°52	28°25	23°20	14°50	1°48	0°29	9°57	10°54	21°25	20°11	29°48	26°25
F 13	15 23 52	22°27'06	14°32	13°16	28°46	23°59	15° 4	1°45	0°28	9°56	10°52	21°23	20° 7	29°54	26°30
S 14	15 27 49	23°25'01	28°37	14°37	29° 6	24°38	15°18	1°42	0°26	9°55	10°50	21°18	20° 4	0♄ 1	26°35
S 15	15 31 45	24°22'54	12♄34	15°53	29°23	25°17	15°33	1°39	0°24	9°54	10°49	21°11	20° 1	0° 8	26°40
M 16	15 35 42	25°20'47	26°19	17° 6	29°39	25°56	15°47	1°36	0°22	9°53	10°47	21° 1	19°58	0°14	26°45
T 17	15 39 38	26°18'37	9♄47	18°15	29°52	26°35	16° 1	1°33	0°20	9°52	10°46	20°51	19°55	0°21	26°49
W 18	15 43 35	27°16'27	22°57	19°20	0♄ 3	27°14	16°15	1°30	0°18	9°51	10°44	20°40	19°52	0°28	26°54
T 19	15 47 31	28°14'14	5♄48	20°21	0°13	27°52	16°29	1°26	0°17	9°50	10°42	20°30	19°48	0°34	27° 0
F 20	15 51 28	29°12'01	18°20	21°17	0°20	28°31	16°44	1°23	0°15	9°49	10°41	20°21	19°45	0°41	27° 5
S 21	15 55 25	0♄ 9'45	0♄25	22° 9	0°24	29° 9	16°58	1°20	0°13	9°48	10°39	20°15	19°42	0°48	27°10
S 22	15 59 21	1° 7'28	12°36	22°57	0°27	29°48	17°12	1°16	0°11	9°47	10°38	20°11	19°39	0°54	27°15
M 23	16 3 18	2° 5'10	24°29	23°41	0°R27	0♄26	17°26	1°13	0° 9	9°45	10°36	20°10	19°36	1° 1	27°20
T 24	16 7 14	3° 2'50	6♄18	24°20	0°25	1° 4	17°40	1° 9	0° 6	9°44	10°35	20°D 9	19°33	1° 8	27°25
W 25	16 11 11	4° 0'28	18° 8	24°55	0°20	1°42	17°54	1° 6	0° 4	9°43	10°33	20°R10	19°29	1°14	27°30
T 26	16 15 7	4°58'05	0♄ 5	25°25	0°13	2°20	18° 8	1° 2	0° 2	9°42	10°32	20° 9	19°26	1°21	27°36
F 27	16 19 4	5°55'40	12°15	25°50	0° 4	2°58	18°22	0°58	0° 0	9°40	10°30	20° 7	19°23	1°28	27°41
S 28	16 23 0	6°53'14	24°40	26°11	29♄52	3°36	18°36	0°54	29♄58	9°39	10°29	20° 3	19°20	1°34	27°46
S 29	16 26 57	7°50'46	7♄26	26°27	29°37	4°14	18°50	0°50	29°56	9°38	10°27	19°56	19°17	1°41	27°51
M 30	16 30 54	8°48'18	20°32	26°38	29°20	4°52	19° 4	0°46	29°54	9°37	10°26	19°47	19°13	1°48	27°57
T 31	16 34 50	9♄45'48	3♄59	26♄45	29♄ 1	5♄29	19♄17	0♄43	29♄51	9♄35	10♄24	19♄36	19♄10	1♄54	28♄ 2

Delta T = 55.98 sec.

JUNE 1988

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♆	♁	♂
W 1	16 38 47	10♄43'17	17♄45	26°R47	28°R40	6♄ 7	19♄31	0°R39	29°R49	9°R34	10°R23	19°R25	19♄ 7	2♄ 1	28♄ 7
T 2	16 42 43	11°40'46	1♄47	26♄45	28♄16	6°44	19°45	0♄35	29♄47	9♄32	10♄22	19♄13	19° 4	2° 8	28°13
F 3	16 46 40	12°38'13	15°59	26°38	27°51	7°21	19°59	0°30	29°45	9°31	10°20	19° 3	19° 1	2°14	28°18
S 4	16 50 36	13°35'40	0♄16	26°26	27°23	7°58	20°12	0°26	29°42	9°30	10°19	18°56	18°58	2°21	28°24
S 5	16 54 33	14°33'05	14°34	26°11	26°53	8°35	20°26	0°22	29°40	9°28	10°17	18°51	18°54	2°28	28°29
M 6	16 58 29	15°30'30	28°49	25°52	26°22	9°12	20°40	0°18	29°38	9°27	10°16	18°49	18°51	2°34	28°35
T 7	17 2 26	16°27'55	12♄59	25°30	25°49	9°49	20°53	0°14	29°35	9°25	10°15	18°49	18°48	2°41	28°40
W 8	17 6 23	17°25'19	27° 3	25° 4	25°15	10°25	21° 7	0°10	29°33	9°24	10°14	18°49	18°45	2°47	28°46
T 9	17 10 19	18°22'42	11♄ 0	24°36	24°40	11° 2	21°20	0° 5	29°30	9°22	10°12	18°48	18°42	2°54	28°51
F 10	17 14 16	19°20'04	24°50	24° 6	24° 4	11°38	21°34	0° 1	29°28	9°21	10°11	18°45	18°39	3° 1	28°57
S 11	17 18 12	20°17'27	8♄31	23°34	23°27	12°14	21°47	29♄57	29°26	9°19	10°10	18°39	18°35	3° 7	29° 2
S 12	17 22 9	21°14'49	22° 3	23° 1	22°50	12°50	22° 0	29°52	29°23	9°18	10° 9	18°31	18°32	3°14	29° 8
M 13	17 26 5	22°12'10	5♄24	22°27	22°12	13°26	22°14	29°48	29°21	9°16	10° 8	18°20	18°29	3°21	29°13
T 14	17 30 2	23° 9'30	18°32	21°53	21°35	14° 2	22°27	29°44	29°18	9°15	10° 7	18° 8	18°26	3°27	29°19
W 15	17 33 58	24° 6'50	1♄26	21°20	20°57	14°37	22°40	29°39	29°16	9°13	10° 5	17°55	18°23	3°34	29°24
T 16	17 37 55	25° 4'10	14° 4	20°48	20°21	15°12	22°53	29°35	29°14	9°12	10° 4	17°43	18°20	3°41	29°30
F 17	17 41 52	26° 1'29	26°27	20°18	19°44	15°47	23° 6	29°30	29°11	9°10	10° 3	17°33	18°16	3°47	29°35
S 18	17 45 48	26°58'46	8♄37	19°50	19° 9	16°22	23°19	29°26	29° 9	9° 9	10° 2	17°25	18°13	3°54	29°41
S 19	17 49 45	27°56'04	20°35	19°25	18°35	16°57	23°32	29°21	29° 6	9° 7	10° 1	17°20	18°10	4° 1	29°47
M 20	17 53 41	28°53'20	2♄26	19° 2	18° 3	17°31	23°45	29°17	29° 4	9° 6	10° 0	17°17	18° 7	4° 7	29°52
T 21	17 57 38	29°50'36	14°14	18°44	17°31	18° 6	23°58	29°13	29° 1	9° 4	9°59	17°D16	18° 4	4°14	29°58
W 22	18 1 34	0♄47'51	26° 4	18°29	17° 2	18°40	24°11	29° 8	28°59	9° 2	9°59	17°R17	18° 0	4°21	0♄ 3
T 23	18 5 31	1°45'05	8♄ 1	18°18	16°34	19°14	24°24	29° 4	28°56	9° 1	9°58	17°16	17°57	4°27	0° 9
F 24	18 9 27	2°42'19	20°11	18°11	16° 9	19°47	24°36	28°59	28°54	8°59	9°57	17°15	17°54	4°34	0°15
S 25	18 13 24	3°39'32	2♄38	18°D 9	15°45	20°21	24°49	28°55	28°52	8°58	9°56	17°12	17°51	4°41	0°20
S 26	18 17 21	4°36'44	15°28	18°12	15°23	20°54	25° 1	28°50	28°49	8°56	9°55	17° 6	17°48	4°47	0°26
M 27	18 21 17	5°33'57	28°43	18°19	15° 4	21°27	25°14	28°46	28°47	8°54	9°54	16°59	17°45	4°54	0°31
T 28	18 25 14	6°31'08	12♄23	18°31	14°47	22° 0	25°26	28°42	28°44	8°53	9°54	16°49	17°41	5° 0	0°37
W 29	18 29 10	7°28'20	26°26	18°48	14°33	22°32	25°39	28°37	28°42	8°51	9°53	16°38	17°38	5° 7	0°42
T 30	18 33 7	8°25'31	10♄49	19♄10	14♄21	23♄ 4	25♄51	28♄33	28♄39	8♄49	9♄52	16♄28	17♄35	5♄14	0♄48

Delta T = 56.02 sec.

created from Swiss Ephemeris, Copyright Astrodienst AG [13.11.2015]

SWISS EPHEMERIS for the year 1988

JULY 1988

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♁	♃	♄
F 1	18 37 3	9 ^h 22'42"	25 ^h 32'	19 ^h 37'	14 ^h R11	23 ^h 36'	26 ^h 3	28 ^h R29	28 ^h R37	8 ^h R48	9 ^h R52	16 ^h R19	17 ^h 32'	5 ^h 20'	0 ^h 54'
S 2	18 41 0	10 ^h 19'53"	10 ^h 37'	20 ^h 8'	14 ^h II 3	24 ^h 8'	26 ^h 15'	28 ^h 24'	28 ^h 35'	8 ^h 346	9 ^h M51	16 ^h 13'	17 ^h 29'	5 ^h 27'	0 ^h 59'
S 3	18 44 57	11 ^h 17'04"	24 ^h 48'	20 ^h 44'	13 ^h 59'	24 ^h 39'	26 ^h 27'	28 ^h 20'	28 ^h 32'	8 ^h 45'	9 ^h 50'	16 ^h 9'	17 ^h 26'	5 ^h 34'	1 ^h 5'
M 4	18 48 53	12 ^h 14'16"	9 ^h 31'	21 ^h 25'	13 ^h 56'	25 ^h 11'	26 ^h 39'	28 ^h 16'	28 ^h 30'	8 ^h 43'	9 ^h 50'	16 ^h 7'	17 ^h 22'	5 ^h 40'	1 ^h 10'
T 5	18 52 50	13 ^h 11'27"	23 ^h 43'	22 ^h 11'	13 ^h D56	25 ^h 41'	26 ^h 51'	28 ^h 12'	28 ^h 28'	8 ^h 41'	9 ^h 49'	16 ^h D 7	17 ^h 19'	5 ^h 47'	1 ^h 16'
W 6	18 56 46	14 ^h 8'39"	7 ^h 51'	23 ^h 2'	13 ^h 58'	26 ^h 12'	27 ^h 3'	28 ^h 8'	28 ^h 25'	8 ^h 40'	9 ^h 49'	16 ^h R 8	17 ^h 16'	5 ^h 54'	1 ^h 21'
T 7	19 0 43	15 ^h 5'51"	21 ^h 45'	23 ^h 56'	14 ^h 2'	26 ^h 42'	27 ^h 15'	28 ^h 3'	28 ^h 23'	8 ^h 38'	9 ^h 48'	16 ^h 8'	17 ^h 13'	6 ^h 0'	1 ^h 27'
F 8	19 4 39	16 ^h 3'03"	5 ^h 24'	24 ^h 56'	14 ^h 9'	27 ^h 12'	27 ^h 26'	27 ^h 59'	28 ^h 21'	8 ^h 37'	9 ^h 48'	16 ^h 6'	17 ^h 10'	6 ^h 7'	1 ^h 32'
S 9	19 8 36	17 ^h 0'16"	18 ^h 50'	26 ^h 0'	14 ^h 18'	27 ^h 42'	27 ^h 38'	27 ^h 55'	28 ^h 18'	8 ^h 35'	9 ^h 48'	16 ^h 2'	17 ^h 6'	6 ^h 14'	1 ^h 38'
S 10	19 12 32	17 ^h 57'29"	2 ^h II 2	27 ^h 8'	14 ^h 29'	28 ^h 11'	27 ^h 49'	27 ^h 51'	28 ^h 16'	8 ^h 33'	9 ^h 47'	15 ^h 56'	17 ^h 3'	6 ^h 20'	1 ^h 43'
M 11	19 16 29	18 ^h 54'43"	15 ^h 2'	28 ^h 21'	14 ^h 41'	28 ^h 40'	28 ^h 1'	27 ^h 47'	28 ^h 14'	8 ^h 32'	9 ^h 47'	15 ^h 48'	17 ^h 0'	6 ^h 27'	1 ^h 49'
T 12	19 20 26	19 ^h 51'57"	27 ^h 49'	29 ^h 38'	14 ^h 56'	29 ^h 9'	28 ^h 12'	27 ^h 43'	28 ^h 12'	8 ^h 30'	9 ^h 47'	15 ^h 38'	16 ^h 57'	6 ^h 34'	1 ^h 54'
W 13	19 24 22	20 ^h 49'12"	10 ^h 24'	0 ^h 59'	15 ^h 13'	29 ^h 37'	28 ^h 23'	27 ^h 39'	28 ^h 9'	8 ^h 29'	9 ^h 46'	15 ^h 29'	16 ^h 54'	6 ^h 40'	2 ^h 0'
T 14	19 28 19	21 ^h 46'26"	22 ^h 46'	2 ^h 24'	15 ^h 32'	0 ^h Y 5	28 ^h 34'	27 ^h 35'	28 ^h 7'	8 ^h 27'	9 ^h 46'	15 ^h 19'	16 ^h 51'	6 ^h 47'	2 ^h 5'
F 15	19 32 15	22 ^h 43'41"	4 ^h 58'	3 ^h 54'	15 ^h 53'	0 ^h 32'	28 ^h 46'	27 ^h 32'	28 ^h 5'	8 ^h 25'	9 ^h 46'	15 ^h 11'	16 ^h 47'	6 ^h 53'	2 ^h 10'
S 16	19 36 12	23 ^h 40'57"	16 ^h 59'	5 ^h 27'	16 ^h 15'	0 ^h 59'	28 ^h 56'	27 ^h 28'	28 ^h 3'	8 ^h 24'	9 ^h 46'	15 ^h 6'	16 ^h 44'	7 ^h 0'	2 ^h 16'
S 17	19 40 8	24 ^h 38'12"	28 ^h 52'	7 ^h 4'	16 ^h 39'	1 ^h 26'	29 ^h 7'	27 ^h 24'	28 ^h 1'	8 ^h 22'	9 ^h 46'	15 ^h 2'	16 ^h 41'	7 ^h 7'	2 ^h 21'
M 18	19 44 5	25 ^h 35'28"	10 ^h 40'	8 ^h 45'	17 ^h 4'	1 ^h 52'	29 ^h 18'	27 ^h 21'	27 ^h 59'	8 ^h 21'	9 ^h 46'	15 ^h D 0	16 ^h 38'	7 ^h 13'	2 ^h 26'
T 19	19 48 1	26 ^h 32'44"	22 ^h 27'	10 ^h 29'	17 ^h 31'	2 ^h 18'	29 ^h 29'	27 ^h 17'	27 ^h 57'	8 ^h 19'	9 ^h 46'	15 ^h 1'	16 ^h 35'	7 ^h 20'	2 ^h 32'
W 20	19 51 58	27 ^h 30'00"	4 ^h 16'	12 ^h 17'	18 ^h 0'	2 ^h 43'	29 ^h 39'	27 ^h 13'	27 ^h 55'	8 ^h 18'	9 ^h D46	15 ^h 2'	16 ^h 32'	7 ^h 27'	2 ^h 37'
T 21	19 55 55	28 ^h 27'16"	16 ^h 12'	14 ^h 8'	18 ^h 30'	3 ^h 8'	29 ^h 50'	27 ^h 10'	27 ^h 53'	8 ^h 16'	9 ^h 46'	15 ^h 3'	16 ^h 28'	7 ^h 33'	2 ^h 42'
F 22	19 59 51	29 ^h 24'33"	28 ^h 21'	16 ^h 1'	19 ^h 2'	3 ^h 32'	0 ^h II 0	27 ^h 7'	27 ^h 51'	8 ^h 15'	9 ^h 46'	15 ^h R 4	16 ^h 25'	7 ^h 40'	2 ^h 47'
S 23	20 3 48	0 ^h 21'50"	10 ^h M48	17 ^h 58'	19 ^h 35'	3 ^h 56'	0 ^h 10'	27 ^h 3'	27 ^h 49'	8 ^h 13'	9 ^h 46'	15 ^h 3'	16 ^h 22'	7 ^h 47'	2 ^h 53'
S 24	20 7 44	1 ^h 19'08"	23 ^h 36'	19 ^h 56'	20 ^h 9'	4 ^h 20'	0 ^h 20'	27 ^h 0'	27 ^h 47'	8 ^h 12'	9 ^h 46'	15 ^h 1'	16 ^h 19'	7 ^h 53'	2 ^h 58'
M 25	20 11 41	2 ^h 16'25"	6 ^h 31'	21 ^h 57'	20 ^h 44'	4 ^h 43'	0 ^h 30'	26 ^h 57'	27 ^h 45'	8 ^h 10'	9 ^h 46'	14 ^h 57'	16 ^h 16'	8 ^h 0'	3 ^h 3'
T 26	20 15 37	3 ^h 13'44"	20 ^h 33'	24 ^h 0'	21 ^h 21'	5 ^h 5'	0 ^h 40'	26 ^h 54'	27 ^h 43'	8 ^h 9'	9 ^h 46'	14 ^h 52'	16 ^h 12'	8 ^h 7'	3 ^h 8'
W 27	20 19 34	4 ^h 11'02"	4 ^h 32'	26 ^h 4'	21 ^h 59'	5 ^h 28'	0 ^h 50'	26 ^h 51'	27 ^h 41'	8 ^h 8'	9 ^h 46'	14 ^h 45'	16 ^h 9'	8 ^h 13'	3 ^h 13'
T 28	20 23 30	5 ^h 8'22"	19 ^h 15'	28 ^h 8'	22 ^h 38'	5 ^h 49'	1 ^h 0'	26 ^h 48'	27 ^h 40'	8 ^h 6'	9 ^h 47'	14 ^h 40'	16 ^h 6'	8 ^h 20'	3 ^h 18'
F 29	20 27 27	6 ^h 5'42"	4 ^h 6'	0 ^h 14'	23 ^h 18'	6 ^h 10'	1 ^h 9'	26 ^h 45'	27 ^h 38'	8 ^h 5'	9 ^h 47'	14 ^h 34'	16 ^h 3'	8 ^h 27'	3 ^h 23'
S 30	20 31 24	7 ^h 3'02"	19 ^h 7'	2 ^h 20'	23 ^h 59'	6 ^h 30'	1 ^h 19'	26 ^h 42'	27 ^h 36'	8 ^h 3'	9 ^h 47'	14 ^h 31'	16 ^h 0'	8 ^h 33'	3 ^h 28'
S 31	20 35 20	8 ^h 0'24"	4 ^h 8'	4 ^h 26'	24 ^h II41	6 ^h Y50	1 ^h II28	26 ^h 39'	27 ^h 34'	8 ^h 32	9 ^h M48	14 ^h 29'	15 ^h 57'	8 ^h 40'	3 ^h 33'

Delta T = 56.06 sec.

AUGUST 1988

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♁	♃	♄
M 1	20 39 17	8 ^h 57'46"	19 ^h 3'	6 ^h 32'	25 ^h II24	7 ^h Y10	1 ^h II37	26 ^h R36	27 ^h R33	8 ^h R 1	9 ^h M48	14 ^h D28	15 ^h 53'	8 ^h 46'	3 ^h 38'
T 2	20 43 13	9 ^h 55'09"	3 ^h Y43	8 ^h 38'	26 ^h 8'	7 ^h 28'	1 ^h 46'	26 ^h 34'	27 ^h 31'	7 ^h 359	9 ^h 48'	14 ^h 29'	15 ^h 50'	8 ^h 53'	3 ^h 43'
W 3	20 47 10	10 ^h 52'34"	18 ^h 4'	10 ^h 43'	26 ^h 53'	7 ^h 47'	1 ^h 55'	26 ^h 31'	27 ^h 30'	7 ^h 58'	9 ^h 49'	14 ^h 31'	15 ^h 47'	9 ^h 0'	3 ^h 48'
T 4	20 51 6	11 ^h 50'00"	2 ^h 35'	12 ^h 47'	27 ^h 39'	8 ^h 4'	2 ^h 4'	26 ^h 29'	27 ^h 28'	7 ^h 57'	9 ^h 49'	14 ^h 32'	15 ^h 44'	9 ^h 6'	3 ^h 53'
F 5	20 55 3	12 ^h 47'27"	15 ^h 44'	14 ^h 50'	28 ^h 26'	8 ^h 21'	2 ^h 13'	26 ^h 26'	27 ^h 27'	7 ^h 55'	9 ^h 50'	14 ^h R32	15 ^h 41'	9 ^h 13'	3 ^h 58'
S 6	20 58 59	13 ^h 44'55"	29 ^h 4'	16 ^h 52'	29 ^h 13'	8 ^h 37'	2 ^h 21'	26 ^h 24'	27 ^h 25'	7 ^h 54'	9 ^h 50'	14 ^h 31'	15 ^h 37'	9 ^h 20'	4 ^h 2'
S 7	21 2 56	14 ^h 42'25"	12 ^h II 5	18 ^h 53'	0 ^h 31	8 ^h 53'	2 ^h 30'	26 ^h 22'	27 ^h 24'	7 ^h 53'	9 ^h 51'	14 ^h 29'	15 ^h 34'	9 ^h 26'	4 ^h 7'
M 8	21 6 53	15 ^h 39'56"	24 ^h 50'	20 ^h 53'	0 ^h 50'	9 ^h 8'	2 ^h 38'	26 ^h 20'	27 ^h 22'	7 ^h 52'	9 ^h 52'	14 ^h 25'	15 ^h 31'	9 ^h 33'	4 ^h 12'
T 9	21 10 49	16 ^h 37'28"	7 ^h 32'	22 ^h 51'	1 ^h 40'	9 ^h 22'	2 ^h 46'	26 ^h 18'	27 ^h 21'	7 ^h 51'	9 ^h 52'	14 ^h 21'	15 ^h 28'	9 ^h 40'	4 ^h 16'
W 10	21 14 46	17 ^h 35'02"	19 ^h 39'	24 ^h 48'	2 ^h 30'	9 ^h 36'	2 ^h 54'	26 ^h 16'	27 ^h 20'	7 ^h 49'	9 ^h 53'	14 ^h 17'	15 ^h 25'	9 ^h 46'	4 ^h 21'
T 11	21 18 42	18 ^h 32'37"	1 ^h 48'	26 ^h 44'	3 ^h 21'	9 ^h 48'	3 ^h 2'	26 ^h 14'	27 ^h 19'	7 ^h 48'	9 ^h 54'	14 ^h 12'	15 ^h 22'	9 ^h 53'	4 ^h 25'
F 12	21 22 39	19 ^h 30'13"	13 ^h 48'	28 ^h 38'	4 ^h 13'	10 ^h 1'	3 ^h 10'	26 ^h 12'	27 ^h 17'	7 ^h 47'	9 ^h 54'	14 ^h 9'	15 ^h 18'	10 ^h 0'	4 ^h 30'
S 13	21 26 35	20 ^h 27'50"	25 ^h 41'	0 ^h 30'	5 ^h 6'	10 ^h 12'	3 ^h 18'	26 ^h 10'	27 ^h 16'	7 ^h 46'	9 ^h 55'	14 ^h 7'	15 ^h 15'	10 ^h 6'	4 ^h 34'
S 14	21 30 32	21 ^h 25'28"	7 ^h 30'	2 ^h 22'	5 ^h 59'	10 ^h 22'	3 ^h 25'	26 ^h 9'	27 ^h 15'	7 ^h 45'	9 ^h 56'	14 ^h 5'	1		

SWISS EPHEMERIS for the year 1988

SEPTEMBER 1988

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♁	♃	♄
T 1	22 41 30	8♎46'22	11♏36	1♌39	23♎16	11°R16	5♁13	25♌56	27°R 3	7°R30	10♎16	14♋6	14♋15	12♎12	5♄49
F 2	22 45 26	9°44'26	25°24	3° 3	24°17	11°V11	5°18	25°56	27°R 3	7♄30	10°18	14° 6	14°12	12°19	5°53
S 3	22 49 23	10°42'32	8♁24	4°26	25°19	11° 5	5°22	25°56	27° 3	7°29	10°19	14°R 6	14° 9	12°26	5°56
S 4	22 53 20	11°40'40	21°44	5°48	26°21	10°58	5°26	25°57	27° 3	7°29	10°21	14° 6	14° 5	12°32	5°59
M 5	22 57 16	12°38'50	4♄23	7° 8	27°24	10°51	5°30	25°57	27°D 3	7°28	10°22	14° 6	14° 2	12°39	6° 2
T 6	23 1 13	13°37'02	16°44	8°27	28°26	10°42	5°34	25°58	27° 3	7°28	10°24	14°D 6	13°59	12°46	6° 6
W 7	23 5 9	14°35'16	28°53	9°44	29°29	10°33	5°37	25°59	27° 3	7°27	10°25	14° 6	13°56	12°52	6° 9
T 8	23 9 6	15°33'32	10♌51	10°59	0♌33	10°23	5°41	25°59	27° 3	7°27	10°27	14° 6	13°53	12°59	6°12
F 9	23 13 2	16°31'49	22°43	12°13	1°36	10°13	5°44	26° 0	27° 3	7°27	10°29	14° 6	13°49	13° 6	6°15
S 10	23 16 59	17°30'09	4♎31	13°25	2°40	10° 2	5°47	26° 1	27° 3	7°26	10°30	14° 7	13°46	13°12	6°17
S 11	23 20 55	18°28'30	16°18	14°35	3°44	9°50	5°49	26° 2	27° 3	7°26	10°32	14°R 7	13°43	13°19	6°20
M12	23 24 52	19°26'53	28° 6	15°43	4°49	9°37	5°52	26° 3	27° 4	7°26	10°34	14° 6	13°40	13°26	6°23
T 13	23 28 49	20°25'18	9♌57	16°49	5°54	9°24	5°54	26° 5	27° 4	7°26	10°35	14° 6	13°37	13°32	6°26
W14	23 32 45	21°23'45	21°54	17°52	6°58	9°10	5°57	26° 6	27° 5	7°26	10°37	14° 5	13°34	13°39	6°28
T 15	23 36 42	22°22'14	3♎59	18°54	8° 4	8°55	5°59	26° 8	27° 5	7°25	10°39	14° 4	13°30	13°45	6°31
F 16	23 40 38	23°20'44	16°15	19°53	9° 9	8°40	6° 0	26° 9	27° 6	7°25	10°41	14° 3	13°27	13°52	6°33
S 17	23 44 35	24°19'16	28°44	20°49	10°15	8°25	6° 2	26°11	27° 6	7°25	10°42	14° 2	13°24	13°59	6°35
S 18	23 48 31	25°17'50	11♌29	21°43	11°21	8° 9	6° 3	26°13	27° 7	7°25	10°44	14° 1	13°21	14° 5	6°38
M19	23 52 28	26°16'25	24°35	22°33	12°27	7°53	6° 5	26°14	27° 7	7°D25	10°46	14°D 1	13°18	14°12	6°40
T 20	23 56 24	27°15'02	8♄ 2	23°20	13°33	7°36	6° 6	26°16	27° 8	7°25	10°48	14° 1	13°15	14°19	6°42
W21	0 0 21	28°13'41	21°54	24° 3	14°39	7°19	6° 7	26°18	27° 9	7°25	10°50	14° 1	13°11	14°25	6°44
T 22	0 4 18	29°12'21	6♁10	24°43	15°46	7° 2	6° 7	26°21	27°10	7°25	10°52	14° 3	13° 8	14°32	6°46
F 23	0 8 14	0♌11'03	20°48	25°19	16°53	6°45	6° 8	26°23	27°11	7°25	10°54	14° 4	13° 5	14°39	6°48
S 24	0 12 11	1° 9'47	5♋44	25°50	18° 0	6°27	6° 8	26°25	27°12	7°26	10°56	14° 4	13° 2	14°45	6°50
S 25	0 16 7	2° 8'33	20°51	26°16	19° 8	6° 9	6°R 8	26°28	27°12	7°26	10°58	14°R 4	12°59	14°52	6°52
M26	0 20 4	3° 7'20	6°V 0	26°36	20°15	5°52	6° 8	26°30	27°14	7°26	11° 0	14° 4	12°55	14°59	6°53
T 27	0 24 0	4° 6'09	21° 3	26°52	21°23	5°34	6° 7	26°33	27°15	7°26	11° 2	14° 2	12°52	15° 5	6°55
W28	0 27 57	5° 5'01	5♄50	27° 1	22°31	5°16	6° 7	26°35	27°16	7°27	11° 4	13°59	12°49	15°12	6°56
T 29	0 31 53	6° 3'55	20°14	27°R 3	23°39	4°59	6° 6	26°38	27°17	7°27	11° 6	13°56	12°46	15°19	6°58
F 30	0 35 50	7♌2'51	4♁11	26♌59	24♌47	4°V41	6♁ 5	26♌41	27♌18	7♄27	11♎ 8	13♋53	12♋43	15♎25	6♄59

Delta T = 56.14 sec.

OCTOBER 1988

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♁	♃	♄
S 1	0 39 47	8♌1'49	17♁41	26°R48	25♌56	4°R24	6°R 4	26♌44	27♌19	7♄28	11♎10	13°R51	12♋40	15♎32	7♄ 1
S 2	0 43 43	9° 0'50	0♄44	26♌29	27° 4	4°V 7	6♁ 2	26°47	27°21	7°28	11°12	13♋50	12°36	15°38	7° 2
M 3	0 47 40	9°59'53	13°22	26° 2	28°13	3°50	6° 1	26°50	27°22	7°29	11°14	13°D49	12°33	15°45	7° 3
T 4	0 51 36	10°58'58	25°42	25°28	29°22	3°33	5°59	26°53	27°23	7°29	11°16	13°50	12°30	15°52	7° 4
W 5	0 55 33	11°58'06	7♌46	24°46	0♎31	3°17	5°57	26°57	27°25	7°30	11°19	13°52	12°27	15°58	7° 5
T 6	0 59 29	12°57'16	19°40	23°56	1°40	3° 1	5°55	27° 0	27°26	7°30	11°21	13°53	12°24	16° 5	7° 6
F 7	1 3 26	13°56'28	1♎28	23° 0	2°50	2°45	5°52	27° 3	27°28	7°31	11°23	13°55	12°20	16°12	7° 7
S 8	1 7 22	14°55'42	13°14	21°58	3°59	2°30	5°50	27° 7	27°30	7°31	11°25	13°R56	12°17	16°18	7° 7
S 9	1 11 19	15°54'58	25° 2	20°51	5° 9	2°16	5°47	27°11	27°31	7°32	11°27	13°55	12°14	16°25	7° 8
M10	1 15 16	16°54'17	6♌55	19°41	6°19	2° 2	5°44	27°14	27°33	7°33	11°30	13°53	12°11	16°32	7° 9
T 11	1 19 12	17°53'38	18°54	18°29	7°29	1°49	5°41	27°18	27°35	7°33	11°32	13°49	12° 8	16°38	7° 9
W12	1 23 9	18°53'00	1♎ 2	17°18	8°39	1°36	5°37	27°22	27°37	7°34	11°34	13°43	12° 5	16°45	7° 9
T 13	1 27 5	19°52'25	13°20	16°10	9°49	1°24	5°34	27°26	27°38	7°35	11°36	13°37	12° 1	16°52	7°10
F 14	1 31 2	20°51'52	25°49	15° 5	11° 0	1°13	5°30	27°30	27°40	7°36	11°39	13°30	11°58	16°58	7°10
S 15	1 34 58	21°51'21	8♌30	14° 7	12°10	1° 2	5°26	27°34	27°42	7°36	11°41	13°24	11°55	17° 5	7°10
S 16	1 38 55	22°50'51	21°24	13°17	13°21	0°52	5°22	27°38	27°44	7°37	11°43	13°19	11°52	17°11	7°R10
M17	1 42 51	23°50'23	4♄33	12°37	14°32	0°43	5°18	27°43	27°46	7°38	11°46	13°15	11°49	17°18	7°10
T 18	1 46 48	24°49'57	17°58	12° 7	15°43	0°34	5°13	27°47	27°48	7°39	11°48	13°13	11°46	17°25	7°10
W19	1 50 45	25°49'33	1♌41	11°47	16°54	0°26	5° 9	27°51	27°50	7°40	11°50	13°D13	11°42	17°31	7°10
T 20	1 54 41	26°49'11	15°42	11°D39	18° 5	0°20	5° 4	27°56	27°53	7°41	11°53	13°14	11°39	17°38	7°10
F 21	1 58 38	27°48'50	0♋ 1	11°42	19°16	0°13	4°59	28° 1	27°55	7°42	11°55	13°16	11°36	17°45	7° 9
S 22	2 2 34	28°48'31	14°36	11°56	20°27	0° 8	4°54	28° 5	27°57	7°43	11°58	13°R16	11°33	17°51	7° 9
S 23	2 6 31	29°48'13	29°24	12°20	21°39	0° 3	4°48	28°10	27°59	7°44	12° 0	13°15	11°30	17°58	7° 8
M24	2 10 27	0♎47'57	14°V17	12°54	22°50	29♋59	4°43	28°15	28° 2	7°45	12° 2	13°12	11°26	18° 5	7° 8
T 25	2 14 24	1°47'44	29° 9	13°37	24° 2	29°57	4°37	28°20	28° 4	7°47	12° 5	13° 6	11°23	18°11	7° 7
W26	2 18 20	2°47'32	13♄52	14°28	25°14	29°55	4°31	28°24	28° 6	7°48	12° 7	12°59	11°20	18°18	7° 6
T 27	2 22 17	3°47'22	28°16	15°26	26°26	29°53	4°25	28°29	28° 9	7°49	12° 9	12°51	11°17	18°25	7° 5
F 28	2 26 14	4°47'14	12♁17	16°30	27°38	29°D53	4°19	28°34	28°11	7°50	12°12	12°42	11°14	18°31	7° 4
S 29	2 30 10	5°47'09	25°52	17°40	28°50	29°53	4°13	28°40	28°14	7°52	12°14	12°35	11°11	18°38	7° 3
S 30	2 34 7	6°47'06	9♄ 0	18°54	0♌ 2	29°54	4° 6	28°45	28°16	7°53	12°17	12°29	11° 7	18°45	7° 2
M31	2 38 3	7♎47'05	21♄42	20♌13	1♌14	29♋56	4♁ 0	28♌50	28♌19	7♄54	12♎19	12♋26	11♋ 4	18♎51	7♄ 1

Delta T = 56.18 sec.

created from Swiss Ephemeris, Copyright AstroDienst AG [13.11.2015]

SWISS EPHEMERIS for the year 1988

NOVEMBER 1988

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁
T 1	2 42 0	8♏47'06	4♏ 3	21♏35	2♏27	29♏58	3°R53	28♏55	28♏22	7♏55	12♏22	12°D24	11♏ 1	18♏58	7°R 0
W 2	2 45 56	9°47'09	16° 8	23° 0	3°39	0°V 2	3II46	29° 1	28°24	7°57	12°24	12♏24	10°58	19° 4	6♁59
T 3	2 49 53	10°47'14	28° 1	24°28	4°52	0° 6	3°40	29° 6	28°27	7°58	12°26	12°25	10°55	19°11	6°57
F 4	2 53 49	11°47'21	9♏49	25°58	6° 4	0°11	3°33	29°12	28°30	8° 0	12°29	12°R26	10°52	19°18	6°56
S 5	2 57 46	12°47'30	21°35	27°29	7°17	0°16	3°25	29°17	28°32	8° 1	12°31	12°25	10°48	19°24	6°54
S 6	3 1 43	13°47'42	3♏26	29° 2	8°30	0°23	3°18	29°23	28°35	8° 3	12°34	12°23	10°45	19°31	6°52
M 7	3 5 39	14°47'55	15°25	0♏35	9°43	0°30	3°11	29°28	28°38	8° 4	12°36	12°18	10°42	19°38	6°51
T 8	3 9 36	15°48'10	27°34	2°10	10°56	0°37	3° 3	29°34	28°41	8° 6	12°39	12°10	10°39	19°44	6°49
W 9	3 13 32	16°48'27	9♏55	3°45	12° 9	0°46	2°56	29°40	28°44	8° 7	12°41	12° 0	10°36	19°51	6°47
T 10	3 17 29	17°48'46	22°30	5°21	13°22	0°55	2°48	29°46	28°47	8° 9	12°43	11°48	10°32	19°58	6°45
F 11	3 21 25	18°49'07	5♏19	6°57	14°35	1° 5	2°40	29°52	28°50	8°10	12°46	11°36	10°29	20° 4	6°43
S 12	3 25 22	19°49'29	18°20	8°33	15°48	1°16	2°33	29°58	28°53	8°12	12°48	11°24	10°26	20°11	6°41
S 13	3 29 18	20°49'53	1♁33	10°10	17° 2	1°27	2°25	0♁ 4	28°56	8°14	12°51	11°14	10°23	20°18	6°39
M14	3 33 15	21°50'18	14°57	11°46	18°15	1°39	2°17	0°10	28°59	8°15	12°53	11° 6	10°20	20°24	6°36
T 15	3 37 12	22°50'45	28°31	13°23	19°29	1°52	2° 9	0°16	29° 2	8°17	12°56	11° 1	10°17	20°31	6°34
W16	3 41 8	23°51'13	12♏15	14°59	20°42	2° 5	2° 1	0°22	29° 5	8°19	12°58	10°59	10°13	20°38	6°32
T 17	3 45 5	24°51'42	26°10	16°35	21°56	2°19	1°53	0°28	29° 8	8°21	13° 0	10°D59	10°10	20°44	6°29
F 18	3 49 1	1°55'42	10♏15	18°11	23° 9	2°33	1°45	0°34	29°11	8°22	13° 3	10°R59	10° 7	20°51	6°27
S 19	3 52 58	26°52'44	24°30	19°47	24°23	2°48	1°37	0°41	29°14	8°24	13° 5	10°58	10° 4	20°57	6°24
S 20	3 56 54	27°53'17	8°V53	21°23	25°37	3° 4	1°28	0°47	29°18	8°26	13° 7	10°56	10° 1	21° 4	6°21
M21	4 0 51	28°53'51	23°21	22°59	26°50	3°20	1°20	0°53	29°21	8°28	13°10	10°51	9°58	21°11	6°19
T 22	4 4 47	29°54'27	7♁49	24°35	28° 4	3°37	1°12	1° 0	29°24	8°30	13°12	10°42	9°54	21°17	6°16
W23	4 8 44	0♁55'04	22°11	26°10	29°18	3°54	1° 4	1° 6	29°27	8°32	13°15	10°32	9°51	21°24	6°13
T 24	4 12 41	1°55'42	6II21	27°45	0♏32	4°12	0°56	1°13	29°31	8°34	13°17	10°19	9°48	21°31	6°10
F 25	4 16 37	2°56'22	20°13	29°20	1°46	4°30	0°48	1°19	29°34	8°35	13°19	10° 7	9°45	21°37	6° 7
S 26	4 20 34	3°57'03	3♁43	0♁55	3° 0	4°49	0°39	1°26	29°37	8°37	13°22	9°55	9°42	21°44	6° 4
S 27	4 24 30	4°57'45	16°50	2°30	4°14	5° 8	0°31	1°32	29°41	8°39	13°24	9°46	9°38	21°51	6° 1
M28	4 28 27	5°58'29	29°33	4° 4	5°28	5°28	0°23	1°39	29°44	8°41	13°26	9°39	9°35	21°57	5°58
T 29	4 32 23	6°59'15	11♏56	5°39	6°43	5°48	0°15	1°45	29°47	8°43	13°28	9°34	9°32	22° 4	5°55
W30	4 36 20	8♁ 0'02	24♏ 2	7♁13	7♏57	6°V 8	0II 7	1♁52	29♁51	8♁45	13♏31	9♁33	9♁29	22♏11	5♁52

Delta T = 56.22 sec.

DECEMBER 1988

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♄	♁	♁	♁	♁	♁
T 1	4 40 16	9♁ 0'50	5♏56	8♁48	9♏11	6°V30	29°R59	1♁59	29♁54	8♁47	13♏33	9°R32	9♁26	22♏17	5°R48
F 2	4 44 13	10° 1'40	17°45	10°22	10°25	6°51	29♁51	2° 6	29°58	8°49	13°35	9♁32	9°23	22°24	5♁45
S 3	4 48 10	11° 2'31	29°32	11°56	11°40	7°13	29°43	2°12	0♁ 1	8°51	13°37	9°31	9°19	22°31	5°42
S 4	4 52 6	12° 3'24	11♏25	13°30	12°54	7°35	29°35	2°19	0° 5	8°53	13°40	9°28	9°16	22°37	5°38
M 5	4 56 3	13° 4'18	23°28	15° 5	14° 9	7°58	29°28	2°26	0° 8	8°56	13°42	9°23	9°13	22°44	5°35
T 6	4 59 59	14° 5'13	5♏44	16°39	15°23	8°21	29°20	2°33	0°12	8°58	13°44	9°15	9°10	22°50	5°31
W 7	5 3 56	15° 6'10	18°17	18°13	16°38	8°45	29°12	2°40	0°15	9° 0	13°46	9° 4	9° 7	22°57	5°28
T 8	5 7 52	16° 7'07	1♁ 7	19°47	17°52	9° 8	29° 5	2°46	0°19	9° 2	13°48	8°51	9° 4	23° 4	5°24
F 9	5 11 49	17° 8'06	14°16	21°21	19° 7	9°33	28°57	2°53	0°22	9° 4	13°50	8°38	9° 0	23°10	5°21
S 10	5 15 45	18° 9'06	27°41	22°56	20°21	9°57	28°50	3° 0	0°26	9° 6	13°53	8°24	8°57	23°17	5°17
S 11	5 19 42	19°10'06	11♁19	24°30	21°36	10°22	28°43	3° 7	0°29	9° 8	13°55	8°13	8°54	23°24	5°13
M12	5 23 39	20°11'07	25° 7	26° 4	22°51	10°48	28°36	3°14	0°33	9°10	13°57	8° 4	8°51	23°30	5° 9
T 13	5 27 35	21°12'09	9♁ 3	27°39	24° 5	11°13	28°29	3°21	0°37	9°13	13°59	7°59	8°48	23°37	5° 6
W14	5 31 32	22°13'12	23° 3	29°13	25°20	11°39	28°22	3°28	0°40	9°15	14° 1	7°56	8°44	23°44	5° 2
T 15	5 35 28	23°14'14	7♁ 6	0♁48	26°35	12° 5	28°15	3°35	0°44	9°17	14° 3	7°D55	8°41	23°50	4°58
F 16	5 39 25	24°15'18	21°10	2°22	27°49	12°32	28° 8	3°42	0°47	9°19	14° 5	7°R55	8°38	23°57	4°54
S 17	5 43 21	25°16'21	5°V15	3°57	29° 4	12°59	28° 2	3°49	0°51	9°21	14° 7	7°55	8°35	24° 4	4°50
S 18	5 47 18	26°17'25	19°20	5°32	0♁19	13°26	27°56	3°56	0°55	9°24	14° 9	7°53	8°32	24°10	4°47
M19	5 51 14	27°18'29	3♁24	7° 7	1°34	13°54	27°49	4° 3	0°58	9°26	14°11	7°48	8°29	24°17	4°43
T 20	5 55 11	28°19'33	17°25	8°42	2°49	14°21	27°43	4°10	1° 2	9°28	14°13	7°41	8°25	24°24	4°39
W21	5 59 8	29°20'38	1II19	10°16	4° 3	14°49	27°37	4°18	1° 5	9°30	14°14	7°31	8°22	24°30	4°35
T 22	6 3 4	0♁21'44	15° 3	11°51	5°18	15°17	27°32	4°25	1° 9	9°33	14°16	7°20	8°19	24°37	4°31
F 23	6 7 1	1°22'49	28°34	13°26	6°33	15°46	27°26	4°32	1°13	9°35	14°18	7° 8	8°16	24°44	4°27
S 24	6 10 57	2°23'55	11♁48	15° 1	7°48	16°15	27°21	4°39	1°16	9°37	14°20	6°57	8°13	24°50	4°23
S 25	6 14 54	3°25'02	24°44	16°35	9° 3	16°44	27°15	4°46	1°20	9°39	14°22	6°48	8°10	24°57	4°19
M26	6 18 50	4°26'09	7♏21	18° 9	10°18	17°13	27°10	4°53	1°24	9°42	14°23	6°41	8° 6	25° 4	4°15
T 27	6 22 47	5°27'16	19°41	19°43	11°33	17°42	27° 5	5° 0	1°27	9°44	14°25	6°37	8° 3	25°10	4°11
W28	6 26 44	6°28'24	1♏46	21°16	12°48	18°12	27° 1	5° 7	1°31	9°46	14°27	6°D35	8° 0	25°17	4° 7
T 29	6 30 40	7°29'32	13°41	22°49	14° 3	18°42	26°56	5°14	1°34	9°48	14°29	6°36	7°57	25°23	4° 3
F 30	6 34 37	8°30'40	25°30	24°21	15°18	19°12	26°52	5°21	1°38	9°51	14°30	6°36	7°54	25°30	3°59
S 31	6 38 33	9♁31'49	7♁18	25♁52	16♁33	19°V42	26♁48	5♁29	1♁42	9♁53	14♏32	6°R37	7♁50	25♏37	3♁56

Delta T = 56.26 sec.

created from Swiss Ephemeris, Copyright Astrodienst AG [13.11.2015]