

# SWISS EPHEMERIS for the year 2083

## JANUARY 2083

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
F 1	6 43 26	10 <sup>3</sup> 44'12	5 <sup>II</sup> 27	27°R13	24 <sup>III</sup> 30	11°Y19	25°Y13	5 <sup>II</sup> 17	12 <sup>III</sup> 6	9°R13	15°Y19	18°R19	19 <sup>III</sup> 44	10 <sup>III</sup> 34	20°R 7	
S 2	6 47 23	11°45'20	17°38	26 <sup>II</sup> 36	25°36	11°55	25°15	5°22	12° 9	9 <sup>II</sup> 12	15°19	18 <sup>III</sup> 12	19°41	10°41	20 <sup>II</sup> 6	
S 3	6 51 20	12°46'28	0 <sup>III</sup> 0	26°10	26°42	12°31	25°18	5°27	12°12	9°10	15°19	18° 5	19°37	10°47	20° 4	
M 4	6 55 16	13°47'36	12°34	25°54	27°48	13° 7	25°21	5°33	12°15	9° 9	15°19	18° 0	19°34	10°54	20° 2	
T 5	6 59 13	14°48'44	25°20	25°D48	28°55	13°43	25°25	5°38	12°18	9° 8	15°19	17°56	19°31	11° 1	20° 1	
W 6	7 3 9	15°49'52	8 <sup>II</sup> 18	25°51	0 <sup>II</sup> 2	14°19	25°28	5°44	12°22	9° 6	15°20	17°54	19°28	11° 8	20° 0	
T 7	7 7 6	16°50'59	21°28	26° 2	1° 9	14°56	25°32	5°49	12°25	9° 4	15°20	17°D54	19°25	11°14	19°58	
F 8	7 11 2	17°52'07	4 <sup>III</sup> 50	26°21	2°16	15°32	25°35	5°55	12°28	9° 3	15°20	17°55	19°22	11°21	19°57	
S 9	7 14 59	18°53'15	18°23	26°48	3°24	16° 8	25°39	6° 1	12°31	9° 1	15°20	17°56	19°18	11°28	19°56	
S 10	7 18 55	19°54'23	2 <sup>II</sup> 8	27°20	4°31	16°45	25°44	6° 6	12°35	9° 0	15°21	17°58	19°15	11°35	19°54	
M11	7 22 52	20°55'31	16° 5	27°59	5°39	17°21	25°48	6°12	12°38	8°58	15°21	17°R59	19°12	11°41	19°53	
T 12	7 26 49	21°56'40	0 <sup>III</sup> 12	28°42	6°47	17°58	25°53	6°18	12°41	8°57	15°21	17°59	19° 9	11°48	19°52	
W13	7 30 45	22°57'48	14°29	29°31	7°55	18°35	25°57	6°24	12°45	8°55	15°21	17°57	19° 6	11°55	19°51	
T 14	7 34 42	23°58'56	28°52	0 <sup>III</sup> 23	9° 4	19°12	26° 2	6°30	12°48	8°53	15°22	17°55	19° 2	12° 1	19°50	
F 15	7 38 38	25° 0'05	13 <sup>II</sup> 18	1°19	10°12	19°48	26° 7	6°36	12°51	8°52	15°22	17°51	18°59	12° 8	19°49	
S 16	7 42 35	26° 1'13	27°41	2°19	11°21	20°25	26°13	6°42	12°55	8°50	15°23	17°48	18°56	12°15	19°49	
S 17	7 46 31	27° 2'21	11 <sup>III</sup> 57	3°21	12°30	21° 2	26°18	6°48	12°58	8°49	15°23	17°45	18°53	12°22	19°48	
M18	7 50 28	28° 3'29	26° 0	4°26	13°39	21°39	26°24	6°55	13° 1	8°47	15°23	17°43	18°50	12°28	19°47	
T 19	7 54 25	29° 4'36	9 <sup>III</sup> 46	5°34	14°48	22°17	26°30	7° 1	13° 5	8°45	15°24	17°42	18°47	12°35	19°47	
W20	7 58 21	0 <sup>III</sup> 54	23°12	6°44	15°57	22°54	26°36	7° 7	13° 8	8°44	15°24	17°D42	18°43	12°42	19°46	
T 21	8 2 18	1° 6'47	6 <sup>II</sup> 17	7°55	17° 7	23°31	26°42	7°14	13°12	8°42	15°25	17°43	18°40	12°48	19°46	
F 22	8 6 14	2° 7'52	19° 1	9° 9	18°16	24° 8	26°48	7°20	13°15	8°40	15°25	17°44	18°37	12°55	19°45	
S 23	8 10 11	3° 8'56	1°Y27	10°24	19°26	24°46	26°55	7°27	13°19	8°39	15°26	17°45	18°34	13° 2	19°45	
S 24	8 14 7	4° 9'59	13°38	11°41	20°35	25°23	27° 2	7°33	13°22	8°37	15°26	17°47	18°31	13° 9	19°44	
M25	8 18 4	5°11'01	25°38	12°59	21°45	26° 0	27° 8	7°40	13°26	8°35	15°27	17°47	18°28	13°15	19°44	
T 26	8 22 0	6°12'02	7 <sup>II</sup> 32	14°18	22°55	26°38	27°15	7°46	13°29	8°33	15°28	17°R48	18°24	13°22	19°44	
W27	8 25 57	7°13'02	19°24	15°39	24° 5	27°15	27°23	7°53	13°33	8°32	15°28	17°47	18°21	13°29	19°44	
T 28	8 29 54	8°14'01	1 <sup>II</sup> 20	17° 1	25°16	27°53	27°30	7°59	13°36	8°30	15°29	17°46	18°18	13°36	19°D44	
F 29	8 33 50	9°14'59	13°23	18°23	26°26	28°30	27°37	8° 6	13°39	8°28	15°30	17°45	18°15	13°42	19°44	
S 30	8 37 47	10°15'56	25°38	19°47	27°36	29° 8	27°45	8°13	13°43	8°27	15°30	17°44	18°12	13°49	19°44	
S 31	8 41 43	11 <sup>III</sup> 16'51	8 <sup>II</sup> 7	21 <sup>III</sup> 12	28 <sup>II</sup> 47	29°Y46	27°Y53	8 <sup>II</sup> 20	13 <sup>III</sup> 46	8 <sup>II</sup> 25	15°Y31	17 <sup>III</sup> 43	18 <sup>III</sup> 8	13 <sup>II</sup> 56	19 <sup>II</sup> 44	

Delta T = 182.63 sec.

## FEBRUARY 2083

00:00 UT

Day	Sid.t	☉	☾	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
M 1	8 45 40	12 <sup>III</sup> 17'46	20 <sup>III</sup> 52	22 <sup>III</sup> 38	29 <sup>II</sup> 58	0 <sup>II</sup> 23	28°Y 1	8 <sup>II</sup> 27	13 <sup>III</sup> 50	8°R23	15°Y32	17°R43	18 <sup>III</sup> 5	14 <sup>II</sup> 2	19 <sup>II</sup> 44	
T 2	8 49 36	13°18'39	3 <sup>II</sup> 55	24° 4	1 <sup>II</sup> 8	1° 1	28° 9	8°33	13°53	8 <sup>II</sup> 22	15°33	17 <sup>III</sup> 42	18° 2	14° 9	19°45	
W 3	8 53 33	14°19'31	17°16	25°32	2°19	1°39	28°17	8°40	13°57	8°20	15°33	17°D42	17°59	14°16	19°45	
T 4	8 57 29	15°20'23	0 <sup>III</sup> 52	27° 0	3°30	2°17	28°26	8°47	14° 0	8°18	15°34	17°42	17°56	14°23	19°45	
F 5	9 1 26	16°21'13	14°41	28°29	4°41	2°54	28°34	8°54	14° 4	8°17	15°35	17°42	17°53	14°29	19°46	
S 6	9 5 23	17°22'02	28°42	29°59	5°52	3°32	28°43	9° 1	14° 7	8°15	15°36	17°R42	17°49	14°36	19°46	
S 7	9 9 19	18°22'50	12 <sup>II</sup> 50	1 <sup>III</sup> 30	7° 3	4°10	28°51	9° 8	14°11	8°13	15°37	17°42	17°46	14°43	19°47	
M 8	9 13 16	19°23'37	27° 2	3° 2	8°14	4°48	29° 0	9°15	14°14	8°12	15°37	17°42	17°43	14°49	19°48	
T 9	9 17 12	20°24'24	11 <sup>III</sup> 15	4°34	9°26	5°26	29° 9	9°22	14°18	8°10	15°38	17°42	17°40	14°56	19°48	
W 10	9 21 9	21°25'09	25°27	6° 7	10°37	6° 4	29°19	9°29	14°21	8° 8	15°39	17°D42	17°37	15° 3	19°49	
T 11	9 25 5	22°25'54	9 <sup>II</sup> 36	7°41	11°48	6°42	29°28	9°36	14°25	8° 7	15°40	17°42	17°34	15°10	19°50	
F 12	9 29 2	23°26'38	23°39	9°16	13° 0	7°20	29°37	9°44	14°28	8° 5	15°41	17°43	17°30	15°16	19°51	
S 13	9 32 58	24°27'20	7 <sup>II</sup> 34	10°52	14°12	7°58	29°47	9°51	14°32	8° 3	15°42	17°43	17°27	15°23	19°52	
S 14	9 36 55	25°28'02	21°20	12°28	15°23	8°36	29°57	9°58	14°35	8° 2	15°43	17°44	17°24	15°30	19°53	
M 15	9 40 52	26°28'42	4 <sup>III</sup> 54	14° 5	16°35	9°14	0 <sup>II</sup> 7	10° 5	14°39	8° 0	15°44	17°44	17°21	15°37	19°54	
T 16	9 44 48	27°29'21	18°16	15°43	17°47	9°52	0°17	10°12	14°42	7°59	15°45	17°R45	17°18	15°43	19°55	
W 17	9 48 45	28°29'58	1 <sup>II</sup> 23	17°22	18°58	10°30	0°27	10°20	14°46	7°57	15°46	17°44	17°14	15°50	19°56	
T 18	9 52 41	29°30'34	14°15	19° 2	20°10	11° 8	0°37	10°27	14°49	7°56	15°47	17°43	17°11	15°57	19°58	
F 19	9 56 38	0 <sup>II</sup> 31'08	26°52	20°43	21°22	11°46	0°47	10°34	14°52	7°54	15°48	17°42	17° 8	16° 3	19°59	
S 20	10 0 34	1°31'41	9°Y15	22°25	22°34	12°24	0°58	10°41	14°56	7°52	15°49	17°40	17° 5	16°10	20° 0	
S 21	10 4 31	2°32'12	21°25	24° 7	23°46	13° 2	1° 8	10°49	14°59	7°51	15°50	17°38	17° 2	16°17	20° 2	
M 22	10 8 27	3°32'41	3 <sup>II</sup> 26	25°51	24°58	13°41	1°19	10°56	15° 3	7°49	15°51	17°35	16°59	16°24	20° 3	
T 23	10 12 24	4°33'09	15°20	27°35	26°10	14°19	1°30	11° 3	15° 6	7°48	15°53	17°34	16°55	16°30	20° 5	
W 24	10 16 21	5°33'34	27°13	29°21	27°23	14°57	1°40	11°10	15° 9	7°46	15°54	17°33	16°52	16°37	20° 7	
T 25	10 20 17	6°33'58	9 <sup>II</sup> 7	1 <sup>II</sup> 7	28°35	15°35	1°51	11°18	15°13	7°45	15°55	17°D32	16°49	16°44	20° 8	
F 26	10 24 14	7°34'20	21° 9	2°54	29°47	16°13	2° 2	11°25	15°16	7°44	15°56	17°33	16°46	16°51	20°10	
S 27	10 28 10	8°34'40	3 <sup>II</sup> 22	4°43	0 <sup>III</sup> 59	16°52	2°14	11°32	15°19	7°42	15°57	17°34	16°43	16°57	20°12	
S 28	10 32 7	9 <sup>II</sup> 34'58	15 <sup>III</sup> 52	6 <sup>II</sup> 32	2 <sup>III</sup> 12	17 <sup>II</sup> 30	2 <sup>II</sup> 25	11 <sup>II</sup> 40	15 <sup>III</sup> 23	7 <sup>II</sup> 41	15°Y58	17 <sup>III</sup> 36	16 <sup>III</sup> 39	17 <sup>II</sup> 4	20 <sup>II</sup> 14	

Delta T = 182.80 sec.

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# SWISS EPHEMERIS for the year 2083

## MARCH 2083

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
M 1	10 36 3	10 <sup>h</sup> 35'14"	28 <sup>h</sup> 42'	8 <sup>h</sup> 22'	3 <sup>h</sup> 24'	18 <sup>h</sup> 8'	2 <sup>h</sup> 36'	11 <sup>h</sup> 47'	15 <sup>h</sup> 26'	7 <sup>h</sup> 39'	16 <sup>h</sup> 0'	17 <sup>h</sup> 37'	16 <sup>h</sup> 36'	17 <sup>h</sup> 11'	20 <sup>h</sup> 16'
T 2	10 40 0	11 <sup>h</sup> 35'28"	11 <sup>h</sup> 54'	10 <sup>h</sup> 13'	4 <sup>h</sup> 36'	18 <sup>h</sup> 46'	2 <sup>h</sup> 48'	11 <sup>h</sup> 54'	15 <sup>h</sup> 29'	7 <sup>h</sup> 38'	16 <sup>h</sup> 1'	17 <sup>h</sup> 38'	16 <sup>h</sup> 33'	17 <sup>h</sup> 17'	20 <sup>h</sup> 18'
W 3	10 43 56	12 <sup>h</sup> 35'40"	25 <sup>h</sup> 29'	12 <sup>h</sup> 6'	5 <sup>h</sup> 49'	19 <sup>h</sup> 25'	2 <sup>h</sup> 59'	12 <sup>h</sup> 2'	15 <sup>h</sup> 32'	7 <sup>h</sup> 37'	16 <sup>h</sup> 2'	17 <sup>h</sup> 38'	16 <sup>h</sup> 30'	17 <sup>h</sup> 24'	20 <sup>h</sup> 20'
T 4	10 47 53	13 <sup>h</sup> 35'50"	9 <sup>h</sup> 27'	13 <sup>h</sup> 59'	7 <sup>h</sup> 1'	20 <sup>h</sup> 3'	3 <sup>h</sup> 11'	12 <sup>h</sup> 9'	15 <sup>h</sup> 35'	7 <sup>h</sup> 35'	16 <sup>h</sup> 3'	17 <sup>h</sup> 37'	16 <sup>h</sup> 27'	17 <sup>h</sup> 31'	20 <sup>h</sup> 22'
F 5	10 51 50	14 <sup>h</sup> 35'58"	23 <sup>h</sup> 43'	15 <sup>h</sup> 53'	8 <sup>h</sup> 14'	20 <sup>h</sup> 41'	3 <sup>h</sup> 22'	12 <sup>h</sup> 16'	15 <sup>h</sup> 39'	7 <sup>h</sup> 34'	16 <sup>h</sup> 5'	17 <sup>h</sup> 34'	16 <sup>h</sup> 24'	17 <sup>h</sup> 38'	20 <sup>h</sup> 24'
S 6	10 55 46	15 <sup>h</sup> 36'05"	8 <sup>h</sup> 13'	17 <sup>h</sup> 47'	9 <sup>h</sup> 26'	21 <sup>h</sup> 19'	3 <sup>h</sup> 34'	12 <sup>h</sup> 24'	15 <sup>h</sup> 42'	7 <sup>h</sup> 33'	16 <sup>h</sup> 6'	17 <sup>h</sup> 30'	16 <sup>h</sup> 20'	17 <sup>h</sup> 44'	20 <sup>h</sup> 26'
S 7	10 59 43	16 <sup>h</sup> 36'10"	22 <sup>h</sup> 51'	19 <sup>h</sup> 43'	10 <sup>h</sup> 39'	21 <sup>h</sup> 58'	3 <sup>h</sup> 46'	12 <sup>h</sup> 31'	15 <sup>h</sup> 45'	7 <sup>h</sup> 32'	16 <sup>h</sup> 7'	17 <sup>h</sup> 26'	16 <sup>h</sup> 17'	17 <sup>h</sup> 51'	20 <sup>h</sup> 28'
M 8	11 3 39	17 <sup>h</sup> 36'13"	7 <sup>h</sup> 29'	21 <sup>h</sup> 39'	11 <sup>h</sup> 51'	22 <sup>h</sup> 36'	3 <sup>h</sup> 58'	12 <sup>h</sup> 38'	15 <sup>h</sup> 48'	7 <sup>h</sup> 30'	16 <sup>h</sup> 8'	17 <sup>h</sup> 22'	16 <sup>h</sup> 14'	17 <sup>h</sup> 58'	20 <sup>h</sup> 31'
T 9	11 7 36	18 <sup>h</sup> 36'14"	22 <sup>h</sup> 1'	23 <sup>h</sup> 35'	13 <sup>h</sup> 4'	23 <sup>h</sup> 14'	4 <sup>h</sup> 10'	12 <sup>h</sup> 46'	15 <sup>h</sup> 51'	7 <sup>h</sup> 29'	16 <sup>h</sup> 10'	17 <sup>h</sup> 18'	16 <sup>h</sup> 11'	18 <sup>h</sup> 4'	20 <sup>h</sup> 33'
W 10	11 11 32	19 <sup>h</sup> 36'15"	6 <sup>h</sup> 23'	25 <sup>h</sup> 32'	14 <sup>h</sup> 16'	23 <sup>h</sup> 52'	4 <sup>h</sup> 22'	12 <sup>h</sup> 53'	15 <sup>h</sup> 54'	7 <sup>h</sup> 28'	16 <sup>h</sup> 11'	17 <sup>h</sup> 16'	16 <sup>h</sup> 8'	18 <sup>h</sup> 11'	20 <sup>h</sup> 36'
T 11	11 15 29	20 <sup>h</sup> 36'13"	20 <sup>h</sup> 31'	27 <sup>h</sup> 30'	15 <sup>h</sup> 29'	24 <sup>h</sup> 31'	4 <sup>h</sup> 35'	13 <sup>h</sup> 0'	15 <sup>h</sup> 57'	7 <sup>h</sup> 27'	16 <sup>h</sup> 12'	17 <sup>h</sup> D16	16 <sup>h</sup> 5'	18 <sup>h</sup> 18'	20 <sup>h</sup> 38'
F 12	11 19 25	21 <sup>h</sup> 36'10"	4 <sup>h</sup> 24'	29 <sup>h</sup> 27'	16 <sup>h</sup> 42'	25 <sup>h</sup> 9'	4 <sup>h</sup> 47'	13 <sup>h</sup> 8'	16 <sup>h</sup> 0'	7 <sup>h</sup> 26'	16 <sup>h</sup> 14'	17 <sup>h</sup> 16'	16 <sup>h</sup> 1'	18 <sup>h</sup> 25'	20 <sup>h</sup> 40'
S 13	11 23 22	22 <sup>h</sup> 36'06"	18 <sup>h</sup> 2'	1 <sup>h</sup> 24'	17 <sup>h</sup> 55'	25 <sup>h</sup> 47'	4 <sup>h</sup> 59'	13 <sup>h</sup> 15'	16 <sup>h</sup> 3'	7 <sup>h</sup> 25'	16 <sup>h</sup> 15'	17 <sup>h</sup> 18'	15 <sup>h</sup> 58'	18 <sup>h</sup> 31'	20 <sup>h</sup> 43'
S 14	11 27 19	23 <sup>h</sup> 36'00"	1 <sup>h</sup> 25'	3 <sup>h</sup> 21'	19 <sup>h</sup> 7'	26 <sup>h</sup> 25'	5 <sup>h</sup> 12'	13 <sup>h</sup> 22'	16 <sup>h</sup> 6'	7 <sup>h</sup> 24'	16 <sup>h</sup> 16'	17 <sup>h</sup> 19'	15 <sup>h</sup> 55'	18 <sup>h</sup> 38'	20 <sup>h</sup> 46'
M 15	11 31 15	24 <sup>h</sup> 35'52"	14 <sup>h</sup> 34'	5 <sup>h</sup> 17'	20 <sup>h</sup> 20'	27 <sup>h</sup> 4'	5 <sup>h</sup> 24'	13 <sup>h</sup> 29'	16 <sup>h</sup> 9'	7 <sup>h</sup> 23'	16 <sup>h</sup> 18'	17 <sup>h</sup> R20	15 <sup>h</sup> 52'	18 <sup>h</sup> 45'	20 <sup>h</sup> 48'
T 16	11 35 12	25 <sup>h</sup> 35'42"	27 <sup>h</sup> 31'	7 <sup>h</sup> 11'	21 <sup>h</sup> 33'	27 <sup>h</sup> 42'	5 <sup>h</sup> 37'	13 <sup>h</sup> 37'	16 <sup>h</sup> 12'	7 <sup>h</sup> 22'	16 <sup>h</sup> 19'	17 <sup>h</sup> 20'	15 <sup>h</sup> 49'	18 <sup>h</sup> 52'	20 <sup>h</sup> 51'
W 17	11 39 8	26 <sup>h</sup> 35'30"	10 <sup>h</sup> 16'	9 <sup>h</sup> 5'	22 <sup>h</sup> 46'	28 <sup>h</sup> 20'	5 <sup>h</sup> 49'	13 <sup>h</sup> 44'	16 <sup>h</sup> 15'	7 <sup>h</sup> 21'	16 <sup>h</sup> 20'	17 <sup>h</sup> 17'	15 <sup>h</sup> 45'	18 <sup>h</sup> 58'	20 <sup>h</sup> 54'
T 18	11 43 5	27 <sup>h</sup> 35'16"	22 <sup>h</sup> 51'	10 <sup>h</sup> 56'	23 <sup>h</sup> 59'	28 <sup>h</sup> 58'	6 <sup>h</sup> 2'	13 <sup>h</sup> 51'	16 <sup>h</sup> 18'	7 <sup>h</sup> 20'	16 <sup>h</sup> 22'	17 <sup>h</sup> 13'	15 <sup>h</sup> 42'	19 <sup>h</sup> 5'	20 <sup>h</sup> 57'
F 19	11 47 1	28 <sup>h</sup> 35'01"	5 <sup>h</sup> 15'	12 <sup>h</sup> 45'	25 <sup>h</sup> 11'	29 <sup>h</sup> 37'	6 <sup>h</sup> 15'	13 <sup>h</sup> 58'	16 <sup>h</sup> 21'	7 <sup>h</sup> 19'	16 <sup>h</sup> 23'	17 <sup>h</sup> 7'	15 <sup>h</sup> 39'	19 <sup>h</sup> 12'	20 <sup>h</sup> 59'
S 20	11 50 58	29 <sup>h</sup> 34'43"	17 <sup>h</sup> 29'	14 <sup>h</sup> 31'	26 <sup>h</sup> 24'	0 <sup>h</sup> 15'	6 <sup>h</sup> 28'	14 <sup>h</sup> 6'	16 <sup>h</sup> 23'	7 <sup>h</sup> 18'	16 <sup>h</sup> 24'	16 <sup>h</sup> 59'	15 <sup>h</sup> 36'	19 <sup>h</sup> 18'	21 <sup>h</sup> 2'
S 21	11 54 54	0 <sup>h</sup> 34'24"	29 <sup>h</sup> 34'	16 <sup>h</sup> 14'	27 <sup>h</sup> 37'	0 <sup>h</sup> 53'	6 <sup>h</sup> 41'	14 <sup>h</sup> 13'	16 <sup>h</sup> 26'	7 <sup>h</sup> 17'	16 <sup>h</sup> 26'	16 <sup>h</sup> 50'	15 <sup>h</sup> 33'	19 <sup>h</sup> 25'	21 <sup>h</sup> 5'
M 22	11 58 51	1 <sup>h</sup> 34'02"	11 <sup>h</sup> 32'	17 <sup>h</sup> 54'	28 <sup>h</sup> 50'	1 <sup>h</sup> 32'	6 <sup>h</sup> 54'	14 <sup>h</sup> 20'	16 <sup>h</sup> 29'	7 <sup>h</sup> 16'	16 <sup>h</sup> 27'	16 <sup>h</sup> 42'	15 <sup>h</sup> 30'	19 <sup>h</sup> 32'	21 <sup>h</sup> 8'
T 23	12 2 47	2 <sup>h</sup> 33'38"	23 <sup>h</sup> 26'	19 <sup>h</sup> 29'	0 <sup>h</sup> 8'	2 <sup>h</sup> 10'	7 <sup>h</sup> 7'	14 <sup>h</sup> 27'	16 <sup>h</sup> 31'	7 <sup>h</sup> 15'	16 <sup>h</sup> 29'	16 <sup>h</sup> 35'	15 <sup>h</sup> 26'	19 <sup>h</sup> 39'	21 <sup>h</sup> 11'
W 24	12 6 44	3 <sup>h</sup> 33'12"	5 <sup>h</sup> 17'	21 <sup>h</sup> 0'	1 <sup>h</sup> 16'	2 <sup>h</sup> 48'	7 <sup>h</sup> 20'	14 <sup>h</sup> 34'	16 <sup>h</sup> 34'	7 <sup>h</sup> 14'	16 <sup>h</sup> 30'	16 <sup>h</sup> 29'	15 <sup>h</sup> 23'	19 <sup>h</sup> 45'	21 <sup>h</sup> 14'
T 25	12 10 41	4 <sup>h</sup> 32'44"	17 <sup>h</sup> 10'	22 <sup>h</sup> 25'	2 <sup>h</sup> 29'	3 <sup>h</sup> 26'	7 <sup>h</sup> 33'	14 <sup>h</sup> 41'	16 <sup>h</sup> 37'	7 <sup>h</sup> 14'	16 <sup>h</sup> 31'	16 <sup>h</sup> 25'	15 <sup>h</sup> 20'	19 <sup>h</sup> 52'	21 <sup>h</sup> 17'
F 26	12 14 37	5 <sup>h</sup> 32'13"	29 <sup>h</sup> 9'	23 <sup>h</sup> 45'	3 <sup>h</sup> 42'	4 <sup>h</sup> 5'	7 <sup>h</sup> 46'	14 <sup>h</sup> 48'	16 <sup>h</sup> 39'	7 <sup>h</sup> 13'	16 <sup>h</sup> 33'	16 <sup>h</sup> 23'	15 <sup>h</sup> 17'	19 <sup>h</sup> 59'	21 <sup>h</sup> 21'
S 27	12 18 34	6 <sup>h</sup> 31'41"	11 <sup>h</sup> 19'	25 <sup>h</sup> 0'	4 <sup>h</sup> 55'	4 <sup>h</sup> 43'	7 <sup>h</sup> 59'	14 <sup>h</sup> 55'	16 <sup>h</sup> 42'	7 <sup>h</sup> 12'	16 <sup>h</sup> 34'	16 <sup>h</sup> D23	15 <sup>h</sup> 14'	20 <sup>h</sup> 6'	21 <sup>h</sup> 24'
S 28	12 22 30	7 <sup>h</sup> 31'05"	23 <sup>h</sup> 45'	26 <sup>h</sup> 8'	6 <sup>h</sup> 8'	5 <sup>h</sup> 21'	8 <sup>h</sup> 13'	15 <sup>h</sup> 2'	16 <sup>h</sup> 44'	7 <sup>h</sup> 11'	16 <sup>h</sup> 36'	16 <sup>h</sup> 24'	15 <sup>h</sup> 11'	20 <sup>h</sup> 12'	21 <sup>h</sup> 27'
M 29	12 26 27	8 <sup>h</sup> 30'28"	6 <sup>h</sup> 23'	27 <sup>h</sup> 10'	7 <sup>h</sup> 21'	6 <sup>h</sup> 0'	8 <sup>h</sup> 26'	15 <sup>h</sup> 9'	16 <sup>h</sup> 47'	7 <sup>h</sup> 11'	16 <sup>h</sup> 37'	16 <sup>h</sup> 25'	15 <sup>h</sup> 7'	20 <sup>h</sup> 19'	21 <sup>h</sup> 30'
T 30	12 30 23	9 <sup>h</sup> 29'48"	19 <sup>h</sup> 43'	28 <sup>h</sup> 5'	8 <sup>h</sup> 34'	6 <sup>h</sup> 38'	8 <sup>h</sup> 39'	15 <sup>h</sup> 16'	16 <sup>h</sup> 49'	7 <sup>h</sup> 10'	16 <sup>h</sup> 39'	16 <sup>h</sup> R25	15 <sup>h</sup> 4'	20 <sup>h</sup> 26'	21 <sup>h</sup> 33'
W 31	12 34 20	10 <sup>h</sup> 29'06"	3 <sup>h</sup> 22'	28 <sup>h</sup> 53'	9 <sup>h</sup> 47'	7 <sup>h</sup> 16'	8 <sup>h</sup> 53'	15 <sup>h</sup> 23'	16 <sup>h</sup> 52'	7 <sup>h</sup> 10'	16 <sup>h</sup> 40'	16 <sup>h</sup> 24'	15 <sup>h</sup> 1'	20 <sup>h</sup> 32'	21 <sup>h</sup> 37'

Delta T = 182.95 sec.

## APRIL 2083

00:00 UT

Day	Sid.t	☉	☾	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
T 1	12 38 16	11°28'22"	17°29'	29°34'	11°0'	7°15'	9°8'	15°30'	16°54'	7°R 9	16°41'	16°R20	14°58'	20°39'	21°40'
F 2	12 42 13	12°27'35"	2°1'	0°8'	12°13'	8°33'	9°20'	15°37'	16°56'	7°9	16°43'	16°15'	14°55'	20°46'	21°44'
S 3	12 46 9	13°26'47"	16°53'	0°35'	13°26'	9°11'	9°33'	15°43'	16°59'	7°8	16°44'	16°7'	14°51'	20°53'	21°47'
S 4	12 50 6	14°25'56"	1°56'	0°55'	14°39'	9°49'	9°47'	15°50'	17°1'	7°8	16°46'	15°58'	14°48'	20°59'	21°50'
M 5	12 54 3	15°25'03"	17°0'	1°7'	15°52'	10°27'	10°1'	15°57'	17°3'	7°7	16°47'	15°49'	14°45'	21°6'	21°54'
T 6	12 57 59	16°24'09"	1°56'	1°R12	17°5'	11°5'	10°14'	16°4'	17°5'	7°7	16°49'	15°41'	14°42'	21°13'	21°58'
W 7	13 1 56	17°23'13"	16°36'	1°11'	18°19'	11°44'	10°28'	16°10'	17°8'	7°6	16°50'	15°35'	14°39'	21°19'	22°1'
T 8	13 5 52	18°22'15"	0°55'	1°2'	19°32'	12°22'	10°42'	16°17'	17°10'	7°6	16°51'	15°32'	14°36'	21°26'	22°5'
F 9	13 9 49	19°21'16"	14°51'	0°48'	20°45'	13°0'	10°56'	16°23'	17°12'	7°6	16°53'	15°D31	14°32'	21°33'	22°8'
S 10	13 13 45	20°20'15"	28°24'	0°27'	21°58'	13°38'	11°10'	16°30'	17°14'	7°6	16°54'	15°31'	14°29'	21°40'	22°12'
S 11	13 17 42	21°19'12"	11°37'	0°1'	23°11'	14°16'	11°24'	16°37'	17°16'	7°5	16°56'	15°R31	14°26'	21°46'	22°16'
M 12	13 21 39	22°18'07"	24°32'	29°30'	24°24'	14°54'	11°37'	16°43'	17°18'	7°5	16°57'	15°31'	14°23'	21°53'	22°19'
T 13	13 25 35	23°17'00"	7°12'	28°55'	25°37'	15°33'	11°51'	16°49'	17°20'	7°5	16°59'	15°29'	14°20'	22°0'	22°23'
W 14	13 29 32	24°15'52"	19°40'	28°17'	26°51'	16°11'	12°5'	16°56'	17°21'	7°5	17°0'	15°24'	14°16'	22°7'	22°27'
T 15	13 33 28	25°14'41"	1°58'	27°36'	28°4'	16°49'	12°19'	17°2'	17°23'	7°5	17°2'	15°17'	14°13'	22°13'	22°31'
F 16	13 37 25	26°13'29"	14°9'	26°53'	29°17'	17°27'	12°33'	17°8'	17°25'	7°5	17°3'	15°6'	14°10'	22°20'	22°35'
S 17	13 41 21	27°12'15"	26°13'	26°9'	0°30'	18°5'	12°47'	17°15'	17°27'	7°D 5	17°4'	14°54'	14°7'	22°27'	22°38'
S 18	13 45 18	28°10'59"	8°12'	25°25'	1°43'	18°43'	13°2'	17°21'	17°28'	7°5	17°6'	14°41'	14°4'	22°33'	22°42'
M 19	13 49 14	29°9'41"	20°6'	24°42'	2°57'	19°21'	13°16'	17°27'	17°30'	7°5	17°7'	14°27'	14°1'	22°40'	22°46'
T 20	13 53 11	0°8'21"	11°57'	24°0'	4°10'	20°0'	13°30'	17°33'	17°32'	7°5	17°9'	14°15'	13°57'	22°47'	22°50'
W 21	13 57 7	1°6'59"	13°48'	23°20'	5°23'	20°38'	13°44'	17°39'	17°33'	7°5	17°10'	14°4'	13°54'	22°54'	22°54'
T 22	14 1 4	2°5'35"	25°41'	22°43'	6°36'	21°16'	13°58'	17°45'	17°35'	7°5	17°11'	13°57'	13°51'	23°0'	22°58'
F 23	14 5 1	3°4'09"	7°34'	22°9'	7°50'	21°54'	14°12'	17°51'	17°36'	7°5	17°13'	13°52'	13°48'	23°7'	23°2'
S 24	14 8 57	4°2'41"	19°48'	21°39'	9°3'	22°32'	14°26'	17°57'	17°38'	7°5	17°14'	13°49'	13°45'	23°14'	23°6'
S 25	14 12 54	5°1'10"	2°10'	21°13'	10°16'	23°10'	14°41'	18°2'	17°39'	7°6	17°16'	13°D49	13°42'	23°20'	23°10'
M 26	14 16 50	5°59'38"	14°52'	20°52'	11°29'	23°48'	14°55'	18°8'	17°40'	7°6	17°17'	13°R49	13°38'	23°27'	23°14'
T 27	14 20 47	6°58'03"	27°58'	20°35'	12°42'	24°26'	15°9'	18°14'	17°42'	7°6	17°18'	13°48'	13°35'	23°34'	23°18'
W 28	14 24 43	7°56'26"	11°32'	20°23'	13°56'	25°4'	15°23'	18°20'	17°43'	7°7	17°20'	13°46'	13°32'	23°41'	23°22'
T 29	14 28 40	8°54'47"	25°36'	20°16'	15°9'	25°42'	15°38'	18°25'	17°44'	7°7	17°21'	13°42'	13°29'	23°47'	23°26'
F 30	14 32 36	9°53'05"	1°59'	20°D14	16°32'	26°12'	15°52'	18°31'	17°45'	7°9	17°22'	13°35'	13°26'	23°54'	23°30'

# SWISS EPHEMERIS for the year 2083

MAY 2083

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
S 1	14 36 33	10♈51'22	25♉ 7	20♊17	17♋35	26♌58	16♍ 6	18♎36	17♏46	7♐ 8	17♑24	13♒25	13♓22	24♈ 1	23♉34
S 2	14 40 30	11°49'37	10♌20	20°25	18°48	27°36	16°20	18°41	17°47	7° 8	17°25	13♓14	13°19	24° 8	23°38
M 3	14 44 26	12°47'51	25°40	20°37	20° 2	28°14	16°35	18°47	17°48	7° 9	17°26	13° 3	13°16	24°14	23°42
T 4	14 48 23	13°46'02	10♌53	20°54	21°15	28°52	16°49	18°52	17°49	7° 9	17°28	12°54	13°13	24°21	23°47
W 5	14 52 19	14°44'13	25°51	21°16	22°28	29°30	17° 3	18°57	17°50	7°10	17°29	12°46	13°10	24°28	23°51
T 6	14 56 16	15°42'21	10♌24	21°42	23°41	0♍ 8	17°17	19° 2	17°51	7°10	17°30	12°41	13° 7	24°34	23°55
F 7	15 0 12	16°40'29	24°31	22°12	24°55	0°46	17°32	19° 7	17°52	7°11	17°32	12°39	13° 3	24°41	23°59
S 8	15 4 9	17°38'34	8♌10	22°46	26° 8	1°24	17°46	19°12	17°52	7°12	17°33	12°38	13° 0	24°48	24° 3
S 9	15 8 5	18°36'39	21°23	23°25	27°21	2° 2	18° 0	19°17	17°53	7°12	17°34	12°38	12°57	24°55	24° 7
M10	15 12 2	19°34'42	4♌14	24° 7	28°34	2°40	18°15	19°22	17°54	7°13	17°35	12°37	12°54	25° 1	24°11
T 11	15 15 59	20°32'43	16°47	24°52	29°48	3°18	18°29	19°27	17°54	7°14	17°37	12°35	12°51	25° 8	24°16
W12	15 19 55	21°30'43	29° 6	25°41	1♌ 1	3°56	18°43	19°32	17°55	7°15	17°38	12°30	12°48	25°15	24°20
T 13	15 23 52	22°28'42	11♊15	26°34	2°14	4°34	18°57	19°36	17°55	7°16	17°39	12°23	12°44	25°21	24°24
F 14	15 27 48	23°26'40	23°16	27°29	3°28	5°12	19°12	19°41	17°56	7°16	17°40	12°13	12°41	25°28	24°28
S 15	15 31 45	24°24'36	5♌13	28°28	4°41	5°50	19°26	19°45	17°56	7°17	17°42	12° 0	12°38	25°35	24°32
S 16	15 35 41	25°22'31	17° 6	29°30	5°54	6°28	19°40	19°50	17°56	7°18	17°43	11°47	12°35	25°42	24°36
M17	15 39 38	26°20'24	28°58	0♌35	7° 7	7° 6	19°54	19°54	17°57	7°19	17°44	11°33	12°32	25°48	24°41
T 18	15 43 34	27°18'16	10♌49	1°43	8°21	7°44	20° 9	19°58	17°57	7°20	17°45	11°21	12°28	25°55	24°45
W19	15 47 31	28°16'06	22°43	2°53	9°34	8°22	20°23	20° 2	17°57	7°21	17°46	11°10	12°25	26° 2	24°49
T 20	15 51 28	29°13'55	4♌39	4° 6	10°47	8°59	20°37	20° 6	17°57	7°22	17°47	11° 2	12°22	26° 8	24°53
F 21	15 55 24	0♌11'42	16°41	5°22	12° 1	9°37	20°51	20°10	17°57	7°23	17°49	10°57	12°19	26°15	24°57
S 22	15 59 21	1° 9'28	28°53	6°40	13°14	10°15	21° 5	20°14	17°58	7°24	17°50	10°55	12°16	26°22	25° 2
S 23	16 3 17	2° 7'12	11♌17	8° 1	14°27	10°53	21°19	20°18	17°58	7°25	17°51	10°D54	12°13	26°29	25° 6
M24	16 7 14	3° 4'55	23°58	9°25	15°41	11°31	21°34	20°22	17°57	7°27	17°52	10°54	12° 9	26°35	25°10
T 25	16 11 10	4° 2'36	7♌ 1	10°50	16°54	12° 9	21°48	20°26	17°57	7°28	17°53	10°R54	12° 6	26°42	25°14
W26	16 15 7	5° 0'15	20°29	12°19	18° 7	12°47	22° 2	20°29	17°57	7°29	17°54	10°53	12° 3	26°49	25°18
T 27	16 19 3	5°57'53	4♌24	13°49	19°20	13°24	22°16	20°33	17°57	7°30	17°55	10°50	12° 0	26°56	25°22
F 28	16 23 0	6°55'29	18°47	15°22	20°34	14° 2	22°30	20°36	17°57	7°31	17°56	10°45	11°57	27° 2	25°26
S 29	16 26 57	7°53'04	3♌36	16°58	21°47	14°40	22°44	20°39	17°56	7°33	17°57	10°38	11°54	27° 9	25°31
S 30	16 30 53	8°50'37	18°44	18°36	23° 0	15°18	22°58	20°43	17°56	7°34	17°58	10°29	11°50	27°16	25°35
M31	16 34 50	9♌48'10	4♌ 1	20♌16	24♌14	15♍56	23♎12	20♏46	17♐56	7♑35	17♒59	10♓20	11♓47	27♈22	25♉39

Delta T = 183.27 sec.

JUNE 2083

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
T 1	16 38 46	10♌45'41	19♌16	21♌59	25♌27	16♍34	23♎26	20♏49	17♐55	7♑37	18♒ 0	10♒12	11♓44	27♈29	25♉43
W 2	16 42 43	11°43'11	4♌20	23°44	26°40	17°11	23°40	20°52	17♐55	7°38	18° 1	10♓ 6	11°41	27°36	25°47
T 3	16 46 39	12°40'41	19° 2	25°31	27°54	17°49	23°53	20°55	17°54	7°40	18° 2	10° 2	11°38	27°43	25°51
F 4	16 50 36	13°38'09	3♌18	27°21	29° 7	18°27	24° 7	20°58	17°54	7°41	18° 3	10° 0	11°34	27°49	25°55
S 5	16 54 33	14°35'37	17° 6	29°13	0♌20	19° 5	24°21	21° 0	17°53	7°42	18° 4	10°D 0	11°31	27°56	25°59
S 6	16 58 29	15°33'03	0♌26	1♌ 7	1°34	19°43	24°35	21° 3	17°52	7°44	18° 4	10° 1	11°28	28° 3	26° 3
M 7	17 2 26	16°30'30	13°21	3° 3	2°47	20°20	24°49	21° 5	17°52	7°45	18° 5	10°R 2	11°25	28° 9	26° 7
T 8	17 6 22	17°27'55	25°55	5° 2	4° 0	20°58	25° 2	21° 8	17°51	7°47	18° 6	10° 2	11°22	28°16	26°11
W 9	17 10 19	18°25'20	8♊12	7° 3	5°14	21°36	25°16	21°10	17°50	7°49	18° 7	9°59	11°19	28°23	26°15
T 10	17 14 15	19°22'44	20°18	9° 6	6°27	22°14	25°30	21°12	17°49	7°50	18° 8	9°55	11°15	28°30	26°19
F 11	17 18 12	20°20'08	2♌15	11°10	7°41	22°51	25°43	21°15	17°48	7°52	18° 9	9°49	11°12	28°36	26°23
S 12	17 22 8	21°17'31	14° 8	13°16	8°54	23°29	25°57	21°17	17°47	7°53	18° 9	9°41	11° 9	28°43	26°27
S 13	17 26 5	22°14'54	25°59	15°24	10° 7	24° 7	26°10	21°19	17°46	7°55	18°10	9°33	11° 6	28°50	26°31
M14	17 30 2	23°12'16	7♌51	17°33	11°21	24°45	26°24	21°20	17°45	7°57	18°11	9°24	11° 3	28°56	26°35
T 15	17 33 58	24° 9'37	19°45	19°44	12°34	25°23	26°37	21°22	17°44	7°58	18°12	9°16	11° 0	29° 3	26°39
W16	17 37 55	25° 6'58	1♌44	21°55	13°48	26° 0	26°50	21°24	17°43	8° 0	18°12	9° 9	10°56	29°10	26°42
T 17	17 41 51	26° 4'18	13°48	24° 6	15° 1	26°38	27° 4	21°25	17°42	8° 2	18°13	9° 4	10°53	29°17	26°46
F 18	17 45 48	27° 1'37	26° 0	26°18	16°15	27°16	27°17	21°27	17°41	8° 4	18°14	9° 1	10°50	29°23	26°50
S 19	17 49 44	27°58'56	8♌22	28°30	17°28	27°54	27°30	21°28	17°40	8° 5	18°14	9°D 0	10°47	29°30	26°54
S 20	17 53 41	28°56'13	20°56	0♌42	18°42	28°31	27°43	21°30	17°38	8° 7	18°15	9° 1	10°44	29°37	26°57
M21	17 57 38	29°53'30	3♌44	2°53	19°55	29° 9	27°57	21°31	17°37	8° 9	18°15	9° 2	10°40	29°43	27° 1
T 22	18 1 34	0♌50'47	16°51	5° 3	21° 9	29°47	28°10	21°32	17°36	8°11	18°16	9° 4	10°37	29°50	27° 5
W23	18 5 31	1°48'02	0♌17	7°12	22°22	0♌25	28°23	21°33	17°34	8°13	18°17	9°R 4	10°34	29°57	27° 8
T 24	18 9 27	2°45'17	14° 6	9°21	23°36	1° 2	28°36	21°34	17°33	8°15	18°17	9° 4	10°31	0♌ 4	27°12
F 25	18 13 24	3°42'31	28°18	11°27	24°49	1°40	28°48	21°35	17°31	8°16	18°18	9° 2	10°28	0°10	27°16
S 26	18 17 20	4°39'44	12♌51	13°33	26° 3	2°18	29° 1	21°35	17°30	8°18	18°18	8°58	10°25	0°17	27°19
S 27	18 21 17	5°36'57	27°41	15°36	27°16	2°56	29°14	21°36	17°28	8°20	18°18	8°54	10°21	0°24	27°23
M28	18 25 13	6°34'10	12♌41	17°38	28°30	3°33	29°27	21°36	17°27	8°22	18°19	8°50	10°18	0°30	27°26
T 29	18 29 10	7°31'22	27°42	19°38	29°43	4°11	29°39	21°37	17°25	8°24	18°19	8°45	10°15	0°37	27°30
W30	18 33 7	8°28'34	12♌37	21♌36	0♌57	4♌49	29♌52	21♏37	17♐23	8♑26	18♒20	8♓42	10♓12	0♌44	27♈33

Delta T = 183.44 sec.

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# SWISS EPHEMERIS for the year 2083

JULY 2083

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
T 1	18 37 3	9 <sup>25</sup> 46	27 <sup>3</sup> 15	23 <sup>23</sup> 31	2 <sup>28</sup> 10	5 <sup>0</sup> 27	0 <sup>11</sup> 5	21 <sup>1</sup> 37	17 <sup>1</sup> 22	8 <sup>0</sup> 28	18 <sup>1</sup> 20	8 <sup>0</sup> 41	10 <sup>1</sup> 9	0 <sup>11</sup> 51	27 <sup>2</sup> 37
F 2	18 41 0	10 <sup>22</sup> 57	11 <sup>1</sup> 33	25 <sup>2</sup> 25	3 <sup>2</sup> 24	6 <sup>0</sup> 4	0 <sup>17</sup>	21 <sup>1</sup> 37	17 <sup>1</sup> 20	8 <sup>0</sup> 30	18 <sup>1</sup> 21	8 <sup>0</sup> 40	10 <sup>1</sup> 6	0 <sup>17</sup>	27 <sup>2</sup> 40
S 3	18 44 56	11 <sup>20</sup> 09	25 <sup>2</sup> 31	27 <sup>1</sup> 17	4 <sup>3</sup> 38	6 <sup>0</sup> 42	0 <sup>29</sup>	21 <sup>1</sup> 37	17 <sup>1</sup> 18	8 <sup>0</sup> 32	18 <sup>1</sup> 21	8 <sup>0</sup> 41	10 <sup>1</sup> 2	1 <sup>0</sup> 4	27 <sup>2</sup> 43
S 4	18 48 53	12 <sup>17</sup> 20	8 <sup>1</sup> 48	29 <sup>0</sup> 7	5 <sup>5</sup> 51	7 <sup>2</sup> 20	0 <sup>42</sup>	21 <sup>1</sup> 37	17 <sup>1</sup> 16	8 <sup>0</sup> 34	18 <sup>1</sup> 21	8 <sup>0</sup> 42	9 <sup>5</sup> 59	1 <sup>1</sup> 11	27 <sup>2</sup> 46
M 5	18 52 49	13 <sup>14</sup> 32	21 <sup>1</sup> 48	0 <sup>0</sup> 55	7 <sup>0</sup> 5	7 <sup>5</sup> 58	0 <sup>54</sup>	21 <sup>1</sup> 37	17 <sup>1</sup> 15	8 <sup>0</sup> 36	18 <sup>1</sup> 22	8 <sup>0</sup> 44	9 <sup>5</sup> 56	1 <sup>1</sup> 17	27 <sup>2</sup> 50
T 6	18 56 46	14 <sup>11</sup> 44	4 <sup>1</sup> 26	2 <sup>4</sup> 41	8 <sup>1</sup> 18	8 <sup>3</sup> 35	1 <sup>0</sup> 6	21 <sup>1</sup> 37	17 <sup>1</sup> 13	8 <sup>0</sup> 38	18 <sup>1</sup> 22	8 <sup>0</sup> 45	9 <sup>5</sup> 53	1 <sup>1</sup> 24	27 <sup>2</sup> 53
W 7	19 0 43	15 <sup>0</sup> 8'56	16 <sup>4</sup> 46	4 <sup>2</sup> 24	9 <sup>3</sup> 32	9 <sup>1</sup> 13	1 <sup>1</sup> 18	21 <sup>1</sup> 36	17 <sup>1</sup> 11	8 <sup>0</sup> 40	18 <sup>1</sup> 22	8 <sup>0</sup> 45	9 <sup>5</sup> 50	1 <sup>1</sup> 31	27 <sup>2</sup> 56
T 8	19 4 39	16 <sup>0</sup> 6'08	28 <sup>5</sup> 53	6 <sup>0</sup> 6	10 <sup>4</sup> 46	9 <sup>5</sup> 51	1 <sup>3</sup> 30	21 <sup>1</sup> 36	17 <sup>1</sup> 9	8 <sup>0</sup> 42	18 <sup>1</sup> 22	8 <sup>0</sup> 45	9 <sup>5</sup> 46	1 <sup>1</sup> 38	27 <sup>2</sup> 59
F 9	19 8 36	17 <sup>0</sup> 3'21	10 <sup>8</sup> 50	7 <sup>4</sup> 45	11 <sup>1</sup> 59	10 <sup>2</sup> 29	1 <sup>4</sup> 2	21 <sup>1</sup> 35	17 <sup>1</sup> 7	8 <sup>0</sup> 45	18 <sup>1</sup> 22	8 <sup>0</sup> 43	9 <sup>5</sup> 43	1 <sup>1</sup> 44	28 <sup>0</sup> 2
S 10	19 12 32	18 <sup>0</sup> 3'34	22 <sup>4</sup> 43	9 <sup>2</sup> 22	13 <sup>1</sup> 13	11 <sup>1</sup> 6	1 <sup>5</sup> 54	21 <sup>1</sup> 34	17 <sup>1</sup> 5	8 <sup>0</sup> 47	18 <sup>1</sup> 23	8 <sup>0</sup> 41	9 <sup>5</sup> 40	1 <sup>1</sup> 51	28 <sup>0</sup> 5
S 11	19 16 29	18 <sup>5</sup> 7'48	4 <sup>11</sup> 34	10 <sup>5</sup> 58	14 <sup>2</sup> 27	11 <sup>1</sup> 44	2 <sup>0</sup> 6	21 <sup>1</sup> 33	17 <sup>1</sup> 3	8 <sup>0</sup> 49	18 <sup>1</sup> 23	8 <sup>0</sup> 38	9 <sup>5</sup> 37	1 <sup>1</sup> 58	28 <sup>0</sup> 8
M 12	19 20 25	19 <sup>5</sup> 55'02	16 <sup>2</sup> 28	12 <sup>2</sup> 31	15 <sup>1</sup> 41	12 <sup>2</sup> 22	2 <sup>1</sup> 18	21 <sup>1</sup> 33	17 <sup>1</sup> 1	8 <sup>0</sup> 51	18 <sup>1</sup> 23	8 <sup>0</sup> 35	9 <sup>5</sup> 34	2 <sup>0</sup> 4	28 <sup>0</sup> 11
T 13	19 24 22	20 <sup>5</sup> 52'16	28 <sup>2</sup> 27	14 <sup>0</sup> 2	16 <sup>1</sup> 54	13 <sup>0</sup> 0	2 <sup>2</sup> 29	21 <sup>1</sup> 32	16 <sup>5</sup> 59	8 <sup>0</sup> 53	18 <sup>1</sup> 23	8 <sup>0</sup> 32	9 <sup>5</sup> 31	2 <sup>1</sup> 11	28 <sup>0</sup> 14
W 14	19 28 18	21 <sup>4</sup> 49'30	10 <sup>10</sup> 34	15 <sup>5</sup> 31	18 <sup>0</sup> 8	13 <sup>3</sup> 37	2 <sup>4</sup> 41	21 <sup>1</sup> 30	16 <sup>5</sup> 57	8 <sup>0</sup> 55	18 <sup>1</sup> 23	8 <sup>0</sup> 30	9 <sup>5</sup> 27	2 <sup>1</sup> 18	28 <sup>0</sup> 17
T 15	19 32 15	22 <sup>4</sup> 46'45	22 <sup>2</sup> 50	16 <sup>5</sup> 58	19 <sup>2</sup> 22	14 <sup>1</sup> 15	2 <sup>5</sup> 52	21 <sup>1</sup> 29	16 <sup>5</sup> 55	8 <sup>0</sup> 57	18 <sup>1</sup> 23	8 <sup>0</sup> 28	9 <sup>5</sup> 24	2 <sup>2</sup> 25	28 <sup>0</sup> 20
F 16	19 36 12	23 <sup>4</sup> 44'00	5 <sup>0</sup> 16	18 <sup>2</sup> 22	20 <sup>2</sup> 36	14 <sup>5</sup> 53	3 <sup>0</sup> 4	21 <sup>1</sup> 28	16 <sup>5</sup> 53	8 <sup>0</sup> 59	18 <sup>1</sup> 23	8 <sup>0</sup> 28	9 <sup>5</sup> 21	2 <sup>3</sup> 31	28 <sup>0</sup> 23
S 17	19 40 8	24 <sup>4</sup> 41'16	17 <sup>5</sup> 55	19 <sup>4</sup> 45	21 <sup>1</sup> 49	15 <sup>5</sup> 31	3 <sup>1</sup> 15	21 <sup>1</sup> 27	16 <sup>5</sup> 50	9 <sup>0</sup> 2	18 <sup>1</sup> 23	8 <sup>0</sup> 28	9 <sup>5</sup> 18	2 <sup>3</sup> 38	28 <sup>0</sup> 26
S 18	19 44 5	25 <sup>3</sup> 38'31	0 <sup>11</sup> 46	21 <sup>0</sup> 5	23 <sup>0</sup> 3	16 <sup>0</sup> 9	3 <sup>2</sup> 26	21 <sup>1</sup> 25	16 <sup>4</sup> 48	9 <sup>0</sup> 4	18 <sup>1</sup> 23	8 <sup>0</sup> 29	9 <sup>5</sup> 15	2 <sup>4</sup> 45	28 <sup>0</sup> 28
M 19	19 48 1	26 <sup>3</sup> 35'47	13 <sup>5</sup> 51	22 <sup>2</sup> 23	24 <sup>1</sup> 17	16 <sup>4</sup> 46	3 <sup>3</sup> 37	21 <sup>1</sup> 23	16 <sup>4</sup> 46	9 <sup>0</sup> 6	18 <sup>1</sup> 23	8 <sup>0</sup> 30	9 <sup>5</sup> 12	2 <sup>5</sup> 51	28 <sup>0</sup> 31
T 20	19 51 58	27 <sup>3</sup> 33'03	27 <sup>1</sup> 11	23 <sup>3</sup> 38	25 <sup>3</sup> 31	17 <sup>2</sup> 24	3 <sup>4</sup> 48	21 <sup>1</sup> 22	16 <sup>4</sup> 44	9 <sup>0</sup> 8	18 <sup>1</sup> 23	8 <sup>0</sup> 31	9 <sup>5</sup> 8	2 <sup>5</sup> 58	28 <sup>0</sup> 34
W 21	19 55 54	28 <sup>3</sup> 30'19	10 <sup>10</sup> 46	24 <sup>5</sup> 51	26 <sup>4</sup> 45	18 <sup>0</sup> 2	3 <sup>5</sup> 59	21 <sup>1</sup> 20	16 <sup>4</sup> 42	9 <sup>0</sup> 10	18 <sup>1</sup> 23	8 <sup>0</sup> 31	9 <sup>5</sup> 5	3 <sup>0</sup> 5	28 <sup>0</sup> 36
T 22	19 59 51	29 <sup>2</sup> 27'35	24 <sup>6</sup> 36	26 <sup>0</sup> 2	27 <sup>5</sup> 59	18 <sup>4</sup> 40	4 <sup>1</sup> 10	21 <sup>1</sup> 18	16 <sup>4</sup> 39	9 <sup>0</sup> 12	18 <sup>1</sup> 23	8 <sup>0</sup> 32	9 <sup>5</sup> 2	3 <sup>1</sup> 12	28 <sup>0</sup> 39
F 23	20 3 47	0 <sup>0</sup> 24'51	8 <sup>11</sup> 41	27 <sup>1</sup> 10	29 <sup>1</sup> 12	19 <sup>1</sup> 18	4 <sup>2</sup> 1	21 <sup>1</sup> 16	16 <sup>4</sup> 37	9 <sup>0</sup> 15	18 <sup>1</sup> 23	8 <sup>0</sup> 32	9 <sup>5</sup> 59	3 <sup>1</sup> 18	28 <sup>0</sup> 41
S 24	20 7 44	1 <sup>22</sup> 08	23 <sup>0</sup> 0	28 <sup>1</sup> 16	0 <sup>0</sup> 26	19 <sup>5</sup> 55	4 <sup>3</sup> 1	21 <sup>1</sup> 14	16 <sup>4</sup> 35	9 <sup>0</sup> 17	18 <sup>1</sup> 23	8 <sup>0</sup> 31	9 <sup>5</sup> 56	3 <sup>2</sup> 25	28 <sup>0</sup> 44
S 25	20 11 41	2 <sup>19</sup> 25	7 <sup>2</sup> 30	29 <sup>1</sup> 18	1 <sup>4</sup> 40	20 <sup>2</sup> 33	4 <sup>4</sup> 2	21 <sup>1</sup> 12	16 <sup>4</sup> 33	9 <sup>0</sup> 19	18 <sup>1</sup> 23	8 <sup>0</sup> 31	9 <sup>5</sup> 52	3 <sup>3</sup> 32	28 <sup>0</sup> 46
M 26	20 15 37	3 <sup>16</sup> 42	22 <sup>0</sup> 6	0 <sup>11</sup> 19	2 <sup>5</sup> 54	21 <sup>1</sup> 11	4 <sup>5</sup> 52	21 <sup>1</sup> 10	16 <sup>4</sup> 30	9 <sup>0</sup> 21	18 <sup>1</sup> 23	8 <sup>0</sup> 30	9 <sup>5</sup> 49	3 <sup>3</sup> 38	28 <sup>0</sup> 49
T 27	20 19 34	4 <sup>14</sup> 00	6 <sup>3</sup> 42	1 <sup>1</sup> 16	4 <sup>0</sup> 8	21 <sup>1</sup> 49	5 <sup>0</sup> 3	21 <sup>1</sup> 8	16 <sup>4</sup> 28	9 <sup>0</sup> 24	18 <sup>1</sup> 23	8 <sup>0</sup> 30	9 <sup>5</sup> 46	3 <sup>4</sup> 45	28 <sup>0</sup> 51
W 28	20 23 30	5 <sup>11</sup> 19	21 <sup>1</sup> 14	2 <sup>1</sup> 10	5 <sup>2</sup> 22	22 <sup>2</sup> 27	5 <sup>1</sup> 13	21 <sup>1</sup> 5	16 <sup>4</sup> 26	9 <sup>0</sup> 26	18 <sup>1</sup> 22	8 <sup>0</sup> 29	9 <sup>5</sup> 43	3 <sup>5</sup> 52	28 <sup>0</sup> 53
T 29	20 27 27	6 <sup>0</sup> 8'38	5 <sup>1</sup> 35	3 <sup>0</sup> 1	6 <sup>3</sup> 36	23 <sup>0</sup> 5	5 <sup>2</sup> 23	21 <sup>1</sup> 3	16 <sup>4</sup> 23	9 <sup>0</sup> 28	18 <sup>1</sup> 22	8 <sup>0</sup> 29	9 <sup>5</sup> 40	3 <sup>5</sup> 59	28 <sup>0</sup> 55
F 30	20 31 23	7 <sup>0</sup> 5'57	19 <sup>4</sup> 40	3 <sup>4</sup> 48	7 <sup>5</sup> 50	23 <sup>2</sup> 42	5 <sup>3</sup> 33	21 <sup>1</sup> 0	16 <sup>4</sup> 21	9 <sup>0</sup> 30	18 <sup>1</sup> 22	8 <sup>0</sup> 29	9 <sup>5</sup> 37	4 <sup>0</sup> 5	28 <sup>0</sup> 57
S 31	20 35 20	8 <sup>0</sup> 1'17	3 <sup>1</sup> 25	4 <sup>11</sup> 32	9 <sup>0</sup> 4	24 <sup>2</sup> 20	5 <sup>11</sup> 43	20 <sup>1</sup> 57	16 <sup>4</sup> 19	9 <sup>0</sup> 32	18 <sup>1</sup> 22	8 <sup>0</sup> 29	9 <sup>5</sup> 33	4 <sup>1</sup> 12	29 <sup>0</sup> 0

Delta T = 183.60 sec.

AUGUST 2083

00:00 UT

Day	Sid.t	☉	☾	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
S 1	20 39 17	9♌ 0°39	16♋48	5♎13	10♏18	24♌58	5♊53	20°R55	16°R16	9♏35	18°R21	8°R29	8≈30	4♐19	29♌2
M 2	20 43 13	9°58'01	29°50	5°50	11°32	25°36	6°2	20♋52	16≈14	9°37	18♑21	8≈29	8°27	4°25	29°4
T 3	20 47 10	10°55'24	12♑30	6°22	12°46	26°14	6°12	20°49	16°11	9°39	18°21	8°29	8°24	4°32	29°6
W 4	20 51 6	11°52'48	24°53	6°51	14°0	26°52	6°21	20°46	16°9	9°41	18°21	8°29	8°21	4°39	29°7
T 5	20 55 3	12°50'14	7♌1	7°15	15°14	27°30	6°31	20°43	16°7	9°44	18°20	8°28	8°18	4°46	29°9
F 6	20 58 59	13°47'41	19°0	7°35	16°28	28°8	6°40	20°40	16°4	9°46	18°20	8°D28	8°14	4°52	29°11
S 7	21 2 56	14°45'09	0♐53	7°50	17°42	28°46	6°49	20°37	16°2	9°48	18°19	8°29	8°11	4°59	29°13
S 8	21 6 52	15°42'38	12°45	8°0	18°56	29°24	6°58	20°33	16°0	9°50	18°19	8°29	8°8	5°6	29°14
M 9	21 10 49	16°40'08	24°41	8°R5	20°10	0♎2	7°7	20°30	15°57	9°52	18°19	8°30	8°5	5°12	29°16
T 10	21 14 46	17°37'40	6♌45	8°5	21°24	0°40	7°15	20°27	15°55	9°55	18°18	8°31	8°2	5°19	29°18
W 11	21 18 42	18°35'13	18°59	8°0	22°38	1°17	7°24	20°23	15°52	9°57	18°18	8°32	7°58	5°26	29°19
T 12	21 22 39	19°32'47	1♌27	7°49	23°52	1°55	7°32	20°20	15°50	9°59	18°17	8°32	7°55	5°33	29°20
F 13	21 26 35	20°30'23	14°9	7°33	25°7	2°33	7°41	20°16	15°48	10°1	18°17	8°R32	7°52	5°39	29°22
S 14	21 30 32	21°27'59	27°8	7°11	26°21	3°12	7°49	20°12	15°45	10°3	18°16	8°32	7°49	5°46	29°23
S 15	21 34 28	22°25'37	10♎23	6°44	27°35	3°50	7°57	20°9	15°43	10°6	18°15	8°30	7°46	5°53	29°24
M 16	21 38 25	23°23'16	23°52	6°12	28°49	4°28	8°5	20°5	15°40	10°8	18°15	8°29	7°43	5°59	29°26
T 17	21 42 21	24°20'55	7♎34	5°35	0♎3	5°6	8°12	20°1	15°38	10°10	18°14	8°27	7°39	6°6	29°27
W 18	21 46 18	25°18'36	21°28	4°54	1°17	5°44	8°20	19°57	15°36	10°12	18°14	8°25	7°36	6°13	29°28
T 19	21 50 14	26°16'18	5♎30	4°9	2°32	6°22	8°28	19°53	15°33	10°14	18°13	8°23	7°33	6°19	29°29
F 20	21 54 11	27°14'01	19°38	3°20	3°46	7°0	8°35	19°49	15°31	10°16	18°12	8°22	7°30	6°26	29°30
S 21	21 58 8	28°11'45	3♌51	2°30	5°0	7°38	8°42	19°45	15°29	10°19	18°12	8°D22	7°27	6°33	29°31
S 22	22 2 4	29°9'30	18°5	1°38	6°14	8°16	8°49	19°41	15°26	10°21	18°11	8°23	7°24	6°40	29°31
M 23	22 6 1	0♎7'17	2♌19	0°45	7°28	8°54	8°56	19°37	15°24	10°23	18°10	8°24	7°20	6°46	29°32
T 24	22 9 57	1°5'04	16°29	29♏53	8°43	9°32	9°3	19°32	15°22	10°25	18°10	8°25	7°17	6°53	29°33
W 25	22 13 54	2°2'53	0≈34	29°2	9°57	10°10	9°9	19°28	15°20	10°27	18°9	8°26	7°14	7°0	29°34
T 26	22 17 50	3°0'42	14°29	28°14	11°11	10°49	9°16	19°24	15°17	10°29	18°8	8°R26	7°11	7°6	29°34
F 27	22 21 47	3°58'34	28°13	27°30	12°25	11°27	9°22	19°20	15°15	10°31	18°7	8°25	7°8	7°13	29°35
S 28	22 25 44	4°56'26	11♋42	26°51	13°40	12°5	9°28	19°15	15°13	10°33	18°7	8°23	7°4	7°20	29°35
S 29	22 29 40	5°54'20	7♎54	26°17	14°54	12°43	9°34	19°11	15°11	10°35	18°6	8°19	7°1	7°26	29°36
M 30	22 33 37	6°52'16	2♑49	25°49	16°8	13°21	9°40	19°6	15°9	10°37	18°5	8°15	6°58	7°33	29°36
T 31	22 37 33	7♎50'13	20♑27	25♏29	17♎22	14♎0	9♐45	19♋2	15≈6	10♌39	18♑4	8≈10	6≈55	7♐40	29♌36

# SWISS EPHEMERIS for the year 2083

## SEPTEMBER 2083

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
W 1	22 41 30	8 <sup>h</sup> 48'13"	2 <sup>h</sup> 49'	25°R16	18 <sup>h</sup> 37'	14 <sup>h</sup> 38'	9 <sup>h</sup> 51'	18°R57	15°R 4	10 <sup>h</sup> 241	18°R 3	8°R 5	6 <sup>h</sup> 52'	7 <sup>h</sup> 47'	29 <sup>h</sup> 36'
T 2	22 45 26	9°46'14"	14°57'	25°D11	19°51'	15°16'	9°56'	18 <sup>h</sup> 53'	15 <sup>h</sup> 22'	10°43'	18°Y 2	8 <sup>h</sup> 22'	6°49'	7°53'	29°37'
F 3	22 49 23	10°44'17"	26°55'	25°Q15	21° 5'	15°54'	10° 1'	18°48'	15° 0'	10°45'	18° 2'	7°59'	6°45'	8° 0'	29°37'
S 4	22 53 19	11°42'22"	8 <sup>h</sup> 48'	25°27'	22°19'	16°33'	10° 6'	18°44'	14°58'	10°47'	18° 1'	7°D58'	6°42'	8° 7'	29°R37'
S 5	22 57 16	12°40'29"	20°40'	25°48'	23°34'	17°11'	10°11'	18°39'	14°56'	10°49'	18° 0'	7°59'	6°39'	8°13'	29°37'
M 6	23 1 12	13°38'37"	2 <sup>h</sup> 36'	26°17'	24°48'	17°49'	10°16'	18°35'	14°54'	10°51'	17°59'	8° 0'	6°36'	8°20'	29°37'
T 7	23 5 9	14°36'48"	14°41'	26°55'	26° 2'	18°28'	10°20'	18°30'	14°52'	10°53'	17°58'	8° 1'	6°33'	8°27'	29°36'
W 8	23 9 6	15°35'01"	26°59'	27°40'	27°17'	19° 6'	10°24'	18°26'	14°50'	10°55'	17°57'	8° 3'	6°29'	8°34'	29°36'
T 9	23 13 2	16°33'16"	9 <sup>h</sup> 23'	28°34'	28°31'	19°44'	10°28'	18°21'	14°48'	10°57'	17°56'	8°R 3	6°26'	8°40'	29°36'
F 10	23 16 59	17°31'32"	22°30'	29°34'	29°45'	20°23'	10°32'	18°16'	14°46'	10°59'	17°55'	8° 2'	6°23'	8°47'	29°36'
S 11	23 20 55	18°29'51"	5 <sup>h</sup> 47'	0 <sup>h</sup> 42'	1 <sup>h</sup> 0'	21° 1'	10°36'	18°12'	14°44'	11° 1'	17°54'	8° 0'	6°20'	8°54'	29°35'
S 12	23 24 52	19°28'11"	19°25'	1°56'	2°14'	21°40'	10°39'	18° 7'	14°42'	11° 3'	17°53'	7°55'	6°17'	9° 0'	29°35'
M13	23 28 48	20°26'33"	3 <sup>h</sup> 21'	3°16'	3°28'	22°18'	10°43'	18° 3'	14°41'	11° 4'	17°52'	7°49'	6°14'	9° 7'	29°34'
T 14	23 32 45	21°24'57"	17°31'	4°42'	4°43'	22°57'	10°46'	17°58'	14°39'	11° 6'	17°51'	7°42'	6°10'	9°14'	29°34'
W15	23 36 41	22°23'22"	1 <sup>h</sup> 51'	6°12'	5°57'	23°35'	10°49'	17°53'	14°37'	11° 8'	17°50'	7°35'	6° 7'	9°20'	29°33'
T 16	23 40 38	23°21'50"	16°14'	7°46'	7°11'	24°14'	10°52'	17°49'	14°35'	11°10'	17°49'	7°29'	6° 4'	9°27'	29°32'
F 17	23 44 35	24°20'19"	0 <sup>h</sup> 37'	9°24'	8°26'	24°52'	10°54'	17°44'	14°34'	11°12'	17°48'	7°25'	6° 1'	9°34'	29°31'
S 18	23 48 31	25°18'49"	14°54'	11° 5'	9°40'	25°31'	10°57'	17°40'	14°32'	11°13'	17°47'	7°23'	5°58'	9°41'	29°31'
S 19	23 52 28	26°17'21"	29° 4'	12°49'	10°54'	26° 9'	10°59'	17°35'	14°30'	11°15'	17°46'	7°D22'	5°55'	9°47'	29°30'
M20	23 56 24	27°15'55"	13 <sup>h</sup> 4'	14°35'	12° 9'	26°48'	11° 1'	17°31'	14°29'	11°17'	17°45'	7°23'	5°51'	9°54'	29°29'
T 21	0 0 21	28°14'31"	26°54'	16°22'	13°23'	27°27'	11° 3'	17°26'	14°27'	11°18'	17°44'	7°24'	5°48'	10° 1'	29°28'
W22	0 4 17	29°13'08"	10 <sup>h</sup> 34'	18°11'	14°37'	28° 5'	11° 4'	17°22'	14°26'	11°20'	17°43'	7°R24'	5°45'	10° 7'	29°27'
T 23	0 8 14	0 <sup>h</sup> 11'46"	24° 4'	20° 1'	15°52'	28°44'	11° 6'	17°17'	14°24'	11°22'	17°42'	7°23'	5°42'	10°14'	29°26'
F 24	0 12 10	1°10'27"	7 <sup>h</sup> 23'	21°51'	17° 6'	29°22'	11° 7'	17°13'	14°23'	11°23'	17°41'	7°19'	5°39'	10°21'	29°24'
S 25	0 16 7	2° 9'09"	20°30'	23°41'	18°20'	0 <sup>h</sup> 1'	11° 8'	17° 9'	14°22'	11°25'	17°39'	7°13'	5°35'	10°27'	29°23'
S 26	0 20 3	3° 7'53"	3 <sup>h</sup> Y25'	25°32'	19°35'	0°40'	11° 9'	17° 4'	14°20'	11°26'	17°38'	7° 5'	5°32'	10°34'	29°22'
M27	0 24 0	4° 6'39"	16° 8'	27°23'	20°49'	1°19'	11° 9'	17° 0'	14°19'	11°28'	17°37'	6°55'	5°29'	10°41'	29°20'
T 28	0 27 57	5° 5'27"	28°36'	29°13'	22° 3'	1°57'	11°10'	16°56'	14°18'	11°29'	17°36'	6°44'	5°26'	10°47'	29°19'
W29	0 31 53	6° 4'17"	10 <sup>h</sup> 53'	1 <sup>h</sup> 3'	23°18'	2°36'	11°10'	16°51'	14°17'	11°31'	17°35'	6°34'	5°23'	10°54'	29°17'
T 30	0 35 50	7 <sup>h</sup> 3'10"	22 <sup>h</sup> 58'	2 <sup>h</sup> 52'	24 <sup>h</sup> 32'	3 <sup>h</sup> 15'	11°R10	16 <sup>h</sup> 47'	14 <sup>h</sup> 15'	11 <sup>h</sup> 32'	17 <sup>h</sup> 34'	6 <sup>h</sup> 25'	5 <sup>h</sup> 20'	11 <sup>h</sup> 1'	29 <sup>h</sup> 16'

Delta T = 183.94 sec.

## OCTOBER 2083

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
F 1	0 39 46	8 <sup>h</sup> 2'05"	4 <sup>h</sup> 11'54"	4 <sup>h</sup> 41'	25 <sup>h</sup> 46'	3 <sup>h</sup> 54'	11°R10	16°R43	14°R14	11 <sup>h</sup> 234	17°R33	6°R17	5 <sup>h</sup> 16'	11 <sup>h</sup> 8'	29°R14
S 2	0 43 43	9° 1'02"	16°45'	6°29'	27° 1'	4°32'	11 <sup>h</sup> 9'	16 <sup>h</sup> 39'	14 <sup>h</sup> 13'	11°35'	17°Y31	6 <sup>h</sup> 12'	5°13'	11°14'	29 <sup>h</sup> 13'
S 3	0 47 39	10° 0'01"	28°35'	8°17'	28°15'	5°11'	11° 9'	16°35'	14°12'	11°36'	17°30'	6°10'	5°10'	11°21'	29°11'
M 4	0 51 36	10°59'03"	10 <sup>h</sup> 29'	10° 3'	29°29'	5°50'	11° 8'	16°31'	14°11'	11°38'	17°29'	6°D 9	5° 7'	11°28'	29° 9'
T 5	0 55 32	11°58'06"	22°32'	11°49'	0 <sup>h</sup> 43'	6°29'	11° 7'	16°27'	14°10'	11°39'	17°28'	6° 9'	5° 4'	11°34'	29° 7'
W 6	0 59 29	12°57'13"	4 <sup>h</sup> 24'	13°35'	1°58'	7° 8'	11° 6'	16°23'	14° 9'	11°40'	17°27'	6°R10	5° 1'	11°41'	29° 5'
T 7	1 3 26	13°56'21"	17°26'	15°19'	3°12'	7°47'	11° 4'	16°19'	14° 9'	11°41'	17°26'	6° 9'	4°57'	11°48'	29° 4'
F 8	1 7 22	14°55'32"	0 <sup>h</sup> 26'	17° 3'	4°26'	8°26'	11° 3'	16°16'	14° 8'	11°43'	17°25'	6° 7'	4°54'	11°54'	29° 2'
S 9	1 11 19	15°54'44"	13°52'	18°46'	5°41'	9° 5'	11° 1'	16°12'	14° 7'	11°44'	17°23'	6° 2'	4°51'	12° 1'	29° 0'
S 10	1 15 15	16°53'59"	27°45'	20°28'	6°55'	9°44'	10°59'	16° 8'	14° 6'	11°45'	17°22'	5°54'	4°48'	12° 8'	28°57'
M11	1 19 12	17°53'17"	12 <sup>h</sup> 2'	22° 9'	8° 9'	10°23'	10°57'	16° 5'	14° 6'	11°46'	17°21'	5°44'	4°45'	12°15'	28°55'
T 12	1 23 8	18°52'36"	26°38'	23°50'	9°24'	11° 2'	10°54'	16° 1'	14° 5'	11°47'	17°20'	5°33'	4°41'	12°21'	28°53'
W13	1 27 5	19°51'57"	11 <sup>h</sup> 11'	25°29'	10°38'	11°41'	10°52'	15°58'	14° 5'	11°48'	17°19'	5°22'	4°38'	12°28'	28°51'
T 14	1 31 1	20°51'20"	26°15'	27° 8'	11°52'	12°20'	10°49'	15°54'	14° 4'	11°49'	17°18'	5°13'	4°35'	12°35'	28°49'
F 15	1 34 58	21°50'46"	11 <sup>h</sup> 0'	28°47'	13° 7'	13° 0'	10°46'	15°51'	14° 4'	11°50'	17°16'	5° 5'	4°32'	12°41'	28°46'
S 16	1 38 55	22°50'13"	25°32'	0 <sup>h</sup> 24'	14°21'	13°39'	10°43'	15°48'	14° 3'	11°51'	17°15'	5° 0'	4°29'	12°48'	28°44'
S 17	1 42 51	23°49'42"	9 <sup>h</sup> 34'	2° 1'	15°35'	14°18'	10°40'	15°45'	14° 3'	11°52'	17°14'	4°58'	4°26'	12°55'	28°42'
M18	1 46 48	24°49'12"	23°48'	3°37'	16°49'	14°57'	10°36'	15°42'	14° 2'	11°53'	17°13'	4°D57'	4°22'	13° 1'	28°39'
T 19	1 50 44	25°48'44"	7 <sup>h</sup> 30'	5°13'	18° 4'	15°36'	10°32'	15°39'	14° 2'	11°54'	17°12'	4°R57'	4°19'	13° 8'	28°37'
W20	1 54 41	26°48'18"	20°55'	6°48'	19°18'	16°16'	10°28'	15°36'	14° 2'	11°55'	17°11'	4°57'	4°16'	13°15'	28°34'
T 21	1 58 37	27°47'54"	4 <sup>h</sup> 6'	8°22'	20°32'	16°55'	10°24'	15°33'	14° 2'	11°56'	17°10'	4°54'	4°13'	13°21'	28°32'
F 22	2 2 34	28°47'31"	17° 4'	9°56'	21°46'	17°34'	10°20'	15°30'	14° 2'	11°57'	17° 8'	4°49'	4°10'	13°28'	28°29'
S 23	2 6 30	29°47'10"	29°51'	11°29'	23° 1'	18°14'	10°15'	15°28'	14° 2'	11°57'	17° 7'	4°40'	4° 6'	13°35'	28°26'
S 24	2 10 27	0 <sup>h</sup> 46'51"	12 <sup>h</sup> Y28'	13° 2'	24°15'	18°53'	10°11'	15°25'	14°D 2	11°58'	17° 6'	4°29'	4° 3'	13°42'	28°24'
M25	2 14 23	1°46'34"	24°54'	14°34'	25°29'	19°32'	10° 6'	15°23'	14° 2'	11°59'	17° 5'	4°16'	4° 0'	13°48'	28°21'
T 26	2 18 20	2°46'19"	7 <sup>h</sup> 11'	16° 5'	26°43'	20°12'	10° 1'	15°20'	14° 2'	12° 0'	17° 4'	4° 2'	3°57'	13°55'	28°18'
W27	2 22 17	3°46'05"	19°18'	17°36'	27°57'	20°51'	9°56'	15°18'	14° 2'	12° 0'	17° 3'	3°47'	3°54'	14° 2'	28°15'
T 28	2 26 13	4°45'54"	1 <sup>h</sup> 11'	19° 6'	29°12'	21°31'	9°50'	15°16'	14° 2'	12° 1'	17° 2'	3°35'	3°51'	14° 8'	28°13'
F 29	2 30 10	5°45'45"	13°11'	20°36'	0 <sup>h</sup> 26'	22°10'	9°45'	15°14'	14° 2'	12° 1'	17° 1'	3°24'	3°47'	14°15'	28°10'
S 30	2 34 6	6°45'38"	25° 0'	22° 5'	1°40'	22°50'	9°39'	15°12'	14° 3'	12° 2'	17° 0'	3°16'	3°44'	14°22'	28° 7'
S 31	2 38 3	7 <sup>h</sup> 45'34"	6 <sup>h</sup> 48'	23 <sup>h</sup> 34'	2 <sup>h</sup> 54'	23 <sup>h</sup> 29'	9 <sup>h</sup> 33'	15 <sup>h</sup> 10'	14 <sup>h</sup> 33'	12 <sup>h</sup> 22'	16 <sup>h</sup> Y59'	3 <sup>h</sup> 12'	3 <sup>h</sup> 41'	14 <sup>h</sup> 28'	28 <sup>h</sup> 4'

Delta T = 184.10 sec.

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# SWISS EPHEMERIS for the year 2083

NOVEMBER 2083

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
M 1	2 41 59	8♉45'31	18♊40	25♉2	4♊8	24♊9	9°R27	15°R 8	14♊3	12♉3	16°R57	3°R 9	3♊38	14♉35	28°R 1
T 2	2 45 56	9°45'31	0♉40	26°29	5°22	24°48	9♉21	15°R 6	14° 4	12° 3	16°R56	3°D 9	3°35	14°42	27°R58
W 3	2 49 53	10°45'32	12°53	27°56	6°37	25°28	9°15	15° 5	14° 4	12° 4	16°55	3°R 9	3°32	14°48	27°55
T 4	2 53 49	11°45'36	25°26	29°23	7°51	26° 8	9° 9	15° 3	14° 5	12° 4	16°54	3♊8	3°28	14°55	27°52
F 5	2 57 46	12°45'42	8♉23	0♊48	9° 5	26°47	9° 2	15° 2	14° 5	12° 4	16°53	3° 6	3°25	15° 2	27°49
S 6	3 1 42	13°45'50	21°48	2°13	10°19	27°27	8°55	15° 1	14° 6	12° 5	16°52	3° 1	3°22	15° 9	27°46
S 7	3 5 39	14°46'00	5♊43	3°37	11°33	28° 7	8°49	14°59	14° 7	12° 5	16°51	2°54	3°19	15°15	27°43
M 8	3 9 35	15°46'12	20° 7	5° 1	12°47	28°47	8°42	14°58	14° 8	12° 5	16°50	2°44	3°16	15°22	27°40
T 9	3 13 32	16°46'26	4♉55	6°23	14° 1	29°27	8°35	14°57	14° 8	12° 5	16°49	2°33	3°12	15°29	27°37
W10	3 17 28	17°46'42	20° 0	7°45	15°16	0♉6	8°28	14°56	14° 9	12° 5	16°48	2°22	3° 9	15°35	27°34
T 11	3 21 25	18°46'59	5♊11	9° 6	16°30	0°46	8°20	14°56	14°10	12° 6	16°47	2°12	3° 6	15°42	27°31
F 12	3 25 21	19°47'19	20°18	10°25	17°44	1°26	8°13	14°55	14°11	12° 6	16°46	2° 4	3° 3	15°49	27°27
S 13	3 29 18	20°47'40	5♊12	11°43	18°58	2° 6	8° 5	14°54	14°12	12° 6	16°45	1°59	3° 0	15°55	27°24
S 14	3 33 15	21°48'02	19°45	13° 0	20°12	2°46	7°58	14°54	14°13	12°R 6	16°44	1°56	2°57	16° 2	27°21
M15	3 37 11	22°48'26	3♊55	14°16	21°26	3°26	7°50	14°53	14°14	12° 6	16°44	1°D56	2°53	16° 9	27°18
T 16	3 41 8	23°48'51	17°41	15°29	22°40	4° 6	7°43	14°53	14°15	12° 6	16°43	1°R56	2°50	16°15	27°15
W17	3 45 4	24°49'17	1♊4	16°41	23°54	4°46	7°35	14°53	14°17	12° 6	16°42	1°56	2°47	16°22	27°12
T 18	3 49 1	25°49'45	14° 8	17°50	25° 8	5°26	7°27	14°D53	14°18	12° 6	16°41	1°54	2°44	16°29	27° 8
F 19	3 52 57	26°50'13	26°54	18°57	26°22	6° 6	7°19	14°53	14°19	12° 5	16°40	1°50	2°41	16°35	27° 5
S 20	3 56 54	27°50'44	9♉27	20° 1	27°36	6°46	7°11	14°53	14°20	12° 5	16°39	1°44	2°38	16°42	27° 2
S 21	4 0 51	28°51'15	21°48	21° 2	28°50	7°26	7° 3	14°53	14°22	12° 5	16°38	1°35	2°34	16°49	26°59
M22	4 4 47	29°51'48	4♉1	21°59	0♊4	8° 7	6°55	14°54	14°23	12° 5	16°38	1°23	2°31	16°56	26°56
T 23	4 8 44	0♊52'22	16° 6	22°52	1°18	8°47	6°47	14°54	14°25	12° 4	16°37	1°11	2°28	17° 2	26°53
W24	4 12 40	1°52'58	28° 4	23°41	2°32	9°27	6°39	14°55	14°26	12° 4	16°36	0°59	2°25	17° 9	26°49
T 25	4 16 37	2°53'35	9♉58	24°24	3°46	10° 7	6°31	14°56	14°28	12° 4	16°35	0°49	2°22	17°16	26°46
F 26	4 20 33	3°54'14	21°49	25° 2	4°59	10°47	6°23	14°56	14°30	12° 3	16°35	0°40	2°18	17°22	26°43
S 27	4 24 30	4°54'54	3♊37	25°32	6°13	11°28	6°14	14°57	14°31	12° 3	16°34	0°34	2°15	17°29	26°40
S 28	4 28 26	5°55'35	15°27	25°55	7°27	12° 8	6° 6	14°58	14°33	12° 3	16°33	0°30	2°12	17°36	26°37
M29	4 32 23	6°56'18	27°20	26°10	8°41	12°48	5°58	14°59	14°35	12° 2	16°32	0°D28	2° 9	17°42	26°34
T 30	4 36 20	7°57'03	9♉21	26°R17	9♊55	13♉29	5♉50	15°R 1	14°R37	12♉2	16°R32	0°R29	2°R 6	17°R49	26°R30

Delta T = 184.26 sec.

DECEMBER 2083

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
W 1	4 40 16	8♊57'49	21♉34	26°R13	11♊9	14♉9	5°R42	15°R 2	14°R38	12°R 1	16°R31	0°R30	2°R 3	17°R56	26°R27
T 2	4 44 13	9°58'36	4♉3	25°R59	12°22	14°50	5♉34	15° 3	14°40	12°R 0	16°R31	0°R31	1°59	18° 2	26°R24
F 3	4 48 9	10°59'25	16°55	25°33	13°36	15°30	5°25	15° 5	14°42	12° 0	16°30	0°31	1°56	18° 9	26°21
S 4	4 52 6	12° 0'15	0♊12	24°57	14°50	16°11	5°17	15° 6	14°44	11°59	16°29	0°29	1°53	18°16	26°18
S 5	4 56 2	13° 1'07	13°58	24°10	16° 3	16°51	5° 9	15° 8	14°46	11°59	16°29	0°25	1°50	18°22	26°15
M 6	4 59 59	14° 2'00	28°13	23°12	17°17	17°32	5° 1	15°10	14°48	11°58	16°28	0°20	1°47	18°29	26°12
T 7	5 3 55	15° 2'55	12♉56	22° 5	18°31	18°13	4°53	15°12	14°50	11°57	16°28	0°13	1°44	18°36	26° 9
W 8	5 7 52	16° 3'50	28° 0	20°51	19°44	18°53	4°45	15°14	14°53	11°56	16°27	0° 6	1°40	18°42	26° 6
T 9	5 11 49	17° 4'47	13♊16	19°31	20°58	19°34	4°38	15°16	14°55	11°56	16°27	29°R59	1°37	18°49	26° 3
F 10	5 15 45	18° 5'46	28°34	18° 8	22°12	20°15	4°30	15°18	14°57	11°55	16°26	29°54	1°34	18°56	26° 0
S 11	5 19 42	19° 6'44	13♊32	16°46	23°25	20°55	4°22	15°21	14°59	11°54	16°26	29°51	1°31	19° 2	25°57
S 12	5 23 38	20° 7'44	28°32	15°26	24°39	21°36	4°15	15°23	15° 2	11°53	16°25	29°D50	1°28	19° 9	25°55
M13	5 27 35	21° 8'44	12♉58	14°11	25°52	22°17	4° 7	15°26	15° 4	11°52	16°25	29°51	1°24	19°16	25°52
T 14	5 31 31	22° 9'45	26°57	13° 4	27° 5	22°58	4° 0	15°28	15° 6	11°51	16°25	29°52	1°21	19°23	25°49
W15	5 35 28	23°10'46	10♉28	12° 7	28°19	23°39	3°52	15°31	15° 9	11°50	16°24	29°53	1°18	19°29	25°46
T 16	5 39 25	24°11'48	23°36	11°19	29°32	24°19	3°45	15°34	15°11	11°49	16°24	29°R54	1°15	19°36	25°44
F 17	5 43 21	25°12'50	6♉21	10°43	0♊46	25° 0	3°38	15°37	15°14	11°48	16°24	29°53	1°12	19°43	25°41
S 18	5 47 18	26°13'53	18°49	10°18	1°59	25°41	3°31	15°40	15°16	11°47	16°23	29°51	1° 9	19°49	25°38
S 19	5 51 14	27°14'56	1♊3	10° 3	3°12	26°22	3°24	15°43	15°19	11°46	16°23	29°47	1° 5	19°56	25°36
M20	5 55 11	28°15'59	13° 7	9°D59	4°25	27° 3	3°17	15°46	15°22	11°45	16°23	29°42	1° 2	20° 3	25°33
T 21	5 59 7	29°17'03	25° 4	10° 5	5°38	27°44	3°11	15°50	15°24	11°44	16°22	29°37	0°59	20° 9	25°31
W22	6 3 4	0♊18'07	6♉56	10°20	6°51	28°25	3° 4	15°53	15°27	11°43	16°22	29°31	0°56	20°16	25°28
T 23	6 7 0	1°19'12	18°46	10°44	8° 5	29° 6	2°58	15°57	15°30	11°41	16°22	29°26	0°53	20°23	25°26
F 24	6 10 57	2°20'17	0♊36	11°14	9°18	29°47	2°52	16° 0	15°32	11°40	16°22	29°22	0°50	20°29	25°23
S 25	6 14 54	3°21'23	12°28	11°51	10°30	0♊29	2°46	16° 4	15°35	11°39	16°22	29°19	0°46	20°36	25°21
S 26	6 18 50	4°22'29	24°23	12°35	11°43	1°10	2°40	16° 8	15°38	11°38	16°22	29°D18	0°43	20°43	25°19
M27	6 22 47	5°23'35	6♉24	13°23	12°56	1°51	2°34	16°11	15°41	11°36	16°22	29°18	0°40	20°49	25°16
T 28	6 26 43	6°24'42	18°32	14°17	14° 9	2°32	2°28	16°15	15°44	11°35	16°22	29°19	0°37	20°56	25°14
W29	6 30 40	7°25'50	0♉52	15°14	15°22	3°14	2°23	16°19	15°46	11°34	16°21	29°21	0°34	21° 3	25°12
T 30	6 34 36	8°26'57	13°26	16°15	16°34	3°55	2°18	16°24	15°49	11°32	16°21	29°22	0°30	21° 9	25°10
F 31	6 38 33	9♊28'06	26♉18	17°R19	17°R47	4♊36	2♉13	16°R28	15°R52	11°R31	16°D21	29°R24	0°R27	21°R16	25°R 8

Delta T = 184.42 sec.

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