

SWISS EPHEMERIS for the year 2179

JANUARY 2179

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
F 1	6 42 27	10°25'50	14♌51	18♋18	27♌49	1♉45	7°R18	16°R52	29♋16	5♋54	23°R33	23♌51	23♌ 1	16♋42	8°R15
S 2	6 46 24	11°26'58	28°46	19°55	29° 0	2° 8	7♌12	16♌48	29°17	5°56	23♌32	23°52	22°58	16°48	8♌14
S 3	6 50 20	12°28'07	12♌30	21°32	0♌10	2°32	7° 7	16°44	29°19	5°57	23°30	23°53	22°55	16°55	8°13
M 4	6 54 17	13°29'17	26° 0	23°10	1°21	2°55	7° 1	16°40	29°20	5°59	23°29	23°55	22°52	17° 2	8°12
T 5	6 58 13	14°30'27	9♌18	24°47	2°32	3°19	6°56	16°36	29°21	6° 0	23°28	23°56	22°48	17° 9	8°11
W 6	7 2 10	15°31'37	22°23	26°25	3°44	3°43	6°51	16°32	29°23	6° 2	23°26	23°R57	22°45	17°15	8°11
T 7	7 6 6	16°32'48	5♌17	28° 2	4°55	4° 8	6°47	16°28	29°24	6° 3	23°25	23°56	22°42	17°22	8°10
F 8	7 10 3	17°33'58	17°57	29°40	6° 6	4°33	6°42	16°24	29°26	6° 5	23°24	23°54	22°39	17°29	8° 9
S 9	7 14 0	18°35'08	0♌26	1♌17	7°18	4°58	6°38	16°20	29°27	6° 7	23°23	23°51	22°36	17°36	8° 9
S 10	7 17 56	19°36'18	12°44	2°54	8°29	5°24	6°34	16°16	29°29	6° 8	23°21	23°47	22°32	17°42	8° 8
M11	7 21 53	20°37'28	24°51	4°31	9°41	5°50	6°30	16°13	29°31	6°10	23°20	23°42	22°29	17°49	8° 8
T 12	7 25 49	21°38'37	6♌31	6° 6	10°52	6°16	6°26	16° 9	29°32	6°12	23°19	23°37	22°26	17°56	8° 8
W13	7 29 46	22°39'46	18°44	7°41	12° 4	6°42	6°22	16° 6	29°34	6°14	23°18	23°33	22°23	18° 2	8° 7
T 14	7 33 42	23°40'55	0♌36	9°15	13°16	7° 9	6°19	16° 2	29°36	6°15	23°16	23°29	22°20	18° 9	8° 7
F 15	7 37 39	24°42'03	12°28	10°48	14°28	7°36	6°16	15°59	29°38	6°17	23°15	23°27	22°17	18°16	8° 7
S 16	7 41 35	25°43'10	24°27	12°19	15°40	8° 3	6°13	15°56	29°40	6°19	23°14	23°D26	22°13	18°23	8° 7
S 17	7 45 32	26°44'17	6♌38	13°48	16°52	8°31	6°10	15°53	29°41	6°21	23°12	23°26	22°10	18°29	8° 7
M18	7 49 29	27°45'23	19° 4	15°15	18° 4	8°58	6° 7	15°50	29°43	6°23	23°11	23°28	22° 7	18°36	8°D 7
T 19	7 53 25	28°46'29	1♌50	16°38	19°16	9°26	6° 5	15°47	29°45	6°25	23°10	23°30	22° 4	18°43	8° 7
W20	7 57 22	29°47'33	15° 0	17°58	20°28	9°54	6° 3	15°44	29°48	6°26	23° 9	23°31	22° 1	18°49	8° 7
T 21	8 1 18	0♌48'38	28°37	19°14	21°41	10°23	6° 1	15°41	29°50	6°28	23° 7	23°R31	21°58	18°56	8° 7
F 22	8 5 15	1°49'41	12♌40	20°26	22°53	10°51	5°59	15°39	29°52	6°30	23° 6	23°30	21°54	19° 3	8° 7
S 23	8 9 11	2°50'44	27° 7	21°31	24° 5	11°20	5°57	15°36	29°54	6°32	23° 5	23°26	21°51	19°10	8° 8
S 24	8 13 8	3°51'46	11♌52	22°31	25°18	11°49	5°56	15°34	29°56	6°34	23° 3	23°21	21°48	19°16	8° 8
M25	8 17 4	4°52'47	26°48	23°23	26°30	12°18	5°55	15°31	29°58	6°36	23° 2	23°15	21°45	19°23	8° 8
T 26	8 21 1	5°53'48	11♌45	24° 7	27°43	12°48	5°54	15°29	0♌1	6°38	23° 1	23° 8	21°42	19°30	8° 9
W27	8 24 58	6°54'48	26°35	24°42	28°55	13°17	5°53	15°27	0° 3	6°40	23° 0	23° 2	21°38	19°37	8° 9
T 28	8 28 54	7°55'48	11♌11	25° 8	0♌8	13°47	5°53	15°25	0° 5	6°42	22°58	22°57	21°35	19°43	8°10
F 29	8 32 51	8°56'47	25°28	25°23	1°21	14°17	5°52	15°23	0° 8	6°44	22°57	22°54	21°32	19°50	8°11
S 30	8 36 47	9°57'45	9♌24	25°R27	2°34	14°47	5°D52	15°21	0°10	6°46	22°56	22°D53	21°29	19°57	8°11
S 31	8 40 44	10°58'44	22♌59	25°20	3♌47	15♌17	5♌52	15♌19	0♌13	6°49	22°55	22°A54	21°26	20°4	8♌12

Delta T = 379.52 sec.

FEBRUARY 2179

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Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
M 1	8 44 40	11°59'41	6♌15	25°R 2	4♌59	15♌47	5♌52	15°R18	0♌15	6♌51	22°R54	22°A55	21°A23	20°A10	8♌13
T 2	8 48 37	13° 0'38	19°14	24°32	6°12	16°18	5°53	15°R16	0°18	6°53	22°52	22°R56	21°19	20°17	8°14
W 3	8 52 33	14° 1'34	1♌59	23°52	7°25	16°49	5°54	15°15	0°20	6°55	22°51	22°55	21°16	20°24	8°15
T 4	8 56 30	15° 2'30	14°32	23° 2	8°38	17°20	5°54	15°13	0°23	6°57	22°50	22°53	21°13	20°30	8°16
F 5	9 0 27	16° 3'24	26°55	22° 4	9°51	17°51	5°56	15°12	0°26	6°59	22°49	22°48	21°10	20°37	8°17
S 6	9 4 23	17° 4'18	9♌ 9	20°59	11° 5	18°22	5°57	15°11	0°28	7° 1	22°48	22°40	21° 7	20°44	8°18
S 7	9 8 20	18° 5'10	21°17	19°50	12°18	18°53	5°58	15°10	0°31	7° 4	22°46	22°31	21° 4	20°51	8°19
M 8	9 12 16	19° 6'01	3♌18	18°38	13°31	19°25	6° 0	15° 9	0°34	7° 6	22°45	22°19	21° 0	20°57	8°21
T 9	9 16 13	20° 6'51	15°13	17°25	14°44	19°56	6° 2	15° 9	0°37	7° 8	22°44	22° 7	20°57	21° 4	8°22
W10	9 20 9	21° 7'40	27° 6	16°13	15°57	20°28	6° 4	15° 8	0°39	7°10	22°43	21°56	20°54	21°11	8°23
T 11	9 24 6	22° 8'27	8♌56	15° 5	17°10	21° 0	6° 6	15° 7	0°42	7°12	22°42	21°46	20°51	21°17	8°25
F 12	9 28 2	23° 9'13	20°48	14° 1	18°24	21°32	6° 9	15° 7	0°45	7°15	22°41	21°39	20°48	21°24	8°26
S 13	9 31 59	24° 9'57	2♌46	13° 4	19°37	22° 4	6°11	15° 7	0°48	7°17	22°40	21°34	20°44	21°31	8°28
S 14	9 35 56	25°10'40	14°52	12°13	20°50	22°36	6°14	15° 7	0°51	7°19	22°39	21°31	20°41	21°38	8°29
M15	9 39 52	26°11'22	27°13	11°30	22° 4	23° 9	6°17	15°D 7	0°54	7°21	22°38	21°D31	20°38	21°44	8°31
T 16	9 43 49	27°12'01	9♌52	10°54	23°17	23°41	6°21	15° 7	0°57	7°24	22°37	21°31	20°35	21°51	8°33
W17	9 47 45	28°12'39	22°56	10°27	24°30	24°14	6°24	15° 7	1° 0	7°26	22°36	21°R31	20°32	21°58	8°34
T 18	9 51 42	29°13'16	6♌28	10° 8	25°44	24°47	6°28	15° 7	1° 3	7°28	22°35	21°31	20°29	22° 4	8°36
F 19	9 55 38	0♌13'50	20°29	9°56	26°57	25°19	6°32	15° 7	1° 6	7°30	22°34	21°27	20°25	22°11	8°38
S 20	9 59 35	1°14'23	4♌59	9°D52	28°11	25°52	6°36	15° 8	1° 9	7°33	22°33	21°22	20°22	22°18	8°40
S 21	10 3 31	2°14'55	19°54	9°54	29°24	26°25	6°40	15° 9	1°12	7°35	22°32	21°13	20°19	22°25	8°42
M22	10 7 28	3°15'24	5♌16	10° 4	0♌38	26°58	6°44	15° 9	1°15	7°37	22°31	21° 3	20°16	22°31	8°44
T 23	10 11 25	4°15'52	20°24	10°19	1°51	27°32	6°49	15°10	1°18	7°39	22°30	20°52	20°13	22°38	8°46
W24	10 15 21	5°16'19	5♌37	10°41	3° 5	28° 5	6°53	15°11	1°21	7°42	22°29	20°42	20°10	22°45	8°48
T 25	10 19 18	6°16'44	20°35	11° 8	4°18	28°38	6°58	15°12	1°25	7°44	22°28	20°33	20° 6	22°52	8°50
F 26	10 23 14	7°17'07	5♌ 9	11°39	5°32	29°12	7° 3	15°13	1°28	7°46	22°27	20°27	20° 3	22°58	8°52
S 27	10 27 11	8°17'30	19°17	12°16	6°45	29°45	7° 9	15°15	1°31	7°48	22°26	20°24	20° 0	23° 5	8°55
S 28	10 31 7	9♌17'51	2♌57	12°57	7°59	0♌19	7♌14	15°R16	1°V34	7°A51	22°26	20°A23	19°A57	23°A12	8°B57

Delta T = 379.71 sec.

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SWISS EPHEMERIS for the year 2179

MARCH 2179

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Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♁	♁	♁	♁	♁	♁
M 1	10 35 4	10X18'11	16A12	13A41	9A13	0II52	7II20	15II18	1V37	7K53	22R25	20R23	19A54	23K18	8B59
T 2	10 39 0	11°18'29	29° 4	14°30	10°26	1°26	7°25	15°19	1°41	7°55	22B24	20A23	19°50	23°25	9° 2
W 3	10 42 57	12°18'46	11B39	15°21	11°40	2° 0	7°31	15°21	1°44	7°58	22°23	20°21	19°47	23°32	9° 4
T 4	10 46 54	13°19'02	24° 0	16°16	12°54	2°34	7°37	15°23	1°47	8° 0	22°22	20°17	19°44	23°39	9° 7
F 5	10 50 50	14°19'16	6A11	17°14	14° 7	3° 8	7°44	15°25	1°50	8° 2	22°22	20°10	19°41	23°45	9° 9
S 6	10 54 47	15°19'28	18°14	18°15	15°21	3°42	7°50	15°27	1°54	8° 4	22°21	20° 1	19°38	23°52	9°12
S 7	10 58 43	16°19'38	0K12	19°18	16°35	4°16	7°57	15°29	1°57	8° 7	22°20	19°48	19°35	23°59	9°15
M 8	11 2 40	17°19'47	12° 7	20°23	17°48	4°50	8° 3	15°31	2° 0	8° 9	22°20	19°34	19°31	24° 5	9°17
T 9	11 6 36	18°19'54	23°59	21°31	19° 2	5°25	8°10	15°34	2° 4	8°11	22°19	19°19	19°28	24°12	9°20
W10	11 10 33	19°19'59	5V51	22°41	20°16	5°59	8°17	15°36	2° 7	8°13	22°18	19° 4	19°25	24°19	9°23
T 11	11 14 29	20°20'02	17°43	23°53	21°30	6°33	8°25	15°39	2°11	8°16	22°18	18°51	19°22	24°26	9°25
F 12	11 18 26	21°20'03	29°38	25° 7	22°43	7° 8	8°32	15°42	2°14	8°18	22°17	18°41	19°19	24°32	9°28
S 13	11 22 22	22°20'02	11B38	26°22	23°57	7°42	8°39	15°44	2°17	8°20	22°17	18°33	19°15	24°39	9°31
S 14	11 26 19	23°19'59	23°46	27°39	25°11	8°17	8°47	15°47	2°21	8°22	22°16	18°29	19°12	24°46	9°34
M15	11 30 16	24°19'54	6II 6	28°58	26°25	8°52	8°55	15°50	2°24	8°25	22°16	18°27	19° 9	24°53	9°37
T 16	11 34 12	25°19'47	18°42	0K19	27°38	9°26	9° 3	15°53	2°27	8°27	22°15	18°27	19° 6	24°59	9°40
W17	11 38 9	26°19'38	1B40	1°41	28°52	10° 1	9°11	15°57	2°31	8°29	22°15	18°27	19° 3	25° 6	9°43
T 18	11 42 5	27°19'26	15° 3	3° 5	0K 6	10°36	9°19	16° 0	2°34	8°31	22°14	18°26	19° 0	25°13	9°46
F 19	11 46 2	28°19'12	28°54	4°30	1°20	11°11	9°27	16° 3	2°38	8°33	22°14	18°23	18°56	25°19	9°49
S 20	11 49 58	29°18'56	13Q14	5°56	2°33	11°46	9°36	16° 7	2°41	8°36	22°13	18°17	18°53	25°26	9°52
S 21	11 53 55	0V18'38	28° 2	7°24	3°47	12°21	9°45	16°10	2°45	8°38	22°13	18° 9	18°50	25°33	9°56
M22	11 57 51	1°18'17	13M11	8°53	5° 1	12°56	9°53	16°14	2°48	8°40	22°13	17°59	18°47	25°40	9°59
T 23	12 1 48	2°17'54	28°31	10°24	6°15	13°31	10° 2	16°18	2°51	8°42	22°12	17°49	18°44	25°46	10° 2
W24	12 5 45	3°17'29	13B51	11°56	7°28	14° 6	10°11	16°22	2°55	8°44	22°12	17°38	18°41	25°53	10° 5
T 25	12 9 41	4°17'03	29° 0	13°29	8°42	14°41	10°20	16°26	2°58	8°46	22°12	17°29	18°37	26° 0	10° 9
F 26	12 13 38	5°16'34	13M47	15° 4	9°56	15°16	10°29	16°30	3° 2	8°48	22°11	17°23	18°34	26° 6	10°12
S 27	12 17 34	6°16'04	28° 8	16°39	11°10	15°51	10°39	16°34	3° 5	8°50	22°11	17°19	18°31	26°13	10°15
S 28	12 21 31	7°15'32	11A59	18°17	12°24	16°26	10°48	16°38	3° 9	8°52	22°11	17°D18	18°28	26°20	10°19
M29	12 25 27	8°14'58	25°21	19°55	13°37	17° 2	10°58	16°43	3°12	8°55	22°11	17°18	18°25	26°27	10°22
T 30	12 29 24	9°14'23	8B18	21°35	14°51	17°37	11° 7	16°47	3°15	8°57	22°11	17°R18	18°21	26°33	10°25
W31	12 33 20	10V13'46	20B53	23K16	16K 5	18II12	11II17	16II51	3V19	8K59	22B10	17A18	18A18	26K40	10B29

Delta T = 379.88 sec.

APRIL 2179

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♁	♁	♁	♁	♁	♁
T 1	12 37 17	11V13'06	3A11	24K59	17K19	18II48	11II27	16II56	3V22	9K 1	22R10	17R15	18A15	26K47	10B32
F 2	12 41 14	12°12'26	15°18	26°43	18°33	19°23	11°37	17° 1	3°26	9° 3	22B10	17A11	18°12	26°54	10°36
S 3	12 45 10	13°11'43	27°15	28°28	19°46	19°58	11°47	17° 5	3°29	9° 5	22°10	17° 3	18° 9	27° 0	10°39
S 4	12 49 7	14°10'58	9K 9	0V15	21° 0	20°34	11°58	17°10	3°32	9° 7	22°10	16°53	18° 6	27° 7	10°43
M 5	12 53 3	15°10'12	21° 0	2° 3	22°14	21°10	12° 8	17°15	3°36	9° 8	22D10	16°42	18° 2	27°14	10°47
T 6	12 57 0	16° 9'24	2V52	3°53	23°28	21°45	12°18	17°20	3°39	9°10	22°10	16°30	17°59	27°20	10°50
W 7	13 0 56	17° 8'33	14°45	5°44	24°42	22°21	12°29	17°25	3°43	9°12	22°10	16°18	17°56	27°27	10°54
T 8	13 4 53	18° 7'41	26°42	7°36	25°56	22°56	12°40	17°30	3°46	9°14	22°10	16° 8	17°53	27°34	10°58
F 9	13 8 49	19° 6'46	8B44	9°30	27° 9	23°32	12°50	17°36	3°49	9°16	22°10	16° 0	17°50	27°41	11° 1
S 10	13 12 46	20° 5'50	20°52	11°25	28°23	24° 8	13° 1	17°41	3°53	9°18	22°10	15°54	17°47	27°47	11° 5
S 11	13 16 42	21° 4'51	3II 9	13°21	29°37	24°43	13°12	17°46	3°56	9°20	22°11	15°51	17°43	27°54	11° 9
M12	13 20 39	22° 3'51	15°36	15°19	0V51	25°19	13°23	17°52	3°59	9°22	22°11	15°D50	17°40	28° 1	11°12
T 13	13 24 36	23° 2'48	28°18	17°19	2° 5	25°55	13°34	17°57	4° 2	9°23	22°11	15°51	17°37	28° 7	11°16
W14	13 28 32	24° 1'42	11B17	19°19	3°18	26°31	13°45	18° 3	4° 6	9°25	22°11	15°52	17°34	28°14	11°20
T 15	13 32 29	25° 0'35	24°37	21°21	4°32	27° 7	13°57	18° 9	4° 9	9°27	22°11	15°R53	17°31	28°21	11°24
F 16	13 36 25	25°59'25	8Q20	23°24	5°46	27°42	14° 8	18°14	4°12	9°29	22°12	15°52	17°27	28°28	11°27
S 17	13 40 22	26°58'13	22°28	25°28	7° 0	28°18	14°19	18°20	4°15	9°30	22°12	15°49	17°24	28°34	11°31
S 18	13 44 18	27°56'58	6M59	27°33	8°13	28°54	14°31	18°26	4°19	9°32	22°12	15°45	17°21	28°41	11°35
M19	13 48 15	28°55'42	21°51	29°39	9°27	29°30	14°43	18°32	4°22	9°34	22°13	15°39	17°18	28°48	11°39
T 20	13 52 11	29°54'23	6B55	1B46	10°41	0B 6	14°54	18°38	4°25	9°35	22°13	15°32	17°15	28°55	11°43
W21	13 56 8	0B53'02	22° 3	3°53	11°55	0°42	15° 6	18°44	4°28	9°37	22°13	15°25	17°12	29° 1	11°47
T 22	14 0 5	1°51'39	7M 5	6° 0	13° 8	1°18	15°18	18°50	4°31	9°38	22°14	15°19	17° 8	29° 8	11°50
F 23	14 4 1	2°50'14	21°52	8° 8	14°22	1°54	15°30	18°56	4°34	9°40	22°14	15°15	17° 5	29°15	11°54
S 24	14 7 58	3°48'48	6A16	10°15	15°36	2°30	15°42	19° 2	4°38	9°41	22°15	15°13	17° 2	29°21	11°58
S 25	14 11 54	4°47'20	20°14	12°21	16°50	3° 6	15°54	19° 9	4°41	9°43	22°15	15°D13	16°59	29°28	12° 2
M26	14 15 51	5°45'50	3B43	14°27	18° 3	3°42	16° 6	19°15	4°44	9°44	22°16	15°14	16°56	29°35	12° 6
T 27	14 19 47	6°44'18	16°47	16°31	19°17	4°18	16°18	19°22	4°47	9°46	22°16	15°16	16°52	29°42	12°10
W28	14 23 44	7°42'45	29°28	18°34	20°31	4°54	16°30	19°28	4°50	9°47	22°17	15°17	16°49	29°48	12°14
T 29	14 27 40	8°41'10	11A50	20°35	21°45	5°30	16°43	19°35	4°53	9°49	22°17	15°R17	16°46	29°55	12°18
F 30	14 31 37	9B39'34	23A57	22B34	22V58	6B 7	16II55	19II41	4V56	9K50	22B18	15A16	16A43	0V 2	12B22

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SWISS EPHEMERIS for the year 2179

MAY 2179

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♁	♁	♁	♁	♁	♁
S 1	14 35 34	10♁37'56	5♂55	24♁31	24♀12	6♁43	17♁ 7	19♁48	4♀59	9♁51	22♁18	15°R13	16♁40	0♀ 8	12♁25
S 2	14 39 30	11°36'17	17°48	26°25	25°26	7°19	17°20	19°54	5° 2	9°53	22°19	15♁ 9	16°37	0°15	12°29
M 3	14 43 27	12°34'35	29°39	28°16	26°39	7°55	17°33	20° 1	5° 5	9°54	22°20	15° 4	16°33	0°22	12°33
T 4	14 47 23	13°32'53	11♀31	0♁ 3	27°53	8°31	17°45	20° 8	5° 7	9°55	22°20	14°58	16°30	0°29	12°37
W 5	14 51 20	14°31'08	23°29	1°48	29° 7	9° 8	17°58	20°15	5°10	9°56	22°21	14°53	16°27	0°35	12°41
T 6	14 55 16	15°29'23	5♁32	3°29	0♁21	9°44	18°10	20°22	5°13	9°58	22°22	14°48	16°24	0°42	12°45
F 7	14 59 13	16°27'35	17°44	5° 6	1°34	10°20	18°23	20°28	5°16	9°59	22°23	14°44	16°21	0°49	12°49
S 8	15 3 9	17°25'46	0♁ 6	6°40	2°48	10°56	18°36	20°35	5°19	10° 0	22°23	14°42	16°18	0°55	12°53
S 9	15 7 6	18°23'55	12°38	8°10	4° 2	11°33	18°49	20°42	5°21	10° 1	22°24	14°D41	16°14	1° 2	12°57
M10	15 11 3	19°22'02	25°21	9°36	5°15	12° 9	19° 2	20°49	5°24	10° 2	22°25	14°42	16°11	1° 9	13° 1
T 11	15 14 59	20°20'08	8♁18	10°58	6°29	12°45	19°15	20°57	5°27	10° 3	22°26	14°43	16° 8	1°16	13° 5
W12	15 18 56	21°18'11	21°29	12°15	7°43	13°22	19°28	21° 4	5°29	10° 4	22°27	14°44	16° 5	1°22	13° 8
T 13	15 22 52	22°16'13	4♁57	13°29	8°56	13°58	19°41	21°11	5°32	10° 5	22°27	14°46	16° 2	1°29	13°12
F 14	15 26 49	23°14'13	18°41	14°38	10°10	14°34	19°54	21°18	5°34	10° 6	22°28	14°R46	15°58	1°36	13°16
S 15	15 30 45	24°12'11	2♁42	15°43	11°24	15°11	20° 7	21°25	5°37	10° 7	22°29	14°46	15°55	1°43	13°20
S 16	15 34 42	25°10'07	17° 0	16°44	12°37	15°47	20°20	21°33	5°40	10° 8	22°30	14°45	15°52	1°49	13°24
M17	15 38 38	26° 8'01	1♁31	17°41	13°51	16°24	20°34	21°40	5°42	10° 9	22°31	14°43	15°49	1°56	13°28
T 18	15 42 35	27° 5'53	16°12	18°32	15° 5	17° 0	20°47	21°47	5°44	10°10	22°32	14°41	15°46	2° 3	13°32
W19	15 46 32	28° 3'44	0♁55	19°20	16°18	17°37	21° 0	21°55	5°47	10°11	22°33	14°39	15°43	2° 9	13°35
T 20	15 50 28	29° 1'33	15°36	20° 3	17°32	18°13	21°13	22° 2	5°49	10°11	22°34	14°37	15°39	2°16	13°39
F 21	15 54 25	29°59'21	0♁ 5	20°41	18°46	18°50	21°27	22° 9	5°52	10°12	22°35	14°36	15°36	2°23	13°43
S 22	15 58 21	0♁57'07	14°19	21°14	19°59	19°26	21°40	22°17	5°54	10°13	22°36	14°D36	15°33	2°30	13°47
S 23	16 2 18	1°54'52	28°11	21°43	21°13	20° 3	21°54	22°24	5°56	10°14	22°37	14°36	15°30	2°36	13°51
M24	16 6 14	2°52'36	11♁41	22° 6	22°26	20°39	22° 7	22°32	5°58	10°14	22°38	14°37	15°27	2°43	13°54
T 25	16 10 11	3°50'19	24°47	22°25	23°40	21°16	22°21	22°39	6° 1	10°15	22°39	14°38	15°24	2°50	13°58
W26	16 14 7	4°48'00	7♁32	22°39	24°54	21°52	22°34	22°47	6° 3	10°15	22°41	14°39	15°20	2°56	14° 2
T 27	16 18 4	5°45'41	19°57	22°49	26° 7	22°29	22°48	22°54	6° 5	10°16	22°42	14°40	15°17	3° 3	14° 6
F 28	16 22 1	6°43'20	2♁ 8	22°R53	27°21	23° 5	23° 1	23° 2	6° 7	10°16	22°43	14°R40	15°14	3°10	14° 9
S 29	16 25 57	7°40'58	14° 8	22°53	28°35	23°42	23°15	23°10	6° 9	10°17	22°44	14°40	15°11	3°17	14°13
S 30	16 29 54	8°38'36	26° 2	22°49	29°48	24°19	23°28	23°17	6°11	10°17	22°45	14°40	15° 8	3°23	14°17
M31	16 33 50	9♁36'12	7♀54	22♁40	1♁ 2	24♁55	23♁42	23♁25	6♀13	10♁18	22♁46	14♁39	15♁ 4	3♀30	14♁20

Delta T = 380.26 sec.

JUNE 2179

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♁	♁	♁	♁	♁	♁
T 1	16 37 47	10♁33'48	19♀49	22°R26	2♁16	25♁32	23♁56	23♁33	6♀15	10♁18	22♁48	14°R39	15♁ 1	3♀37	14♁24
W 2	16 41 43	11°31'23	1♁50	22♁ 9	3°29	26° 8	24° 9	23°40	6°17	10°19	22°49	14♁38	14°58	3°43	14°27
T 3	16 45 40	12°28'56	14° 1	21°49	4°43	26°45	24°23	23°48	6°18	10°19	22°50	14°38	14°55	3°50	14°31
F 4	16 49 36	13°26'29	26°23	21°25	5°56	27°22	24°37	23°56	6°20	10°19	22°51	14°38	14°52	3°57	14°35
S 5	16 53 33	14°24'01	8♁59	20°58	7°10	27°58	24°50	24° 3	6°22	10°20	22°53	14°38	14°49	4° 4	14°38
S 6	16 57 30	15°21'32	21°50	20°28	8°24	28°35	25° 4	24°11	6°24	10°20	22°54	14°38	14°45	4°10	14°42
M 7	17 1 26	16°19'02	4♁55	19°57	9°37	29°12	25°18	24°19	6°25	10°20	22°55	14°38	14°42	4°17	14°45
T 8	17 5 23	17°16'31	18°15	19°25	10°51	29°49	25°32	24°27	6°27	10°20	22°57	14°37	14°39	4°24	14°49
W 9	17 9 19	18°13'59	1♁49	18°52	12° 5	0♁25	25°45	24°34	6°29	10°20	22°58	14°37	14°36	4°30	14°52
T 10	17 13 16	19°11'26	15°34	18°18	13°18	1° 2	25°59	24°42	6°30	10°20	22°59	14°37	14°33	4°37	14°55
F 11	17 17 12	20° 8'51	29°30	17°45	14°32	1°39	26°13	24°50	6°32	10°20	23° 1	14°36	14°30	4°44	14°59
S 12	17 21 9	21° 6'15	13♁36	17°13	15°46	2°16	26°27	24°58	6°33	10°20	23° 2	14°36	14°26	4°51	15° 2
S 13	17 25 5	22° 3'38	27°48	16°42	16°59	2°53	26°41	25° 6	6°34	10°R20	23° 3	14°D36	14°23	4°57	15° 5
M14	17 29 2	23° 1'01	12♁ 5	16°13	18°13	3°29	26°54	25°13	6°36	10°20	23° 5	14°36	14°20	5° 4	15° 9
T 15	17 32 59	23°58'22	26°24	15°47	19°27	4° 6	27° 8	25°21	6°37	10°20	23° 6	14°37	14°17	5°11	15°12
W16	17 36 55	24°55'42	10♁41	15°23	20°40	4°43	27°22	25°29	6°38	10°20	23° 8	14°38	14°14	5°17	15°15
T 17	17 40 52	25°53'01	24°53	15° 3	21°54	5°20	27°36	25°37	6°40	10°20	23° 9	14°38	14°10	5°24	15°18
F 18	17 44 48	26°50'19	8♁57	14°46	23° 8	5°57	27°50	25°45	6°41	10°20	23°10	14°R39	14° 7	5°31	15°22
S 19	17 48 45	27°47'37	22°49	14°34	24°21	6°34	28° 4	25°52	6°42	10°20	23°12	14°39	14° 4	5°38	15°25
S 20	17 52 41	28°44'54	6♁25	14°25	25°35	7°10	28°17	26° 0	6°43	10°20	23°13	14°38	14° 1	5°44	15°28
M21	17 56 38	29°42'11	19°44	14°D21	26°49	7°47	28°31	26° 8	6°44	10°19	23°15	14°37	13°58	5°51	15°31
T 22	18 0 35	0♁39'27	2♁45	14°22	28° 2	8°24	28°45	26°16	6°45	10°19	23°16	14°35	13°55	5°58	15°34
W23	18 4 31	1°36'42	15°27	14°27	29°16	9° 1	28°59	26°24	6°46	10°19	23°18	14°32	13°51	6° 4	15°37
T 24	18 8 28	2°33'58	27°53	14°36	0♁30	9°38	29°13	26°31	6°47	10°18	23°19	14°30	13°48	6°11	15°40
F 25	18 12 24	3°31'13	10♁ 4	14°51	1°43	10°15	29°26	26°39	6°48	10°18	23°21	14°28	13°45	6°18	15°43
S 26	18 16 21	4°28'27	22° 5	15°10	2°57	10°52	29°40	26°47	6°49	10°18	23°22	14°26	13°42	6°25	15°46
S 27	18 20 17	5°25'42	4♀ 0	15°33	4°11	11°29	29°54	26°55	6°49	10°17	23°24	14°D26	13°39	6°31	15°49
M28	18 24 14	6°22'57	15°53	16° 2	5°24	12° 6	0♁ 8	27° 2	6°50	10°17	23°25	14°26	13°36	6°38	15°51
T 29	18 28 10	7°20'11	27°48	16°34	6°38	12°43	0°21	27°10	6°51	10°16	23°27	14°27	13°32	6°45	15°54
W30	18 32 7	8♁17'26	9♁51	17♁12	7♁52	13♁20	0♁35	27♁18	6♀51	10♁16	23♁28	14♁29	13♁29	6♀51	15♁57

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SWISS EPHEMERIS for the year 2179

JULY 2179

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♆	♁	
T 1	18 36 4	9 ⁵ 14'40	22 ⁸ 6	17 ^{II} 54	9 ⁵ 6	13 ^Ω 57	0 ⁵ 49	27 ^{II} 26	6 ^Υ 52	10 [°] R15	23 ⁵ 30	14 [°] 30	13 [°] 26	6 ^Υ 58	16 ⁸ 0
F 2	18 40 0	10 [°] 11'55	4 ^{II} 36	18 [°] 40	10 [°] 19	14 [°] 34	1 [°] 3	27 [°] 33	6 [°] 52	10 [°] 14	23 [°] 32	14 [°] 31	13 [°] 23	7 [°] 5	16 [°] 2
S 3	18 43 57	11 [°] 9'10	17 [°] 24	19 [°] 31	11 [°] 33	15 [°] 11	1 [°] 16	27 [°] 41	6 [°] 53	10 [°] 14	23 [°] 33	14 [°] R32	13 [°] 20	7 [°] 12	16 [°] 5
S 4	18 47 53	12 [°] 6'24	0 ⁵ 32	20 [°] 26	12 [°] 47	15 [°] 48	1 [°] 30	27 [°] 49	6 [°] 53	10 [°] 13	23 [°] 35	14 [°] 31	13 [°] 16	7 [°] 18	16 [°] 8
M 5	18 51 50	13 [°] 3'39	14 [°] 0	21 [°] 25	14 [°] 1	16 [°] 25	1 [°] 44	27 [°] 56	6 [°] 54	10 [°] 13	23 [°] 36	14 [°] 29	13 [°] 13	7 [°] 25	16 [°] 10
T 6	18 55 46	14 [°] 0'53	27 [°] 45	22 [°] 29	15 [°] 14	17 [°] 3	1 [°] 57	28 [°] 4	6 [°] 54	10 [°] 12	23 [°] 38	14 [°] 25	13 [°] 10	7 [°] 32	16 [°] 13
W 7	18 59 43	14 [°] 58'07	11 ^Ω 46	23 [°] 37	16 [°] 28	17 [°] 40	2 [°] 11	28 [°] 12	6 [°] 54	10 [°] 11	23 [°] 39	14 [°] 21	13 [°] 7	7 [°] 38	16 [°] 15
T 8	19 3 39	15 [°] 55'21	25 [°] 57	24 [°] 48	17 [°] 42	18 [°] 17	2 [°] 25	28 [°] 19	6 [°] 54	10 [°] 10	23 [°] 41	14 [°] 16	13 [°] 4	7 [°] 45	16 [°] 17
F 9	19 7 36	16 [°] 52'35	10 ^{III} 15	26 [°] 4	18 [°] 56	18 [°] 54	2 [°] 38	28 [°] 27	6 [°] 55	10 [°] 9	23 [°] 42	14 [°] 12	13 [°] 1	7 [°] 52	16 [°] 20
S 10	19 11 33	17 [°] 49'48	24 [°] 35	27 [°] 24	20 [°] 10	19 [°] 31	2 [°] 52	28 [°] 34	6 [°] 55	10 [°] 9	23 [°] 44	14 [°] 9	12 [°] 57	7 [°] 59	16 [°] 22
S 11	19 15 29	18 [°] 47'01	8 ^Ω 52	28 [°] 48	21 [°] 23	20 [°] 9	3 [°] 5	28 [°] 42	6 [°] 55	10 [°] 8	23 [°] 46	14 [°] 7	12 [°] 54	8 [°] 5	16 [°] 24
M12	19 19 26	19 [°] 44'14	23 [°] 5	0 ⁵ 15	22 [°] 37	20 [°] 46	3 [°] 19	28 [°] 49	6 [°] R55	10 [°] 7	23 [°] 47	14 [°] D 7	12 [°] 51	8 [°] 12	16 [°] 27
T 13	19 23 22	20 [°] 41'27	7 ^{III} 11	1 [°] 47	23 [°] 51	21 [°] 23	3 [°] 32	28 [°] 57	6 [°] 55	10 [°] 6	23 [°] 49	14 [°] 8	12 [°] 48	8 [°] 19	16 [°] 29
W14	19 27 19	21 [°] 38'40	21 [°] 8	3 [°] 22	25 [°] 5	22 [°] 0	3 [°] 46	29 [°] 4	6 [°] 55	10 [°] 5	23 [°] 50	14 [°] 9	12 [°] 45	8 [°] 25	16 [°] 31
T 15	19 31 15	22 [°] 35'53	4 [°] 55	5 [°] 1	26 [°] 19	22 [°] 38	3 [°] 59	29 [°] 12	6 [°] 55	10 [°] 4	23 [°] 52	14 [°] 10	12 [°] 42	8 [°] 32	16 [°] 33
F 16	19 35 12	23 [°] 33'05	18 [°] 33	6 [°] 43	27 [°] 32	23 [°] 15	4 [°] 12	29 [°] 19	6 [°] 54	10 [°] 3	23 [°] 54	14 [°] R10	12 [°] 38	8 [°] 39	16 [°] 35
S 17	19 39 8	24 [°] 30'18	1 ⁵ 59	8 [°] 28	28 [°] 46	23 [°] 52	4 [°] 26	29 [°] 26	6 [°] 54	10 [°] 2	23 [°] 55	14 [°] 9	12 [°] 35	8 [°] 45	16 [°] 37
S 18	19 43 5	25 [°] 27'31	15 [°] 14	10 [°] 17	0 ^Ω 0	24 [°] 29	4 [°] 39	29 [°] 34	6 [°] 54	10 [°] 1	23 [°] 57	14 [°] 6	12 [°] 32	8 [°] 52	16 [°] 39
M19	19 47 2	26 [°] 24'44	28 [°] 15	12 [°] 9	1 [°] 14	25 [°] 7	4 [°] 52	29 [°] 41	6 [°] 54	10 [°] 0	23 [°] 58	14 [°] 1	12 [°] 29	8 [°] 59	16 [°] 41
T 20	19 50 58	27 [°] 21'58	11 [∞] 2	14 [°] 4	2 [°] 28	25 [°] 44	5 [°] 6	29 [°] 48	6 [°] 53	9 [°] 59	24 [°] 0	13 [°] 54	12 [°] 26	9 [°] 6	16 [°] 43
W21	19 54 55	28 [°] 19'12	23 [°] 36	16 [°] 1	3 [°] 41	26 [°] 21	5 [°] 19	29 [°] 55	6 [°] 53	9 [°] 58	24 [°] 2	13 [°] 46	12 [°] 22	9 [°] 12	16 [°] 44
T 22	19 58 51	29 [°] 16'26	5 [°] 56	18 [°] 0	4 [°] 55	26 [°] 59	5 [°] 32	0 ⁵ 3	6 [°] 52	9 [°] 57	24 [°] 3	13 [°] 38	12 [°] 19	9 [°] 19	16 [°] 46
F 23	20 2 48	0 ^Ω 13'41	18 [°] 5	20 [°] 2	6 [°] 9	27 [°] 36	5 [°] 45	0 [°] 10	6 [°] 52	9 [°] 56	24 [°] 5	13 [°] 31	12 [°] 16	9 [°] 26	16 [°] 48
S 24	20 6 44	1 [°] 10'57	0 ^Υ 4	22 [°] 5	7 [°] 23	28 [°] 14	5 [°] 58	0 [°] 17	6 [°] 51	9 [°] 54	24 [°] 6	13 [°] 25	12 [°] 13	9 [°] 32	16 [°] 49
S 25	20 10 41	2 [°] 8'13	11 [°] 58	24 [°] 10	8 [°] 37	28 [°] 51	6 [°] 11	0 [°] 24	6 [°] 51	9 [°] 53	24 [°] 8	13 [°] 21	12 [°] 10	9 [°] 39	16 [°] 51
M26	20 14 37	3 [°] 5'30	23 [°] 49	26 [°] 16	9 [°] 51	29 [°] 29	6 [°] 24	0 [°] 31	6 [°] 50	9 [°] 52	24 [°] 9	13 [°] 19	12 [°] 7	9 [°] 46	16 [°] 53
T 27	20 18 34	4 [°] 2'48	5 [°] 43	28 [°] 23	11 [°] 5	0 ^{III} 6	6 [°] 37	0 [°] 38	6 [°] 49	9 [°] 51	24 [°] 11	13 [°] D18	12 [°] 3	9 [°] 53	16 [°] 54
W28	20 22 31	5 [°] 0'07	17 [°] 46	0 ^Ω 30	12 [°] 19	0 [°] 44	6 [°] 50	0 [°] 45	6 [°] 49	9 [°] 50	24 [°] 13	13 [°] 19	12 [°] 0	9 [°] 59	16 [°] 55
T 29	20 26 27	5 [°] 57'27	0 ^{II} 1	2 [°] 37	13 [°] 32	1 [°] 21	7 [°] 3	0 [°] 52	6 [°] 48	9 [°] 48	24 [°] 14	13 [°] 20	11 [°] 57	10 [°] 6	16 [°] 57
F 30	20 30 24	6 [°] 54'48	12 [°] 33	4 [°] 44	14 [°] 46	1 [°] 59	7 [°] 16	0 [°] 59	6 [°] 47	9 [°] 47	24 [°] 16	13 [°] R21	11 [°] 54	10 [°] 13	16 [°] 58
S 31	20 34 20	7 ^Ω 52'10	25 ^{II} 28	6 ^Ω 51	16 ^Ω 0	2 ^{III} 36	7 ⁵ 29	1 ⁵ 5	6 ^Υ 46	9 [°] 46	24 ⁵ 17	13 [°] R20	11 [°] 51	10 [°] 19	16 ⁵ 59

Delta T = 380.63 sec.

AUGUST 2179

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♃	♄	♅	♆	♇	♁	♂	♆	♁	
S 1	20 38 17	8 ^Ω 49'32	8 ⁵ 47	8 ^Ω 57	17 ^Ω 14	3 ^{III} 14	7 ⁵ 41	1 ⁵ 12	6 [°] R45	9 [°] R44	24 ⁵ 19	13 [°] R17	11 [°] 48	10 [°] 26	17 ⁸ 1
M 2	20 42 13	9 [°] 46'56	22 [°] 30	11 [°] 2	18 [°] 28	3 [°] 51	7 [°] 54	1 [°] 19	6 [°] Υ44	9 [°] 43	24 [°] 20	13 [°] R12	11 [°] 44	10 [°] 33	17 [°] 2
T 3	20 46 10	10 [°] 44'20	6 ^Ω 37	13 [°] 7	19 [°] 42	4 [°] 29	8 [°] 7	1 [°] 26	6 [°] 43	9 [°] 42	24 [°] 22	13 [°] 5	11 [°] 41	10 [°] 40	17 [°] 3
W 4	20 50 6	11 [°] 41'46	21 [°] 3	15 [°] 10	20 [°] 56	5 [°] 7	8 [°] 19	1 [°] 32	6 [°] 42	9 [°] 40	24 [°] 23	12 [°] 57	11 [°] 38	10 [°] 46	17 [°] 4
T 5	20 54 3	12 [°] 39'11	5 ^{III} 42	17 [°] 12	22 [°] 10	5 [°] 44	8 [°] 32	1 [°] 39	6 [°] 41	9 [°] 39	24 [°] 25	12 [°] 47	11 [°] 35	10 [°] 53	17 [°] 5
F 6	20 58 0	13 [°] 36'38	20 [°] 26	19 [°] 13	23 [°] 24	6 [°] 22	8 [°] 44	1 [°] 45	6 [°] 40	9 [°] 37	24 [°] 26	12 [°] 39	11 [°] 32	11 [°] 0	17 [°] 6
S 7	21 1 56	14 [°] 34'05	5 ^Ω 7	21 [°] 12	24 [°] 38	7 [°] 0	8 [°] 57	1 [°] 52	6 [°] 39	9 [°] 36	24 [°] 28	12 [°] 32	11 [°] 28	11 [°] 6	17 [°] 7
S 8	21 5 53	15 [°] 31'33	19 [°] 39	23 [°] 10	25 [°] 52	7 [°] 37	9 [°] 9	1 [°] 58	6 [°] 38	9 [°] 34	24 [°] 29	12 [°] 27	11 [°] 25	11 [°] 13	17 [°] 7
M 9	21 9 49	16 [°] 29'02	3 ^{III} 58	25 [°] 7	27 [°] 6	8 [°] 15	9 [°] 21	2 [°] 4	6 [°] 36	9 [°] 33	24 [°] 31	12 [°] 25	11 [°] 22	11 [°] 20	17 [°] 8
T 10	21 13 46	17 [°] 26'31	18 [°] 1	27 [°] 1	28 [°] 20	8 [°] 53	9 [°] 33	2 [°] 11	6 [°] 35	9 [°] 31	24 [°] 32	12 [°] D24	11 [°] 19	11 [°] 26	17 [°] 9
W11	21 17 42	18 [°] 24'02	1 [°] 48	28 [°] 55	29 [°] 34	9 [°] 31	9 [°] 46	2 [°] 17	6 [°] 34	9 [°] 30	24 [°] 34	12 [°] 24	11 [°] 16	11 [°] 33	17 [°] 10
T 12	21 21 39	19 [°] 21'33	15 [°] 20	0 ^{III} 47	0 ^{III} 48	10 [°] 9	9 [°] 58	2 [°] 23	6 [°] 32	9 [°] 28	24 [°] 35	12 [°] R25	11 [°] 13	11 [°] 40	17 [°] 10
F 13	21 25 35	20 [°] 19'04	28 [°] 37	2 [°] 37	2 [°] 2	10 [°] 46	10 [°] 10	2 [°] 29	6 [°] 31	9 [°] 27	24 [°] 37	12 [°] 24	11 [°] 9	11 [°] 47	17 [°] 11
S 14	21 29 32	21 [°] 16'37	11 ⁵ 42	4 [°] 26	3 [°] 16	11 [°] 24	10 [°] 22	2 [°] 35	6 [°] 30	9 [°] 25	24 [°] 38	12 [°] 20	11 [°] 6	11 [°] 53	17 [°] 11
S 15	21 33 29	22 [°] 14'10	24 [°] 35	6 [°] 13	4 [°] 30	12 [°] 2	10 [°] 33	2 [°] 41	6 [°] 28	9 [°] 24	24 [°] 40	12 [°] 14	11 [°] 3	12 [°] 0	17 [°] 12
M16	21 37 25	23 [°] 11'45	7 [∞] 17	7 [°] 59	5 [°] 44	12 [°] 40	10 [°] 45	2 [°] 47	6 [°] 27	9 [°] 22	24 [°] 41	12 [°] 6	11 [°] 0	12 [°] 7	17 [°] 12
T 17	21 41 22	24 [°] 9'21	19 [°] 49	9 [°] 43	6 [°] 57	13 [°] 18	10 [°] 57	2 [°] 53	6 [°] 25	9 [°] 21	24 [°] 43	11 [°] 55	10 [°] 57	12 [°] 13	17 [°] 12
W18	21 45 18	25 [°]													

SWISS EPHEMERIS for the year 2179

SEPTEMBER 2179

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♁	♁	♁	♁	♁	♁	♁
W 1	22 40 30	8♎36'10	29♏38	2♃52	25♎27	22♎50	13♎43	4♎13	5°R58	8°R56	25♎2	10°R19	10♎9	13♎54	17°R10	
T 2	22 44 27	9°34'11	14♎37	4°13	26°41	23°28	13°54	4°18	5°Y55	8°X55	25°4	10♎8	10°6	14°1	17♎9	
F 3	22 48 23	10°32'13	29°43	5°32	27°55	24°7	14°4	4°22	5°53	8°53	25°5	9°57	10°3	14°7	17°8	
S 4	22 52 20	11°30'16	14♎46	6°50	29°9	24°45	14°14	4°27	5°51	8°51	25°6	9°48	9°59	14°14	17°8	
S 5	22 56 16	12°28'21	29°38	8°6	0♃23	25°23	14°24	4°31	5°49	8°50	25°7	9°41	9°56	14°21	17°7	
M 6	23 0 13	13°26'28	14♎11	9°20	1°37	26°2	14°34	4°36	5°47	8°48	25°8	9°38	9°53	14°27	17°6	
T 7	23 4 9	14°24'35	28°22	10°32	2°51	26°40	14°44	4°40	5°45	8°47	25°9	9°36	9°50	14°34	17°5	
W 8	23 8 6	15°22'45	12♎10	11°42	4°5	27°19	14°54	4°44	5°43	8°45	25°11	9°36	9°47	14°41	17°4	
T 9	23 12 2	16°20'55	25°37	12°51	5°19	27°57	15°3	4°48	5°40	8°43	25°12	9°36	9°44	14°47	17°3	
F 10	23 15 59	17°19'07	8♎44	13°57	6°32	28°36	15°13	4°52	5°38	8°42	25°13	9°34	9°40	14°54	17°2	
S 11	23 19 56	18°17'21	21°36	15°1	7°46	29°14	15°22	4°56	5°36	8°40	25°14	9°31	9°37	15°1	17°1	
S 12	23 23 52	19°15'36	4♎13	16°3	9°0	29°53	15°31	5°0	5°34	8°38	25°15	9°25	9°34	15°8	17°0	
M 13	23 27 49	20°13'53	16°40	17°2	10°14	0♃32	15°41	5°4	5°31	8°37	25°16	9°16	9°31	15°14	16°58	
T 14	23 31 45	21°12'11	28°57	17°59	11°28	1°10	15°50	5°8	5°29	8°35	25°17	9°4	9°28	15°21	16°57	
W 15	23 35 42	22°10'31	11♎6	18°52	12°42	1°49	15°59	5°11	5°27	8°34	25°18	8°51	9°25	15°28	16°56	
T 16	23 39 38	23°8'52	23°8	19°43	13°56	2°28	16°7	5°15	5°24	8°32	25°19	8°37	9°21	15°34	16°54	
F 17	23 43 35	24°7'16	5°Y5	20°31	15°10	3°6	16°16	5°18	5°22	8°30	25°20	8°25	9°18	15°41	16°53	
S 18	23 47 31	25°5'41	16°57	21°15	16°24	3°45	16°25	5°21	5°20	8°29	25°21	8°14	9°15	15°48	16°51	
S 19	23 51 28	26°4'08	28°46	21°55	17°37	4°24	16°33	5°25	5°17	8°27	25°21	8°5	9°12	15°54	16°50	
M 20	23 55 24	27°2'38	10♎36	22°31	18°51	5°3	16°41	5°28	5°15	8°26	25°22	7°59	9°9	16°1	16°48	
T 21	23 59 21	28°1'09	22°28	23°3	20°5	5°42	16°50	5°31	5°13	8°24	25°23	7°56	9°5	16°8	16°46	
W 22	0 3 18	28°59'43	4♎28	23°30	21°19	6°21	16°58	5°34	5°10	8°23	25°24	7°D54	9°2	16°15	16°45	
T 23	0 7 14	29°58'18	16°39	23°53	22°33	6°59	17°6	5°36	5°8	8°21	25°25	7°55	8°59	16°21	16°43	
F 24	0 11 11	0♃56'56	29°7	24°10	23°47	7°38	17°13	5°39	5°5	8°20	25°26	7°R55	8°56	16°28	16°41	
S 25	0 15 7	1°55'37	11♎56	24°21	25°0	8°17	17°21	5°42	5°3	8°18	25°26	7°55	8°53	16°35	16°39	
S 26	0 19 4	2°54'19	25°12	24°R26	26°14	8°56	17°28	5°44	5°1	8°17	25°27	7°52	8°50	16°41	16°37	
M 27	0 23 0	3°53'04	8♎56	24°25	27°28	9°36	17°36	5°47	4°58	8°15	25°28	7°48	8°46	16°48	16°35	
T 28	0 26 57	4°51'51	23°11	24°16	28°42	10°15	17°43	5°49	4°56	8°14	25°29	7°41	8°43	16°55	16°33	
W 29	0 30 53	5°50'40	7♎53	24°1	29°56	10°54	17°50	5°51	4°53	8°12	25°29	7°33	8°40	17°1	16°31	
T 30	0 34 50	6♃49'31	22♎56	23♎38	1♎9	11♃33	17♎57	5♎53	4°Y51	8°X11	25♎30	7♎23	8♎37	17°Y8	16♎29	

Delta T = 381.01 sec.

OCTOBER 2179

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Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♁	♁	♁	♁	♁	♁	♁
F 1	0 38 47	7♎48'24	8♎12	23°R8	2♎23	12♎12	18♎4	5♎55	4°R48	8°R10	25♎31	7°R14	8♎34	17°Y15	16°R27	
S 2	0 42 43	8°47'19	23°28	22♎30	3°37	12°51	18°11	5°57	4°Y46	8°X8	25°31	7♎7	8°30	17°21	16♎25	
S 3	0 46 40	9°46'16	8♎15	21°46	4°51	13°31	18°17	5°59	4°44	8°7	25°32	7°2	8°27	17°28	16°23	
M 4	0 50 36	10°45'15	23°24	20°54	6°4	14°10	18°23	6°0	4°41	8°6	25°32	6°59	8°24	17°35	16°21	
T 5	0 54 33	11°44'16	7♎48	19°56	7°18	14°49	18°29	6°2	4°39	8°4	25°33	6°D58	8°21	17°42	16°18	
W 6	0 58 29	12°43'19	21°46	18°54	8°32	15°29	18°35	6°3	4°36	8°3	25°33	6°59	8°18	17°48	16°16	
T 7	1 2 26	13°42'23	5♎38	17°47	9°46	16°8	18°41	6°5	4°34	8°2	25°34	7°0	8°15	17°55	16°14	
F 8	1 6 22	14°41'29	18°26	16°38	10°59	16°47	18°47	6°6	4°32	8°1	25°34	7°R0	8°11	18°2	16°11	
S 9	1 10 19	15°40'37	1♎14	15°28	12°13	17°27	18°53	6°7	4°29	7°59	25°35	6°58	8°8	18°8	16°9	
S 10	1 14 16	16°39'47	13°44	14°19	13°27	18°6	18°58	6°8	4°27	7°58	25°35	6°55	8°5	18°15	16°6	
M 11	1 18 12	17°38'58	26°2	13°14	14°40	18°46	19°3	6°9	4°25	7°57	25°36	6°49	8°2	18°22	16°4	
T 12	1 22 9	18°38'11	8°X	9°12	15°54	19°25	19°8	6°10	4°22	7°56	25°36	6°42	7°59	18°28	16°1	
W 13	1 26 5	19°37'26	20°9	11°19	17°8	20°5	19°13	6°11	4°20	7°55	25°36	6°33	7°56	18°35	15°59	
T 14	1 30 2	20°36'43	2°Y4	10°34	18°21	20°45	19°18	6°11	4°18	7°54	25°37	6°24	7°52	18°42	15°56	
F 15	1 33 58	21°36'01	13°56	9°58	19°35	21°24	19°22	6°12	4°16	7°52	25°37	6°15	7°49	18°48	15°53	
S 16	1 37 55	22°35'22	25°46	9°32	20°48	22°4	19°26	6°12	4°13	7°51	25°37	6°8	7°46	18°55	15°51	
S 17	1 41 51	23°34'45	7♎37	9°16	22°2	22°44	19°31	6°12	4°11	7°50	25°38	6°2	7°43	19°2	15°48	
M 18	1 45 48	24°34'10	19°30	9°D12	23°16	23°23	19°35	6°12	4°9	7°49	25°38	5°59	7°40	19°8	15°45	
T 19	1 49 44	25°33'37	1♎28	9°19	24°29	24°3	19°38	6°R12	4°7	7°48	25°38	5°D57	7°36	19°15	15°42	
W 20	1 53 41	26°33'06	13°32	9°37	25°43	24°43	19°42	6°12	4°4	7°47	25°38	5°57	7°33	19°22	15°40	
T 21	1 57 38	27°32'38	25°48	10°4	26°56	25°23	19°46	6°12	4°2	7°46	25°38	5°59	7°30	19°29	15°37	
F 22	2 1 34	28°32'12	8♎18	10°41	28°10	26°3	19°49	6°12	4°0	7°46	25°38	6°0	7°27	19°35	15°34	
S 23	2 5 31	29°31'48	21°6	11°27	29°23	26°43	19°52	6°11	3°58	7°45	25°39	6°2	7°24	19°42	15°31	
S 24	2 9 27	0♎31'26	4♎17	12°21	0♎37	27°23	19°55	6°11	3°56	7°44	25°39	6°R2	7°21	19°49	15°28	
M 25	2 13 24	1°31'07	17°53	13°21	1°50	28°3	19°57	6°10	3°54	7°43	25°39	6°1	7°17	19°55	15°25	
T 26	2 17 20	2°30'50	1♎56	14°28	3°4	28°43	20°0	6°9	3°52	7°42	25°39	5°58	7°14	20°2	15°23	
W 27	2 21 17	3°30'35	16°25	15°41	4°17	29°23	20°2	6°8	3°50	7°41	25°R39	5°54	7°11	20°9	15°20	
T 28	2 25 13	4°30'22	1♃16	16°58	5°31	0♎3	20°4	6°7	3°48	7°41	25°39	5°50	7°8	20°15	15°17	
F 29	2 29 10	5°30'12	16°23	18°19	6°44	0°43	20°6	6°6	3°46	7°40	25°39	5°45	7°5	20°22	15°14	
S 30	2 33 7	6°30'03	1♎36	19°44	7°57	1°23	20°8	6°5	3°44	7°39	25°39	5°41	7°2	20°29	15°11	
S 31	2 37 3	7♎29'57	16♎45	21♎11	9♎11	2♎4	20♎10	6♎4	3°Y42	7°X39	25♎39	5♎39	6♎58	20°Y35	15♎8	

Delta T = 381.19 sec.

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SWISS EPHEMERIS for the year 2179

NOVEMBER 2179

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♁	♁	♁	♁	♁	♁	♁
M 1	2 41 0	8♂29°52	1♂41	22♂41	10♂24	2♂44	20♂11	6°R 2	3°R40	7°R38	25°R38	5♂38	6♂55	20♀42	15°R 5	
T 2	2 44 56	9°29'50	16°16	24°13	11°38	3°24	20°12	6♂ 1	3♀38	7♂38	25♂38	5°38	6°52	20°49	15♂ 2	
W 3	2 48 53	10°29'49	0♂25	25°46	12°51	4° 4	20°13	5°59	3°37	7°37	25°38	5°39	6°49	20°55	14°59	
T 4	2 52 49	11°29'49	17° 7	27°21	14° 4	4°45	20°14	5°57	3°35	7°36	25°38	5°41	6°46	21° 2	14°56	
F 5	2 56 46	12°29'52	24° 22	28°57	15°18	5°25	20°14	5°56	3°33	7°36	25°38	5°42	6°42	21° 9	14°53	
S 6	3 0 42	13°29'56	10♂14	0♂33	16°31	6° 6	20°15	5°54	3°31	7°36	25°37	5°R43	6°39	21°16	14°50	
S 7	3 4 39	14°30'01	22°45	2°10	17°44	6°46	20°R15	5°52	3°30	7°35	25°37	5°43	6°36	21°22	14°47	
M 8	3 8 36	15°30'08	5♂ 0	3°47	18°57	7°27	20°15	5°49	3°28	7°35	25°37	5°41	6°33	21°29	14°44	
T 9	3 12 32	16°30'16	17° 3	5°25	20°11	8° 7	20°15	5°47	3°27	7°34	25°37	5°39	6°30	21°36	14°41	
W10	3 16 29	17°30'26	28°59	7° 3	21°24	8°48	20°14	5°45	3°25	7°34	25°36	5°37	6°27	21°42	14°38	
T11	3 20 25	18°30'38	10♀50	8°41	22°37	9°29	20°13	5°42	3°24	7°34	25°36	5°34	6°23	21°49	14°35	
F12	3 24 22	19°30'51	22°40	10°18	23°50	10° 9	20°13	5°40	3°22	7°34	25°35	5°31	6°20	21°56	14°32	
S13	3 28 18	20°31'06	4♂31	11°56	25° 3	10°50	20°12	5°37	3°21	7°33	25°35	5°29	6°17	22° 2	14°29	
S14	3 32 15	21°31'22	16°27	13°34	26°16	11°31	20°10	5°34	3°19	7°33	25°35	5°27	6°14	22° 9	14°26	
M15	3 36 11	22°31'40	28°27	15°11	27°29	12°12	20° 9	5°31	3°18	7°33	25°34	5°26	6°11	22°16	14°23	
T16	3 40 8	23°32'00	10♂36	16°48	28°42	12°52	20° 7	5°28	3°17	7°33	25°34	5°D26	6° 7	22°22	14°20	
W17	3 44 5	24°32'22	22°53	18°25	29°55	13°33	20° 5	5°25	3°15	7°33	25°33	5°27	6° 4	22°29	14°17	
T18	3 48 1	25°32'45	5♂21	20° 2	1♂ 8	14°14	20° 3	5°22	3°14	7°33	25°33	5°28	6° 1	22°36	14°14	
F19	3 51 58	26°33'11	18° 3	21°39	2°21	14°55	20° 1	5°19	3°13	7°D33	25°32	5°29	5°58	22°42	14°11	
S20	3 55 54	27°33'38	0♂59	23°15	3°34	15°36	19°59	5°16	3°12	7°33	25°32	5°30	5°55	22°49	14° 8	
S21	3 59 51	28°34'07	14°12	24°51	4°47	16°17	19°56	5°12	3°11	7°33	25°31	5°30	5°52	22°56	14° 5	
M22	4 3 47	29°34'37	27°45	26°27	6° 0	16°58	19°53	5° 9	3°10	7°33	25°30	5°R30	5°48	23° 2	14° 2	
T23	4 7 44	0♂35'10	11♂37	28° 2	7°13	17°39	19°50	5° 5	3° 9	7°33	25°30	5°30	5°45	23° 9	13°59	
W24	4 11 40	1°35'44	25°49	29°38	8°25	18°20	19°47	5° 2	3° 8	7°33	25°29	5°30	5°42	23°16	13°57	
T25	4 15 37	2°36'20	10♂19	1♂13	9°38	19° 2	19°44	4°58	3° 7	7°33	25°28	5°30	5°39	23°22	13°54	
F26	4 19 34	3°36'58	25° 4	2°48	10°51	19°43	19°40	4°54	3° 6	7°34	25°28	5°29	5°36	23°29	13°51	
S27	4 23 30	4°37'38	9♂56	4°23	12° 3	20°24	19°36	4°50	3° 5	7°34	25°27	5°29	5°33	23°36	13°48	
S28	4 27 27	5°38'19	24°50	5°57	13°16	21° 6	19°32	4°46	3° 5	7°34	25°26	5°D29	5°29	23°43	13°45	
M29	4 31 23	6°39'01	9♂36	7°32	14°29	21°47	19°28	4°42	3° 4	7°34	25°25	5°R29	5°26	23°49	13°43	
T30	4 35 20	7♂39'45	24♂ 9	9♂ 6	15♂41	22♂28	19♂24	4♂38	3♀ 3	7♂35	25♂25	5♂29	5♂23	23♀56	13♂40	

Delta T = 381.38 sec.

DECEMBER 2179

00:00 UT

Day	Sid.t	☉	☽	♀	♁	♂	♃	♅	♁	♁	♁	♁	♁	♁	♁	♁
W 1	4 39 16	8♂40'30	8♂21	10♂40	16♂54	23♂10	19°R19	4°R34	3°R 3	7♂35	25°R24	5°R29	5♂20	24♀ 3	13°R37	
T 2	4 43 13	9°41'17	22° 9	12°15	18° 6	23°51	19♂15	4♂30	3♀ 2	7°36	25♂23	5♂28	5°17	24° 9	13♂35	
F 3	4 47 10	10°42'04	5♂31	13°49	19°19	24°33	19°10	4°26	3° 2	7°36	25°22	5°28	5°13	24°16	13°32	
S 4	4 51 6	11°42'52	18°29	15°22	20°31	25°14	19° 5	4°21	3° 1	7°37	25°21	5°27	5°10	24°23	13°30	
S 5	4 55 3	12°43'41	1♂ 5	16°56	21°43	25°56	19° 0	4°17	3° 1	7°37	25°20	5°27	5° 7	24°29	13°27	
M 6	4 58 59	13°44'31	13°23	18°30	22°56	26°38	18°54	4°13	3° 0	7°38	25°20	5°D27	5° 4	24°36	13°24	
T 7	5 2 56	14°45'22	25°27	20° 4	24° 8	27°19	18°49	4° 8	3° 0	7°38	25°19	5°27	5° 1	24°43	13°22	
W 8	5 6 52	15°46'13	7♀21	21°38	25°20	28° 1	18°43	4° 4	3° 0	7°39	25°18	5°27	4°58	24°49	13°20	
T 9	5 10 49	16°47'06	19°11	23°11	26°32	28°43	18°37	3°59	3° 0	7°40	25°17	5°28	4°54	24°56	13°17	
F10	5 14 45	17°47'59	1♂ 1	24°45	27°44	29°24	18°31	3°54	2°59	7°40	25°16	5°30	4°51	25° 3	13°15	
S11	5 18 42	18°48'53	12°55	26°19	28°56	0♂ 6	18°25	3°50	2°59	7°41	25°15	5°31	4°48	25° 9	13°12	
S12	5 22 38	19°49'48	24°55	27°53	0♂ 8	0°48	18°19	3°45	2°D59	7°42	25°14	5°32	4°45	25°16	13°10	
M13	5 26 35	20°50'44	7♂ 6	29°26	1°20	1°30	18°12	3°40	2°59	7°43	25°13	5°R32	4°42	25°23	13° 8	
T14	5 30 32	21°51'41	19°28	1♂ 0	2°32	2°12	18° 6	3°35	2°59	7°43	25°12	5°32	4°39	25°29	13° 6	
W15	5 34 28	22°52'39	2♂ 4	2°34	3°43	2°54	17°59	3°31	2°59	7°44	25°11	5°30	4°35	25°36	13° 4	
T16	5 38 25	23°53'37	14°52	4° 8	4°55	3°36	17°52	3°26	3° 0	7°45	25°10	5°28	4°32	25°43	13° 2	
F17	5 42 21	24°54'37	27°55	5°41	6° 6	4°18	17°46	3°21	3° 0	7°46	25° 9	5°25	4°29	25°49	12°59	
S18	5 46 18	25°55'37	11♂10	7°15	7°18	5° 0	17°39	3°16	3° 0	7°47	25° 7	5°22	4°26	25°56	12°57	
S19	5 50 14	26°56'38	24°39	8°49	8°29	5°42	17°31	3°11	3° 0	7°48	25° 6	5°19	4°23	26° 3	12°55	
M20	5 54 11	27°57'40	8♂20	10°22	9°40	6°24	17°24	3° 6	3° 1	7°49	25° 5	5°17	4°19	26° 9	12°54	
T21	5 58 8	28°58'43	22°12	11°55	10°52	7° 7	17°17	3° 1	3° 1	7°50	25° 4	5°16	4°16	26°16	12°52	
W22	6 2 4	29°59'47	6♂15	13°29	12° 3	7°49	17° 9	2°56	3° 2	7°51	25° 3	5°D16	4°13	26°23	12°50	
T23	6 6 1	1♂ 0'52	20°27	15° 1	13°14	8°31	17° 2	2°51	3° 2	7°52	25° 2	5°16	4°10	26°29	12°48	
F24	6 9 57	2° 1'58	4♂47	16°34	14°25	9°14	16°54	2°47	3° 3	7°54	25° 1	5°18	4° 7	26°36	12°46	
S25	6 13 54	3° 3'04	19°12	18° 6	15°35	9°56	16°47	2°42	3° 3	7°55	24°59	5°19	4° 4	26°43	12°45	
S26	6 17 50	4° 4'12	3♂37	19°37	16°46	10°38	16°39	2°37	3° 4	7°56	24°58	5°R20	4° 0	26°49	12°43	
M27	6 21 47	5° 5'20	18° 0	21° 8	17°57	11°21	16°31	2°32	3° 5	7°57	24°57	5°20	3°57	26°56	12°42	
T28	6 25 43	6° 6'28	2♂14	22°38	19° 7	12° 4	16°23	2°27	3° 6	7°59	24°56	5°17	3°54	27° 3	12°40	
W29	6 29 40	7° 7'37	16°14	24° 6	20°18	12°46	16°15	2°22	3° 6	8° 0	24°55	5°14	3°51	27°10	12°39	
T30	6 33 37	8° 8'46	29°56	25°34	21°28	13°29	16° 7	2°17	3° 7	8° 1	24°53	5° 8	3°48	27°16	12°37	
F31	6 37 33	9♂ 9'55	13♂17	26♂59	22♂38	14♂11	15♂59	2♂12	3♀ 8	8♂ 3	24♂52	5♂ 3	3♂45	27♀23	12♂36	

Delta T = 381.56 sec.

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