

# SWISS EPHEMERIS for the year 1993

JANUARY 1993

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
F 1	6 42 38	10°35'11	8°55'	27°33'	26°41'	20°R25	13°29'	16°21'	17°40'	18°21'	24°36'	21°D19	20°26'	8°30'	23°R 0
S 2	6 46 34	11°36'20	21° 2	29° 4	27°48'	20° 2	13°34'	16°27'	17°44'	18°24'	24°38'	21°19'	20°22'	8°37'	22°58'
S 3	6 50 31	12°37'29	3°22'	0°35'	28°54'	19°38'	13°39'	16°34'	17°47'	18°26'	24°40'	21°21'	20°19'	8°44'	22°55'
M 4	6 54 27	13°38'38	16° 2	2° 7	0° 0	19°14'	13°44'	16°40'	17°51'	18°28'	24°42'	21°22'	20°16'	8°51'	22°52'
T 5	6 58 24	14°39'46	29° 4	3°39'	1° 6	18°50'	13°48'	16°47'	17°54'	18°30'	24°43'	21°24'	20°13'	8°57'	22°49'
W 6	7 2 21	15°40'54	12°30'	5°12'	2°12'	18°26'	13°52'	16°53'	17°58'	18°33'	24°45'	21°25'	20°10'	9° 4	22°46'
T 7	7 6 17	16°42'02	26°22'	6°44'	3°17'	18° 3	13°56'	17° 0	18° 2	18°35'	24°47'	21°R25	20° 6	9°11'	22°43'
F 8	7 10 14	17°43'10	10°38'	8°18'	4°23'	17°39'	14° 0	17° 6	18° 5	18°37'	24°49'	21°24'	20° 3	9°18'	22°40'
S 9	7 14 10	18°44'18	25°12'	9°51'	5°28'	17°15'	14° 4	17°13'	18° 9	18°40'	24°50'	21°21'	20° 0	9°24'	22°37'
S 10	7 18 7	19°45'25	9°59'	11°26'	6°32'	16°51'	14° 8	17°20'	18°12'	18°42'	24°52'	21°18'	19°57'	9°31'	22°33'
M 11	7 22 3	20°46'32	24°51'	13° 0	7°37'	16°27'	14°11'	17°26'	18°16'	18°44'	24°53'	21°13'	19°54'	9°38'	22°30'
T 12	7 26 0	21°47'39	9°39'	14°35'	8°41'	16° 4	14°14'	17°33'	18°19'	18°46'	24°55'	21° 9	19°51'	9°44'	22°26'
W 13	7 29 57	22°48'46	24°17'	16°11'	9°44'	15°41'	14°18'	17°40'	18°23'	18°49'	24°56'	21° 5	19°47'	9°51'	22°23'
T 14	7 33 53	23°49'52	8°39'	17°47'	10°48'	15°18'	14°20'	17°47'	18°27'	18°51'	24°58'	21° 3	19°44'	9°58'	22°19'
F 15	7 37 50	24°50'59	22°42'	19°23'	11°51'	14°56'	14°23'	17°53'	18°30'	18°53'	24°59'	21°D 2	19°41'	10° 5	22°16'
S 16	7 41 46	25°52'05	6°26'	21° 0	12°53'	14°34'	14°26'	18° 0	18°34'	18°55'	25° 1	21° 2	19°38'	10°11'	22°12'
S 17	7 45 43	26°53'12	19°51'	22°37'	13°56'	14°12'	14°28'	18° 7	18°37'	18°58'	25° 2	21° 4	19°35'	10°18'	22° 8
M 18	7 49 39	27°54'18	2°59'	24°15'	14°58'	13°51'	14°30'	18°14'	18°41'	19° 0	25° 4	21° 5	19°32'	10°25'	22° 4
T 19	7 53 36	28°55'24	15°52'	25°54'	15°59'	13°30'	14°32'	18°21'	18°44'	19° 2	25° 5	21°R 6	19°28'	10°31'	22° 0
W 20	7 57 32	29°56'29	28°33'	27°33'	17° 0	13°10'	14°34'	18°28'	18°48'	19° 4	25° 6	21° 6	19°25'	10°38'	21°56'
T 21	8 1 29	0°57'34	11°3'	29°12'	18° 1	12°50'	14°36'	18°35'	18°51'	19° 7	25° 8	21° 4	19°22'	10°45'	21°52'
F 22	8 5 26	1°58'39	23°23'	0°53'	19° 1	12°31'	14°37'	18°42'	18°55'	19° 9	25° 9	21° 0	19°19'	10°52'	21°48'
S 23	8 9 22	2°59'42	5°34'	2°33'	20° 1	12°13'	14°38'	18°49'	18°58'	19°11'	25°10'	20°54'	19°16'	10°58'	21°44'
S 24	8 13 19	4° 0'45	17°38'	4°15'	21° 1	11°55'	14°39'	18°56'	19° 2	19°13'	25°11'	20°46'	19°12'	11° 5	21°40'
M 25	8 17 15	5° 1'47	29°37'	5°57'	22° 0	11°38'	14°40'	19° 3	19° 5	19°16'	25°12'	20°37'	19° 9	11°12'	21°35'
T 26	8 21 12	6° 2'48	11°30'	7°39'	22°58'	11°22'	14°41'	19°10'	19° 9	19°18'	25°14'	20°28'	19° 6	11°19'	21°31'
W 27	8 25 8	7° 3'48	23°21'	9°23'	23°56'	11° 7	14°41'	19°17'	19°12'	19°20'	25°15'	20°19'	19° 3	11°25'	21°27'
T 28	8 29 5	8° 4'47	5°13'	11° 6	24°53'	10°52'	14°42'	19°25'	19°16'	19°22'	25°16'	20°12'	19° 0	11°32'	21°22'
F 29	8 33 1	9° 5'45	17° 8	12°51'	25°50'	10°38'	14°R42	19°32'	19°19'	19°24'	25°17'	20° 8	18°57'	11°39'	21°18'
S 30	8 36 58	10° 6'42	29°11'	14°35'	26°47'	10°24'	14°42'	19°39'	19°22'	19°27'	25°18'	20° 5	18°53'	11°45'	21°13'
S 31	8 40 55	11° 7'37	11°27'	16°21'	27°42'	10°12'	14°41'	19°46'	19°26'	19°29'	25°19'	20°D 4	18°50'	11°52'	21°9

Delta T = 59.12 sec.

FEBRUARY 1993

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
M 1	8 44 51	12° 8'31	24° 0	18° 7	28°37'	10°R 0	14°R41	19°53'	19°29'	19°31'	25°20'	20° 5	18°47'	11°59'	21°R 5
T 2	8 48 48	13° 9'24	6°15'	19°53'	29°32'	9°54'	14°40'	20° 0	19°33'	19°33'	25°21'	20° 6	18°44'	12° 6	21°R 0
W 3	8 52 44	14°10'16	20°17'	21°40'	0°25'	9°39'	14°39'	20° 8	19°36'	19°35'	25°21'	20°R 6	18°41'	12°12'	20°55'
T 4	8 56 41	15°11'06	4° 7	23°26'	1°18'	9°30'	14°38'	20°15'	19°39'	19°37'	25°22'	20° 5	18°38'	12°19'	20°51'
F 5	9 0 37	16°11'55	18°27'	25°14'	2°11'	9°22'	14°37'	20°22'	19°42'	19°39'	25°23'	20° 2	18°34'	12°26'	20°46'
S 6	9 4 34	17°12'43	3°12'	27° 1	3° 2	9°14'	14°36'	20°29'	19°46'	19°41'	25°24'	19°57'	18°31'	12°33'	20°42'
S 7	9 8 30	18°13'29	18°16'	28°47'	3°53'	9° 7	14°34'	20°37'	19°49'	19°43'	25°24'	19°49'	18°28'	12°39'	20°37'
M 8	9 12 27	19°14'14	3°30'	0°34'	4°43'	9° 1	14°32'	20°44'	19°52'	19°45'	25°25'	19°40'	18°25'	12°46'	20°33'
T 9	9 16 24	20°14'57	18°44'	2°20'	5°32'	8°56'	14°30'	20°51'	19°55'	19°47'	25°26'	19°30'	18°22'	12°53'	20°28'
W 10	9 20 20	21°15'40	3°45'	4° 5	6°20'	8°51'	14°28'	20°58'	19°59'	19°49'	25°26'	19°22'	18°18'	12°59'	20°23'
T 11	9 24 17	22°16'21	18°26'	5°49'	7° 8	8°48'	14°26'	21° 5	20° 2	19°51'	25°27'	19°15'	18°15'	13° 6	20°19'
F 12	9 28 13	23°17'02	2°14'	7°32'	7°54'	8°45'	14°23'	21°13'	20° 5	19°53'	25°28'	19°11'	18°12'	13°13'	20°14'
S 13	9 32 10	24°17'41	16°32'	9°13'	8°39'	8°43'	14°20'	21°20'	20° 8	19°55'	25°28'	19° 9	18° 9	13°20'	20° 9
S 14	9 36 6	25°18'20	29°56'	10°51'	9°24'	8°41'	14°17'	21°27'	20°11'	19°57'	25°29'	19°D 9	18° 6	13°26'	20° 5
M 15	9 40 3	26°18'57	12°57'	12°27'	10° 7	8°D41	14°14'	21°34'	20°14'	19°59'	25°29'	19°R 9	18° 3	13°33'	20° 0
T 16	9 43 59	27°19'33	25°39'	13°59'	10°50'	8°41'	14°11'	21°42'	20°17'	20° 1	25°29'	19° 9	17°59'	13°40'	19°56'
W 17	9 47 56	28°20'08	8° 6	15°27'	11°31'	8°42'	14° 8	21°49'	20°20'	20° 3	25°30'	19° 8	17°56'	13°46'	19°51'
T 18	9 51 53	29°20'41	20°21'	16°50'	12°11'	8°43'	14° 4	21°56'	20°23'	20° 5	25°30'	19° 3	17°53'	13°53'	19°47'
F 19	9 55 49	0°21'13	2°28'	18° 9	12°49'	8°46'	14° 0	22° 3	20°26'	20° 7	25°30'	18°56'	17°50'	14° 0	19°42'
S 20	9 59 46	1°21'44	14°29'	19°21'	13°27'	8°49'	13°56'	22°10'	20°29'	20° 9	25°31'	18°46'	17°47'	14° 7	19°38'
S 21	10 3 42	2°22'13	26°26'	20°27'	14° 3	8°52'	13°52'	22°18'	20°32'	20°11'	25°31'	18°33'	17°44'	14°13'	19°33'
M 22	10 7 39	3°22'40	8°20'	21°25'	14°38'	8°57'	13°48'	22°25'	20°35'	20°12'	25°31'	18°19'	17°40'	14°20'	19°29'
T 23	10 11 35	4°23'06	20°12'	22°16'	15°11'	9° 2	13°43'	22°32'	20°38'	20°14'	25°31'	18° 5	17°37'	14°27'	19°24'
W 24	10 15 32	5°23'30	2° 4	22°58'	15°43'	9° 8	13°39'	22°39'	20°40'	20°16'	25°31'	17°51'	17°34'	14°34'	19°20'
T 25	10 19 28	6°23'53	13°57'	23°31'	16°14'	9°14'	13°34'	22°46'	20°43'	20°18'	25°31'	17°39'	17°31'	14°40'	19°16'
F 26	10 23 25	7°24'13	25°54'	23°54'	16°42'	9°21'	13°29'	22°53'	20°46'	20°19'	25°31'	17°30'	17°28'	14°47'	19°11'
S 27	10 27 21	8°24'32	7°58'	24° 9	17° 9	9°29'	13°24'	23° 0	20°49'	20°21'	25°R31	17°24'	17°24'	14°54'	19° 7
S 28	10 31 18	9°24'48	20°12'	24°R13	17°35'	9°37'	13°19'	23° 7	20°51'	20°23'	25°31'	17°21'	17°21'	15° 0	19°9

Delta T = 59.19 sec.

created from Swiss Ephemeris, Copyright Astrodienst AG [11.2.2014]

# SWISS EPHEMERIS for the year 1993

MARCH 1993

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
M 1	10 35 15	10 <sup>h</sup> 25'03"	2 <sup>h</sup> 11'42"	24°R 8	17°V58	9 <sup>h</sup> 54'6"	13°R13	23 <sup>h</sup> 31'4"	20 <sup>h</sup> 35'4"	20 <sup>h</sup> 35'4"	25°R31	17°R19	17 <sup>h</sup> 18'18"	15 <sup>h</sup> 18'7"	18°R59
T 2	10 39 11	11°25'16"	15°31'	23 <sup>h</sup> 53'53"	18°20'	9°56'	13 <sup>h</sup> 13'8"	23°21'	20°57'	20°26'	25 <sup>h</sup> 31'	17 <sup>h</sup> 19'	17°15'	15°14'	18 <sup>h</sup> 55'
W 3	10 43 8	12°25'26"	28°44'	23°29'	18°40'	10°6'	13°2'	23°28'	20°59'	20°27'	25°31'	17°19'	17°12'	15°21'	18°51'
T 4	10 47 4	13°25'35"	12 <sup>h</sup> 52'24"	22°57'	18°58'	10°17'	12°56'	23°35'	21°2'	20°29'	25°31'	17°17'	17°9'	15°27'	18°47'
F 5	10 51 1	14°25'41"	26°35'	22°18'	19°13'	10°28'	12°50'	23°42'	21°4'	20°31'	25°31'	17°14'	17°5'	15°34'	18°43'
S 6	10 54 57	15°25'45"	11 <sup>h</sup> 11'14"	21°31'	19°27'	10°40'	12°44'	23°49'	21°7'	20°32'	25°30'	17°7'	17°2'	15°41'	18°39'
S 7	10 58 54	16°25'47"	26°16'	20°40'	19°38'	10°52'	12°38'	23°56'	21°9'	20°33'	25°30'	16°58'	16°59'	15°47'	18°35'
M 8	11 2 50	17°25'47"	11 <sup>h</sup> 11'35"	19°44'	19°48'	11°5'	12°32'	24°3'	21°11'	20°35'	25°30'	16°47'	16°56'	15°54'	18°31'
T 9	11 6 47	18°25'46"	26°57'	18°46'	19°54'	11°18'	12°25'	24°10'	21°14'	20°36'	25°29'	16°35'	16°53'	16°1'	18°27'
W10	11 10 44	19°25'42"	12 <sup>h</sup> 12'12"	17°46'	19°59'	11°32'	12°19'	24°17'	21°16'	20°38'	25°29'	16°25'	16°49'	16°8'	18°24'
T 11	11 14 40	20°25'37"	27°9'	16°46'	20°R 1	11°47'	12°12'	24°23'	21°18'	20°39'	25°29'	16°16'	16°46'	16°14'	18°20'
F 12	11 18 37	21°25'29"	11 <sup>h</sup> 11'40"	15°48'	20°1'	12°1'	12°5'	24°30'	21°20'	20°40'	25°28'	16°10'	16°43'	16°21'	18°17'
S 13	11 22 33	22°25'21"	25°41'	14°52'	19°58'	12°17'	11°58'	24°37'	21°22'	20°42'	25°28'	16°7'	16°40'	16°28'	18°13'
S 14	11 26 30	23°25'10"	9 <sup>h</sup> 13'13"	14°0'	19°53'	12°32'	11°51'	24°43'	21°25'	20°43'	25°27'	16°6'	16°37'	16°35'	18°10'
M15	11 30 26	24°24'58"	22°18'	13°12'	19°45'	12°49'	11°44'	24°50'	21°27'	20°44'	25°27'	16°6'	16°34'	16°41'	18°7'
T 16	11 34 23	25°24'45"	5 <sup>h</sup> 3'0"	12°29'	19°35'	13°5'	11°37'	24°57'	21°29'	20°46'	25°26'	16°5'	16°30'	16°48'	18°4'
W17	11 38 19	26°24'29"	17°24'	11°52'	19°23'	13°22'	11°30'	25°3'	21°31'	20°47'	25°26'	16°4'	16°27'	16°55'	18°1'
T 18	11 42 16	27°24'12"	29°34'	11°21'	19°7'	13°40'	11°23'	25°10'	21°33'	20°48'	25°25'	16°0'	16°24'	17°1'	17°58'
F 19	11 46 13	28°23'53"	11 <sup>h</sup> 11'34"	10°56'	18°50'	13°58'	11°16'	25°16'	21°35'	20°49'	25°24'	15°53'	16°21'	17°8'	17°55'
S 20	11 50 9	29°23'32"	23°29'	10°37'	18°30'	14°16'	11°8'	25°23'	21°36'	20°50'	25°24'	15°44'	16°18'	17°15'	17°52'
S 21	11 54 6	0 <sup>h</sup> 23'09"	5 <sup>h</sup> 11'21"	10°25'	18°8'	14°35'	11°1'	25°29'	21°38'	20°51'	25°23'	15°32'	16°15'	17°22'	17°49'
M22	11 58 2	1°22'45"	17°12'	10°18'	17°44'	14°54'	10°53'	25°35'	21°40'	20°52'	25°22'	15°18'	16°11'	17°28'	17°46'
T 23	12 1 59	2°22'18"	29°5'	10°D18	17°17'	15°13'	10°46'	25°42'	21°42'	20°53'	25°21'	15°4'	16°8'	17°35'	17°44'
W24	12 5 55	3°21'49"	11°V 0	10°23'	16°49'	15°33'	10°38'	25°48'	21°43'	20°54'	25°20'	14°51'	16°5'	17°42'	17°41'
T 25	12 9 52	4°21'19"	22°59'	10°34'	16°18'	15°53'	10°30'	25°54'	21°45'	20°55'	25°20'	14°39'	16°2'	17°49'	17°39'
F 26	12 13 48	5°20'46"	5 <sup>h</sup> 3'3"	10°50'	15°46'	16°13'	10°23'	26°0'	21°47'	20°56'	25°19'	14°30'	15°59'	17°55'	17°37'
S 27	12 17 45	6°20'11"	17°14'	11°12'	15°13'	16°34'	10°15'	26°6'	21°48'	20°57'	25°18'	14°24'	15°55'	18°2'	17°34'
S 28	12 21 42	7°19'34"	29°35'	11°38'	14°38'	16°55'	10°7'	26°12'	21°50'	20°58'	25°17'	14°21'	15°52'	18°9'	17°32'
M29	12 25 38	8°18'55"	12 <sup>h</sup> 12'9"	12°8'	14°2'	17°17'	10°0'	26°18'	21°51'	20°59'	25°16'	14°D20	15°49'	18°15'	17°30'
T 30	12 29 35	9°18'13"	24°59'	12°43'	13°25'	17°39'	9°52'	26°24'	21°53'	21°0'	25°15'	14°D20	15°46'	18°22'	17°28'
W31	12 33 31	10°V17'29"	8 <sup>h</sup> 5'9"	13°11'22"	12°V48	18 <sup>h</sup> 5'1"	9°14'44"	26°30'	21°54'	21°0'	25°14'	14°R21	15°43'	18°11'29"	17°26'

Delta T = 59.26 sec.

APRIL 1993

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
T 1	12 37 28	11°V16'43"	21 <sup>h</sup> 54'42"	14°H 4	12°R10	18 <sup>h</sup> 52'23"	9°R36	26°36'36"	21°35'55"	21°3'1	25°R13	14°R20	15°14'40"	18°H36	17°R25
F 2	12 41 24	12°15'54"	5 <sup>h</sup> 11'40"	14°51'	11°V32	18°46'	9°12'29"	26°42'	21°56'	21°2'	25°11'12"	14°18'18"	15°36'	18°42'	17°23'
S 3	12 45 21	13°15'03"	20°4'	15°40'	10°54'	19°9'	9°21'	26°48'	21°58'	21°3'	25°11'	14°14'	15°33'	18°49'	17°22'
S 4	12 49 17	14°14'10"	4 <sup>h</sup> 11'52"	16°33'	10°17'	19°32'	9°13'	26°53'	21°59'	21°3'	25°9'	14°7'	15°30'	18°56'	17°20'
M 5	12 53 14	15°13'14"	19°56'	17°29'	9°40'	19°56'	9°5'	26°59'	22°0'	21°4'	25°8'	13°58'	15°27'	19°2'	17°19'
T 6	12 57 11	16°12'17"	5 <sup>h</sup> 11'8"	18°28'	9°5'	20°20'	8°58'	27°5'	22°1'	21°4'	25°7'	13°50'	15°24'	19°9'	17°18'
W 7	13 1 7	17°11'17"	20°18'	19°29'	8°30'	20°44'	8°50'	27°10'	22°2'	21°5'	25°6'	13°41'	15°21'	19°16'	17°16'
T 8	13 5 4	18°10'15"	5 <sup>h</sup> 11'15"	20°34'	7°56'	21°8'	8°43'	27°16'	22°3'	21°5'	25°5'	13°34'	15°17'	19°23'	17°15'
F 9	13 9 0	19°9'11"	19°50'	21°40'	7°25'	21°32'	8°35'	27°21'	22°4'	21°6'	25°3'	13°30'	15°14'	19°29'	17°15'
S 10	13 12 57	20°8'06"	3 <sup>h</sup> 11'59"	22°49'	6°54'	21°57'	8°28'	27°26'	22°5'	21°6'	25°2'	13°28'	15°11'	19°36'	17°14'
S 11	13 16 53	21°6'58"	17°39'	24°1'	6°26'	22°22'	8°20'	27°32'	22°5'	21°7'	25°1'	13°D27	15°8'	19°43'	17°13'
M12	13 20 50	22°5'49"	0 <sup>h</sup> 35'52"	25°15'	6°0'	22°48'	8°13'	27°37'	22°6'	21°7'	25°0'	13°28'	15°5'	19°50'	17°13'
T 13	13 24 46	23°4'38"	13°40'	26°30'	5°36'	23°13'	8°6'	27°42'	22°7'	21°8'	24°58'	13°29'	15°1'	19°56'	17°12'
W14	13 28 43	24°3'26"	26°7'	27°48'	5°14'	23°39'	7°58'	27°47'	22°8'	21°8'	24°57'	13°R30	14°58'	20°3'	17°12'
T 15	13 32 39	25°2'12"	8 <sup>h</sup> 11'18"	29°8'	4°54'	24°5'	7°51'	27°52'	22°8'	21°8'	24°56'	13°29'	14°55'	20°10'	17°11'
F 16	13 36 36	26°0'56"	20°19'	0°V30	4°37'	24°31'	7°44'	27°57'	22°9'	21°8'	24°54'	13°26'	14°52'	20°16'	17°11'
S 17	13 40 33	26°59'38"	2 <sup>h</sup> 11'12"	1°54'	4°22'	24°57'	7°37'	28°2'	22°9'	21°9'	24°53'	13°21'	14°49'	20°23'	17°D11
S 18	13 44 29	27°58'18"	14°3'	3°19'	4°10'	25°24'	7°30'	28°6'	22°10'	21°9'	24°51'	13°14'	14°46'	20°30'	17°11'
M19	13 48 26	28°56'57"	25°55'	4°47'	4°0'	25°51'	7°23'	28°11'	22°10'	21°9'	24°50'	13°6'	14°42'	20°37'	17°11'
T 20	13 52 22	29°55'34"	7°V50	6°16'	3°52'	26°18'	7°17'	28°16'	22°10'	21°9'	24°48'	12°57'	14°39'	20°43'	17°12'
W21	13 56 19	0 <sup>h</sup> 35'40'09"	19°51'	7°47'	3°47'	26°45'	7°10'	28°20'	22°11'	21°9'	24°47'	12°49'	14°36'	20°50'	17°12'
T 22	14 0 15	1°52'42"	1 <sup>h</sup> 58'58"	9°20'	3°45'	27°12'	7°4'	28°25'	22°11'	21°9'	24°45'	12°43'	14°33'	20°57'	17°13'
F 23	14 4 12	2°51'14"	14°13'	10°54'	3°D45	27°40'	6°57'	28°29'	22°11'	21°R 9	24°44'	12°37'	14°30'	21°3'	17°13'
S 24	14 8 8	3°49'43"	26°38'	12°31'	3°47'	28°8'	6°51'	28°34'	22°11'	21°9'	24°42'	12°34'	14°26'	21°10'	17°14'
S 25	14 12 5	4°48'11"	9 <sup>h</sup> 11'14"	14°9'	3°51'	28°36'	6°45'	28°38'	22°11'	21°9'	24°41'	12°D33	14°23'	21°17'	17°15'
M26	14 16 2	5°46'36"	22°1'	15°49'	3°58'	29°4'	6°39'	28°42'	22°R11	21°9'	24°39'	12°33'	14°20'	21°24'	17°16'
T 27	14 19 58	6°45'00"	5 <sup>h</sup> 3'3"	17°30'	4°7'	29°32'	6°33'	28°46'	22°11'	21°9'	24°38'	12°35'	14°17'	21°30'	17°17'
W28	14 23 55	7°43'21"	18°20'	19°13'	4°18'	0°D 0	6°27'	28°50'	22°11'	21°9'	24°36'	12°36'	14°14'	21°37'	17°18'
T 29	14 27 51	8°41'41"	1 <sup>h</sup> 11'55"	20°58'	4°31'	0°29'	6°21'	28°54'	22°11'	21°9'	24°35'	12°37'	14°11'	21°44'	17°19'
F 30	14 31 48	9°39'58"	15°11'48"	22°V45	4°V46	0°D58	6°16'	28°58'	22°11'	21°8'	24°33'	12°R37	14°7'	21°H51	17°20'

Delta T = 59.33 sec.

created from Swiss Ephemeris, Copyright Astrodienst AG [11.2.2014]

# SWISS EPHEMERIS for the year 1993

MAY 1993

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
S 1	14 35 44	10♈38'13	0♏ 0	24♊34	5♊ 3	1♈27	6♊11	29♈ 2	22♊11	21♊ 8	24♊31	12♊36	14♊ 4	21♊57	17♊22
S 2	14 39 41	11°36'26	14°29	26°24	5°22	1°56	6♈ 5	29° 6	22♈11	21♈ 8	24♈30	12♈33	14° 1	22° 4	17°23
M 3	14 43 37	12°34'37	29°11	28°16	5°43	2°25	6° 0	29° 9	22°10	21° 8	24°28	12°30	13°58	22°11	17°25
T 4	14 47 34	13°32'46	14♈ 0	0♈10	6° 5	2°54	5°55	29°13	22°10	21° 7	24°27	12°25	13°55	22°17	17°27
W 5	14 51 31	14°30'53	28°48	2° 6	6°29	3°24	5°51	29°16	22°10	21° 7	24°25	12°22	13°52	22°24	17°29
T 6	14 55 27	15°28'58	13♈28	4° 3	6°55	3°54	5°46	29°20	22° 9	21° 6	24°23	12°18	13°48	22°31	17°31
F 7	14 59 24	16°27'02	27°53	6° 2	7°23	4°23	5°42	29°23	22° 9	21° 6	24°22	12°17	13°45	22°38	17°33
S 8	15 3 20	17°25'04	11♈57	8° 3	7°52	4°53	5°37	29°26	22° 8	21° 5	24°20	12°16	13°42	22°44	17°35
S 9	15 7 17	18°23'05	25°37	10° 5	8°23	5°24	5°33	29°29	22° 8	21° 5	24°18	12°16	13°39	22°51	17°37
M10	15 11 13	19°21'05	8♈53	12° 9	8°55	5°54	5°29	29°32	22° 7	21° 4	24°17	12°18	13°36	22°58	17°40
T11	15 15 10	20°19'03	21°45	14°15	9°28	6°24	5°25	29°35	22° 6	21° 4	24°15	12°19	13°32	23° 4	17°42
W12	15 19 6	21°16'59	4♈17	16°22	10° 3	6°55	5°22	29°38	22° 5	21° 3	24°13	12°21	13°29	23°11	17°45
T13	15 23 3	22°14'54	16°32	18°30	10°39	7°25	5°18	29°41	22° 5	21° 3	24°12	12°21	13°26	23°18	17°47
F14	15 27 0	23°12'48	28°35	20°39	11°16	7°56	5°15	29°43	22° 4	21° 2	24°10	12°R21	13°23	23°25	17°50
S15	15 30 56	24°10'41	10♈30	22°49	11°54	8°27	5°12	29°46	22° 3	21° 1	24° 8	12°21	13°20	23°31	17°53
S16	15 34 53	25° 8'33	22°23	25° 0	12°34	8°58	5° 9	29°49	22° 2	21° 1	24° 7	12°19	13°17	23°38	17°56
M17	15 38 49	26° 6'23	4♈16	27°11	13°14	9°29	5° 6	29°51	22° 1	21° 0	24° 5	12°17	13°13	23°45	17°59
T18	15 42 46	27° 4'12	16°14	29°22	13°56	10° 0	5° 3	29°53	22° 0	20°59	24° 3	12°15	13°10	23°52	18° 2
W19	15 46 42	28° 2'00	28°20	1♈34	14°38	10°31	5° 1	29°55	21°59	20°58	24° 2	12°12	13° 7	23°58	18° 6
T20	15 50 39	28°59'46	10♈37	3°44	15°22	11° 3	4°59	29°58	21°58	20°58	24° 0	12°11	13° 4	24° 5	18° 9
F21	15 54 35	29°57'32	23° 5	5°55	16° 6	11°34	4°57	0♈ 0	21°57	20°57	23°58	12° 9	13° 1	24°12	18°12
S22	15 58 32	0♈55'16	5♈47	8° 4	16°52	12° 6	4°55	0° 2	21°56	20°56	23°57	12°D 9	12°58	24°18	18°16
S23	16 2 29	1°52'58	18°42	10°12	17°38	12°38	4°53	0° 3	21°54	20°55	23°55	12° 9	12°54	24°25	18°20
M24	16 6 25	2°50'40	1♈52	12°19	18°25	13°10	4°51	0° 5	21°53	20°54	23°53	12° 9	12°51	24°32	18°23
T25	16 10 22	3°48'20	15°14	14°24	19°13	13°42	4°50	0° 7	21°52	20°53	23°52	12°10	12°48	24°39	18°27
W26	16 14 18	4°45'58	28°50	16°27	20° 1	14°14	4°49	0° 8	21°50	20°52	23°50	12°11	12°45	24°45	18°31
T27	16 18 15	5°43'36	12♈38	18°28	20°50	14°46	4°48	0°10	21°49	20°51	23°48	12°11	12°42	24°52	18°35
F28	16 22 11	6°41'11	26°37	20°26	21°40	15°18	4°47	0°11	21°48	20°50	23°47	12°12	12°38	24°59	18°39
S29	16 26 8	7°38'45	10♈46	22°23	22°31	15°51	4°46	0°12	21°46	20°49	23°45	12°R12	12°35	25° 5	18°43
S30	16 30 4	8°36'18	25° 2	24°17	23°22	16°23	4°46	0°13	21°45	20°48	23°44	12°11	12°32	25°12	18°48
M31	16 34 1	9♈33'49	9♈24	26♈ 8	24♈14	16♈56	4♈46	0♈15	21♈43	20♈47	23♈42	12♈11	12♈29	25♈19	18♈52

Delta T = 59.40 sec.

JUNE 1993

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
T 1	16 37 58	10♈31'19	23♈47	27♈57	25♈ 6	17♈28	4♈D45	0♈15	21°R41	20°R46	23°R40	12°R11	12♈26	25♈26	18♈57
W 2	16 41 54	11°28'48	8♈ 8	29°43	25°59	18° 1	4♈46	0°16	21°340	20°345	23°339	12°211	12°23	25°32	19° 1
T 3	16 45 51	12°26'15	22°22	1♈26	26°53	18°34	4°46	0°17	21°38	20°43	23°37	12°D11	12°19	25°39	19° 6
F 4	16 49 47	13°23'42	6♈24	3° 7	27°47	19° 7	4°46	0°18	21°36	20°42	23°36	12°R11	12°16	25°46	19°10
S 5	16 53 44	14°21'07	20°10	4°45	28°42	19°40	4°47	0°18	21°35	20°41	23°34	12°11	12°13	25°53	19°15
S 6	16 57 40	15°18'32	3♈39	6°20	29°37	20°13	4°48	0°19	21°33	20°40	23°33	12°11	12°10	25°59	19°20
M 7	17 1 37	16°15'56	16°49	7°52	0♈32	20°46	4°49	0°19	21°31	20°39	23°31	12°10	12° 7	26° 6	19°25
T 8	17 5 33	17°13'19	29°39	9°21	1°29	21°20	4°50	0°19	21°29	20°37	23°30	12°10	12° 4	26°13	19°30
W 9	17 9 30	18°10'41	12♈11	10°48	2°25	21°53	4°51	0°20	21°27	20°36	23°28	12° 9	12° 0	26°19	19°35
T10	17 13 27	19° 8'03	24°28	12°11	3°22	22°26	4°53	0°R20	21°26	20°35	23°27	12° 9	11°57	26°26	19°40
F11	17 17 23	20° 5'24	6♈33	13°32	4°20	23° 0	4°54	0°20	21°24	20°33	23°25	12° 8	11°54	26°33	19°46
S12	17 21 20	21° 2'44	18°30	14°49	5°17	23°34	4°56	0°20	21°22	20°32	23°24	12°D 8	11°51	26°40	19°51
S13	17 25 16	22° 0'05	0♈23	16° 4	6°16	24° 7	4°58	0°19	21°20	20°31	23°22	12° 8	11°48	26°46	19°56
M14	17 29 13	22°57'24	12°17	17°15	7°14	24°41	5° 0	0°19	21°18	20°29	23°21	12° 8	11°44	26°53	20° 2
T15	17 33 9	23°54'44	24°17	18°23	8°13	25°15	5° 3	0°19	21°16	20°28	23°20	12° 9	11°41	27° 0	20° 7
W16	17 37 6	24°52'03	6♈27	19°28	9°13	25°49	5° 5	0°18	21°14	20°27	23°18	12°10	11°38	27° 6	20°13
T17	17 41 2	25°49'21	18°50	20°30	10°12	26°23	5° 8	0°17	21°12	20°25	23°17	12°11	11°35	27°13	20°19
F18	17 44 59	26°46'39	1♈30	21°28	11°12	26°57	5°11	0°17	21° 9	20°24	23°16	12°12	11°32	27°20	20°24
S19	17 48 56	27°43'57	14°27	22°23	12°13	27°31	5°14	0°16	21° 7	20°22	23°14	12°R12	11°29	27°27	20°30
S20	17 52 52	28°41'15	27°43	23°15	13°13	28° 6	5°17	0°15	21° 5	20°21	23°13	12°12	11°25	27°33	20°36
M21	17 56 49	29°38'32	11♈16	24° 2	14°14	28°40	5°21	0°14	21° 3	20°19	23°12	12°11	11°22	27°40	20°42
T22	18 0 45	0♈35'48	25° 5	24°46	15°15	29°14	5°24	0°13	21° 1	20°18	23°11	12° 9	11°19	27°47	20°48
W23	18 4 42	1°33'04	9♈ 7	25°26	16°17	29°49	5°28	0°12	20°59	20°16	23° 9	12° 6	11°16	27°53	20°54
T24	18 8 38	2°30'20	23°18	26° 2	17°19	0♈23	5°32	0°10	20°56	20°15	23° 8	12° 3	11°13	28° 0	21° 0
F25	18 12 35	3°27'34	7♈33	26°34	18°21	0°58	5°36	0° 9	20°54	20°13	23° 7	12° 1	11°10	28° 7	21° 6
S26	18 16 32	4°24'48	21°50	27° 2	19°23	1°33	5°40	0° 8	20°52	20°12	23° 6	12° 0	11° 6	28°14	21°13
S27	18 20 28	5°22'02	6♈ 4	27°26	20°26	2° 8	5°44	0° 6	20°49	20°10	23° 5	11°D59	11° 3	28°20	21°19
M28	18 24 25	6°19'15	20°15	27°45	21°29	2°43	5°49	0° 4	20°47	20° 9	23° 4	12° 0	11° 0	28°27	21°25
T29	18 28 21	7°16'27	4♈19	27°59	22°32	3°17	5°54	0° 3	20°45	20° 7	23° 3	12° 1	10°57	28°34	21°32
W30	18 32 18	8♈13'39	18♈15	28♈ 9	23♈35	3♈52	5♈58	0♈ 1	20♈43	20♈ 5	23♈ 2	12♈ 3	10♈54	28♈40	21♈38

Delta T = 59.48 sec.

created from Swiss Ephemeris, Copyright Astrodienst AG [11.2.2014]

# SWISS EPHEMERIS for the year 1993

JULY 1993

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
T 1	18 36 14	9°10'51"	2°11'1"	28°14'	24°38'	4°28'	6°3'	29°R59	20°R40	20°R 4	23°R 0	12°14'	10°15'	28°14'	21°145
F 2	18 40 11	10° 8'02"	15°37'	28°R15	25°42'	5° 3	6° 9	29°157	20°38	20°3 2	22°159	12°R 4	10°47'	28°54'	21°52
S 3	18 44 7	11° 5'13"	29° 0	28°11'	26°46'	5°38	6°14	29°55	20°35	20° 1	22°59	12° 3	10°44'	29° 1	21°58
S 4	18 48 4	12° 2'24"	12°31'0	28° 3	27°50'	6°13	6°19	29°52	20°33	19°59	22°58	12° 0	10°41'	29° 7	22° 5
M 5	18 52 1	12°59'36"	25° 5	27°50'	28°54'	6°48	6°25	29°50	20°31	19°57	22°57	11°57	10°38'	29°14	22°12
T 6	18 55 57	13°56'47"	7°46	27°32'	29°59'	7°24	6°31	29°48	20°28	19°56	22°56	11°52	10°35'	29°21	22°19
W 7	18 59 54	14°53'58"	20°13'	27°11'	1°11' 4	7°59	6°36	29°45	20°26	19°54	22°55	11°46	10°31'	29°27	22°25
T 8	19 3 50	15°51'09"	2°11'27"	26°45'	2° 9	8°35	6°42	29°43	20°24	19°53	22°54	11°41	10°28'	29°34	22°32
F 9	19 7 47	16°48'21"	14°31'	26°16'	3°14	9°10	6°49	29°40	20°21	19°51	22°53	11°36	10°25'	29°41	22°39
S 10	19 11 43	17°45'33"	26°27'	25°44'	4°19	9°46	6°55	29°37	20°19	19°49	22°53	11°32	10°22'	29°48	22°46
S 11	19 15 40	18°42'45"	8°19'	25°10'	5°25	10°22	7° 1	29°35	20°16	19°48	22°52	11°30	10°19'	29°54	22°53
M 12	19 19 36	19°39'58"	20°13'	24°33'	6°30	10°58	7° 8	29°32	20°14	19°46	22°51	11°D30	10°16'	0°11'	23° 0
T 13	19 23 33	20°37'11"	2°12	23°55'	7°36	11°33	7°15	29°29	20°11	19°45	22°50	11°30	10°12'	0° 8	23° 8
W 14	19 27 30	21°34'25"	14°22'	23°16'	8°42	12° 9	7°21	29°26	20° 9	19°43	22°50	11°32	10° 9	0°15	23°15
T 15	19 31 26	22°31'40"	26°47'	22°36'	9°49	12°45	7°28	29°23	20° 7	19°41	22°49	11°33	10° 6	0°21	23°22
F 16	19 35 23	23°28'55"	9°11'32"	21°57'	10°55'	13°21	7°35	29°20	20° 4	19°40	22°48	11°R34	10° 3	0°28	23°29
S 17	19 39 19	24°26'11"	22°39'	21°19'	12° 1	13°58	7°43	29°16	20° 2	19°38	22°48	11°33	10° 0	0°35	23°37
S 18	19 43 16	25°23'27"	6°10	20°43'	13° 8	14°34	7°50	29°13	19°59	19°36	22°47	11°31	9°56	0°41	23°44
M 19	19 47 12	26°20'44"	20° 4	20°10'	14°15	15°10	7°57	29°10	19°57	19°35	22°47	11°27	9°53	0°48	23°51
T 20	19 51 9	27°18'01"	4°19	19°39'	15°22'	15°46	8° 5	29° 6	19°55	19°33	22°46	11°21	9°50	0°55	23°59
W 21	19 55 5	28°15'19"	18°48'	19°13'	16°29'	16°23	8°13	29° 3	19°52	19°32	22°46	11°14	9°47	1° 2	24° 6
T 22	19 59 2	29°12'37"	3°11'25"	18°50'	17°36'	16°59	8°21	28°59	19°50	19°30	22°46	11° 6	9°44	1° 8	24°14
F 23	20 2 59	0°11'55"	18° 4	18°32'	18°43'	17°36	8°29	28°56	19°48	19°28	22°45	11° 0	9°41	1°15	24°21
S 24	20 6 55	1° 7'14"	2°37	18°19'	19°51'	18°12	8°37	28°52	19°45	19°27	22°45	10°55	9°37	1°22	24°29
S 25	20 10 52	2° 4'33"	17° 1	18°11'	20°59'	18°49	8°45	28°48	19°43	19°25	22°45	10°52	9°34	1°28	24°36
M 26	20 14 48	3° 1'52"	1°10	18°D 9	22° 6	19°25	8°53	28°44	19°40	19°24	22°44	10°D51	9°31	1°35	24°44
T 27	20 18 45	3°59'12"	15° 5	18°13'	23°14'	20° 2	9° 2	28°41	19°38	19°22	22°44	10°52	9°28	1°42	24°52
W 28	20 22 41	4°56'32"	28°45'	18°22'	24°22'	20°39	9°10	28°37	19°36	19°21	22°44	10°53	9°25	1°48	24°59
T 29	20 26 38	5°53'53"	12°11'	18°38'	25°30'	21°16	9°19	28°33	19°34	19°19	22°44	10°R53	9°21	1°55	25° 7
F 30	20 30 34	6°51'14"	25°24'	19° 0	26°38'	21°53	9°28	28°29	19°31	19°18	22°43	10°52	9°18	2° 2	25°15
S 31	20 34 31	7°14'36"	8°25	19°28	27°11'47"	22°13'30"	9°37	28°25	19°29	19°16	22°43	10°149	9°15	2°11'	25°23

Delta T = 59.55 sec.

AUGUST 1993

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
S 1	20 38 28	8°14'55"	21°14	20°23	28°11'55"	23°11' 7	9°45	28°R21	19°R27	19°R14	22°R43	10°R43	9°12	2°11'	25°130
M 2	20 42 24	9°43'22"	3°52	20°43	0°54	23°44	9°55	28°16	19°25	19°13	22°143	10°135	9° 9	2°22	25°38
T 3	20 46 21	10°40'46"	16°20'	21°30'	1°13	24°21	10° 4	28°12	19°22	19°11	22°D43	10°25	9° 6	2°29	25°46
W 4	20 50 17	11°38'11"	28°37'	22°22'	2°21	24°58	10°13	28° 8	19°20	19°10	22°43	10°14	9° 2	2°35	25°54
T 5	20 54 14	12°35'37"	10°11'44"	23°21'	3°30	25°36	10°22	28° 4	19°18	19° 9	22°43	10° 3	8°59	2°42	26° 2
F 6	20 58 10	13°33'04"	22°44'	24°26'	4°39	26°13	10°32	28° 0	19°16	19° 7	22°43	9°53	8°56	2°49	26°10
S 7	21 2 7	14°30'32"	4°11'37"	25°36'	5°49	26°50	10°41	27°55	19°14	19° 6	22°44	9°44	8°53	2°56	26°18
S 8	21 6 3	15°28'02"	16°28'	26°51'	6°58	27°28	10°51	27°51	19°12	19° 4	22°44	9°38	8°50	3° 2	26°25
M 9	21 10 0	16°25'33"	28°20'	28°12'	8° 7	28° 5	11° 1	27°46	19°10	19° 3	22°44	9°34	8°47	3° 9	26°33
T 10	21 13 57	17°23'05"	10°11'17"	29°38'	9°17	28°43	11°11	27°42	19° 8	19° 1	22°44	9°33	8°43	3°16	26°41
W 11	21 17 53	18°20'38"	22°24'	1°10 9	10°26	29°20	11°21	27°38	19° 6	19° 0	22°44	9°D33	8°40	3°22	26°49
T 12	21 21 50	19°18'13"	4°11'48"	2°44	11°36	29°58	11°31	27°33	19° 4	18°59	22°45	9°R33	8°37	3°29	26°57
F 13	21 25 46	20°15'50"	17°32'	4°24	12°46	0°36	11°41	27°29	19° 2	18°57	22°45	9°33	8°34	3°36	27° 5
S 14	21 29 43	21°13'28"	0°41	6° 7	13°56	1°14	11°51	27°24	19° 0	18°56	22°45	9°31	8°31	3°43	27°13
S 15	21 33 39	22°11'07"	14°18'	7°54	15° 6	1°52	12° 1	27°20	18°58	18°55	22°46	9°27	8°27	3°49	27°21
M 16	21 37 36	23° 8'48"	28°22'	9°44	16°16	2°30	12°12	27°15	18°56	18°54	22°46	9°21	8°24	3°56	27°29
T 17	21 41 32	24° 6'30"	12°15'53"	11°36'	17°26'	3° 8	12°22	27°11	18°54	18°52	22°47	9°12	8°21	4° 3	27°37
W 18	21 45 29	25° 4'14"	27°42'	13°31'	18°36'	3°46	12°33	27° 6	18°52	18°51	22°47	9° 1	8°18	4° 9	27°45
T 19	21 49 26	26° 1'58"	12°11'43"	15°27'	19°47'	4°24	12°43	27° 2	18°51	18°50	22°48	8°51	8°15	4°16	27°54
F 20	21 53 22	26°59'44"	27°46'	17°25'	20°57'	5° 2	12°54	26°57	18°49	18°49	22°48	8°41	8°12	4°23	28° 2
S 21	21 57 19	27°57'32"	12°40	19°24	22° 8	5°40	13° 5	26°53	18°47	18°47	22°49	8°33	8° 8	4°30	28°10
S 22	22 1 15	28°55'20"	27°19'	21°24	23°19	6°18	13°16	26°48	18°45	18°46	22°49	8°28	8° 5	4°36	28°18
M 23	22 5 12	29°53'10"	11°11'38"	23°24	24°29	6°57	13°27	26°44	18°44	18°45	22°50	8°25	8° 2	4°43	28°26
T 24	22 9 8	0°11'50"	25°34'	25°25'	25°40'	7°35	13°38	26°39	18°42	18°44	22°51	8°24	7°59	4°50	28°34
W 25	22 13 5	1°48'52"	9°11'10"	27°25'	26°51'	8°14	13°49	26°35	18°41	18°43	22°52	8°24	7°56	4°56	28°42
T 26	22 17 1	2°46'46"	22°25'	29°25'	28° 2	8°52	14° 0	26°30	18°39	18°42	22°52	8°24	7°53	5° 3	28°50
F 27	22 20 58	3°44'40"	5°24	1°11'24"	29°13'	9°31	14°11	26°26	18°38	18°41	22°53	8°22	7°49	5°10	28°58
S 28	22 24 55	4°42'36"	18° 8	3°23	0°12'24"	10° 9	14°22	26°21	18°36	18°40	22°54	8°17	7°46	5°17	29° 6
S 29	22 28 51	5°40'33"	0°41	5°20	1°36	10°48	14°34	26°17	18°35	18°39	22°55	8°10	7°43	5°23	29°14
M 30	22 32 48	6°38'31"	13° 3	7°17	2°47	11°27	14°45	26°12	18°33	18°38	22°56	8° 0	7°40	5°30	29°22
T 31	22 36 44	7°11'36"	25°17	9°11'13"	3°15'58"	12°11' 6	14°57	26°11	18°32	18°37	22°57	7°47	7°37	5°11'	29°30

Delta T = 59.62 sec.

created from Swiss Ephemeris, Copyright Astrodienst AG [11.2.2014]

# SWISS EPHEMERIS for the year 1993

## SEPTEMBER 1993

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
W 1	22 40 41	8 <sup>h</sup> 34'32	7 <sup>h</sup> 24	11 <sup>h</sup> 8	5 <sup>h</sup> 10	12 <sup>h</sup> 45	15 <sup>h</sup> 8	26 <sup>h</sup> R 3	18 <sup>h</sup> R31	18 <sup>h</sup> R36	22 <sup>h</sup> M58	7 <sup>h</sup> R33	7 <sup>h</sup> 33	5 <sup>h</sup> Y43	29 <sup>h</sup> Ω38
T 2	22 44 37	9 <sup>h</sup> 32'35	19 <sup>h</sup> 24	13 <sup>h</sup> 2	6 <sup>h</sup> 21	13 <sup>h</sup> 24	15 <sup>h</sup> 20	25 <sup>h</sup> 55	18 <sup>h</sup> 30	18 <sup>h</sup> 35	22 <sup>h</sup> 59	7 <sup>h</sup> 19	7 <sup>h</sup> 30	5 <sup>h</sup> 50	29 <sup>h</sup> 46
F 3	22 48 34	10 <sup>h</sup> 30'40	1 <sup>h</sup> Y19	14 <sup>h</sup> 54	7 <sup>h</sup> 33	14 <sup>h</sup> 3	15 <sup>h</sup> 31	25 <sup>h</sup> 55	18 <sup>h</sup> 28	18 <sup>h</sup> 34	23 <sup>h</sup> 0	7 <sup>h</sup> 7	7 <sup>h</sup> 27	5 <sup>h</sup> 57	29 <sup>h</sup> 54
S 4	22 52 30	11 <sup>h</sup> 28'47	13 <sup>h</sup> 10	16 <sup>h</sup> 45	8 <sup>h</sup> 45	14 <sup>h</sup> 42	15 <sup>h</sup> 43	25 <sup>h</sup> 51	18 <sup>h</sup> 27	18 <sup>h</sup> 34	23 <sup>h</sup> 1	6 <sup>h</sup> 55	7 <sup>h</sup> 24	6 <sup>h</sup> 3	0 <sup>h</sup> η 2
S 5	22 56 27	12 <sup>h</sup> 26'55	25 <sup>h</sup> 0	18 <sup>h</sup> 36	9 <sup>h</sup> 57	15 <sup>h</sup> 21	15 <sup>h</sup> 55	25 <sup>h</sup> 46	18 <sup>h</sup> 26	18 <sup>h</sup> 33	23 <sup>h</sup> 2	6 <sup>h</sup> 47	7 <sup>h</sup> 21	6 <sup>h</sup> 10	0 <sup>h</sup> 10
M 6	23 0 23	13 <sup>h</sup> 25'05	6 <sup>h</sup> 51	20 <sup>h</sup> 25	11 <sup>h</sup> 9	16 <sup>h</sup> 0	16 <sup>h</sup> 7	25 <sup>h</sup> 42	18 <sup>h</sup> 25	18 <sup>h</sup> 32	23 <sup>h</sup> 3	6 <sup>h</sup> 41	7 <sup>h</sup> 18	6 <sup>h</sup> 17	0 <sup>h</sup> 18
T 7	23 4 20	14 <sup>h</sup> 23'17	18 <sup>h</sup> 47	22 <sup>h</sup> 12	12 <sup>h</sup> 21	16 <sup>h</sup> 39	16 <sup>h</sup> 19	25 <sup>h</sup> 38	18 <sup>h</sup> 24	18 <sup>h</sup> 31	23 <sup>h</sup> 4	6 <sup>h</sup> 38	7 <sup>h</sup> 14	6 <sup>h</sup> 24	0 <sup>h</sup> 26
W 8	23 8 17	15 <sup>h</sup> 21'32	0 <sup>h</sup> II53	23 <sup>h</sup> 59	13 <sup>h</sup> 33	17 <sup>h</sup> 18	16 <sup>h</sup> 31	25 <sup>h</sup> 34	18 <sup>h</sup> 23	18 <sup>h</sup> 30	23 <sup>h</sup> 5	6 <sup>h</sup> 37	7 <sup>h</sup> 11	6 <sup>h</sup> 30	0 <sup>h</sup> 34
T 9	23 12 13	16 <sup>h</sup> 19'48	13 <sup>h</sup> 14	25 <sup>h</sup> 44	14 <sup>h</sup> 45	17 <sup>h</sup> 58	16 <sup>h</sup> 43	25 <sup>h</sup> 30	18 <sup>h</sup> 22	18 <sup>h</sup> 30	23 <sup>h</sup> 6	6 <sup>h</sup> 37	7 <sup>h</sup> 8	6 <sup>h</sup> 37	0 <sup>h</sup> 42
F 10	23 16 10	17 <sup>h</sup> 18'06	25 <sup>h</sup> 54	27 <sup>h</sup> 29	15 <sup>h</sup> 57	18 <sup>h</sup> 37	16 <sup>h</sup> 55	25 <sup>h</sup> 26	18 <sup>h</sup> 21	18 <sup>h</sup> 29	23 <sup>h</sup> 8	6 <sup>h</sup> 37	7 <sup>h</sup> 5	6 <sup>h</sup> 44	0 <sup>h</sup> 50
S 11	23 20 6	18 <sup>h</sup> 16'27	8 <sup>h</sup> 59	29 <sup>h</sup> 12	17 <sup>h</sup> 9	19 <sup>h</sup> 17	17 <sup>h</sup> 7	25 <sup>h</sup> 22	18 <sup>h</sup> 20	18 <sup>h</sup> 29	23 <sup>h</sup> 9	6 <sup>h</sup> 36	7 <sup>h</sup> 2	6 <sup>h</sup> 50	0 <sup>h</sup> 58
S 12	23 24 3	19 <sup>h</sup> 14'50	22 <sup>h</sup> 32	0 <sup>h</sup> 54	18 <sup>h</sup> 22	19 <sup>h</sup> 56	17 <sup>h</sup> 19	25 <sup>h</sup> 18	18 <sup>h</sup> 20	18 <sup>h</sup> 28	23 <sup>h</sup> 10	6 <sup>h</sup> 32	6 <sup>h</sup> 59	6 <sup>h</sup> 57	1 <sup>h</sup> 6
M13	23 27 59	20 <sup>h</sup> 13'14	6 <sup>h</sup> Ω35	2 <sup>h</sup> 35	19 <sup>h</sup> 34	20 <sup>h</sup> 36	17 <sup>h</sup> 31	25 <sup>h</sup> 14	18 <sup>h</sup> 19	18 <sup>h</sup> 27	23 <sup>h</sup> 12	6 <sup>h</sup> 26	6 <sup>h</sup> 55	7 <sup>h</sup> 4	1 <sup>h</sup> 13
T 14	23 31 56	21 <sup>h</sup> 11'41	21 <sup>h</sup> 7	4 <sup>h</sup> 15	20 <sup>h</sup> 47	21 <sup>h</sup> 15	17 <sup>h</sup> 43	25 <sup>h</sup> 10	18 <sup>h</sup> 18	18 <sup>h</sup> 27	23 <sup>h</sup> 13	6 <sup>h</sup> 18	6 <sup>h</sup> 52	7 <sup>h</sup> 10	1 <sup>h</sup> 21
W15	23 35 52	22 <sup>h</sup> 10'10	6 <sup>h</sup> η 3	5 <sup>h</sup> 53	21 <sup>h</sup> 59	21 <sup>h</sup> 55	17 <sup>h</sup> 56	25 <sup>h</sup> 6	18 <sup>h</sup> 18	18 <sup>h</sup> 26	23 <sup>h</sup> 14	6 <sup>h</sup> 8	6 <sup>h</sup> 49	7 <sup>h</sup> 17	1 <sup>h</sup> 29
T 16	23 39 49	23 <sup>h</sup> 8'40	21 <sup>h</sup> 15	7 <sup>h</sup> 31	23 <sup>h</sup> 12	22 <sup>h</sup> 35	18 <sup>h</sup> 8	25 <sup>h</sup> 2	18 <sup>h</sup> 17	18 <sup>h</sup> 26	23 <sup>h</sup> 16	5 <sup>h</sup> 57	6 <sup>h</sup> 46	7 <sup>h</sup> 24	1 <sup>h</sup> 37
F 17	23 43 46	24 <sup>h</sup> 7'13	6 <sup>h</sup> Ω32	9 <sup>h</sup> 7	24 <sup>h</sup> 25	23 <sup>h</sup> 15	18 <sup>h</sup> 20	24 <sup>h</sup> 59	18 <sup>h</sup> 16	18 <sup>h</sup> 25	23 <sup>h</sup> 17	5 <sup>h</sup> 47	6 <sup>h</sup> 43	7 <sup>h</sup> 31	1 <sup>h</sup> 45
S 18	23 47 42	25 <sup>h</sup> 5'47	21 <sup>h</sup> 44	10 <sup>h</sup> 43	25 <sup>h</sup> 38	23 <sup>h</sup> 55	18 <sup>h</sup> 33	24 <sup>h</sup> 55	18 <sup>h</sup> 16	18 <sup>h</sup> 25	23 <sup>h</sup> 19	5 <sup>h</sup> 39	6 <sup>h</sup> 39	7 <sup>h</sup> 37	1 <sup>h</sup> 52
S 19	23 51 39	26 <sup>h</sup> 4'23	6 <sup>h</sup> η39	12 <sup>h</sup> 18	26 <sup>h</sup> 50	24 <sup>h</sup> 34	18 <sup>h</sup> 45	24 <sup>h</sup> 52	18 <sup>h</sup> 15	18 <sup>h</sup> 25	23 <sup>h</sup> 20	5 <sup>h</sup> 34	6 <sup>h</sup> 36	7 <sup>h</sup> 44	2 <sup>h</sup> 0
M20	23 55 35	27 <sup>h</sup> 3'01	21 <sup>h</sup> 12	13 <sup>h</sup> 51	28 <sup>h</sup> 3	25 <sup>h</sup> 15	18 <sup>h</sup> 58	24 <sup>h</sup> 48	18 <sup>h</sup> 15	18 <sup>h</sup> 24	23 <sup>h</sup> 22	5 <sup>h</sup> 31	6 <sup>h</sup> 33	7 <sup>h</sup> 51	2 <sup>h</sup> 8
T 21	23 59 32	28 <sup>h</sup> 1'41	5 <sup>h</sup> 18	15 <sup>h</sup> 24	29 <sup>h</sup> 16	25 <sup>h</sup> 55	19 <sup>h</sup> 10	24 <sup>h</sup> 45	18 <sup>h</sup> 15	18 <sup>h</sup> 24	23 <sup>h</sup> 23	5 <sup>h</sup> D30	6 <sup>h</sup> 30	7 <sup>h</sup> 57	2 <sup>h</sup> 15
W22	0 3 28	29 <sup>h</sup> 0'22	18 <sup>h</sup> 59	16 <sup>h</sup> 55	0 <sup>h</sup> η29	26 <sup>h</sup> 35	19 <sup>h</sup> 23	24 <sup>h</sup> 41	18 <sup>h</sup> 14	18 <sup>h</sup> 24	23 <sup>h</sup> 25	5 <sup>h</sup> 31	6 <sup>h</sup> 27	8 <sup>h</sup> 4	2 <sup>h</sup> 23
T 23	0 7 25	29 <sup>h</sup> 59'05	2 <sup>h</sup> 14	18 <sup>h</sup> 26	1 <sup>h</sup> 42	27 <sup>h</sup> 15	19 <sup>h</sup> 35	24 <sup>h</sup> 38	18 <sup>h</sup> 14	18 <sup>h</sup> 23	23 <sup>h</sup> 26	5 <sup>h</sup> R31	6 <sup>h</sup> 24	8 <sup>h</sup> 11	2 <sup>h</sup> 30
F 24	0 11 21	0 <sup>h</sup> 57'50	15 <sup>h</sup> 9	19 <sup>h</sup> 55	2 <sup>h</sup> 56	27 <sup>h</sup> 55	19 <sup>h</sup> 48	24 <sup>h</sup> 35	18 <sup>h</sup> 14	18 <sup>h</sup> 23	23 <sup>h</sup> 28	5 <sup>h</sup> 30	6 <sup>h</sup> 20	8 <sup>h</sup> 18	2 <sup>h</sup> 38
S 25	0 15 18	1 <sup>h</sup> 56'36	27 <sup>h</sup> 46	21 <sup>h</sup> 24	4 <sup>h</sup> 9	28 <sup>h</sup> 35	20 <sup>h</sup> 1	24 <sup>h</sup> 32	18 <sup>h</sup> 14	18 <sup>h</sup> 23	23 <sup>h</sup> 30	5 <sup>h</sup> 27	6 <sup>h</sup> 17	8 <sup>h</sup> 24	2 <sup>h</sup> 46
S 26	0 19 15	2 <sup>h</sup> 55'24	10 <sup>h</sup> 8	22 <sup>h</sup> 51	5 <sup>h</sup> 22	29 <sup>h</sup> 16	20 <sup>h</sup> 13	24 <sup>h</sup> 29	18 <sup>h</sup> 14	18 <sup>h</sup> 23	23 <sup>h</sup> 31	5 <sup>h</sup> 21	6 <sup>h</sup> 14	8 <sup>h</sup> 31	2 <sup>h</sup> 53
M27	0 23 11	3 <sup>h</sup> 54'14	22 <sup>h</sup> 20	24 <sup>h</sup> 17	6 <sup>h</sup> 35	29 <sup>h</sup> 56	20 <sup>h</sup> 26	24 <sup>h</sup> 26	18 <sup>h</sup> 14	18 <sup>h</sup> 23	23 <sup>h</sup> 33	5 <sup>h</sup> 13	6 <sup>h</sup> 11	8 <sup>h</sup> 38	3 <sup>h</sup> 0
T 28	0 27 8	4 <sup>h</sup> 53'05	4 <sup>h</sup> 24	25 <sup>h</sup> 43	7 <sup>h</sup> 49	0 <sup>h</sup> η37	20 <sup>h</sup> 39	24 <sup>h</sup> 23	18 <sup>h</sup> D14	18 <sup>h</sup> 23	23 <sup>h</sup> 35	5 <sup>h</sup> 3	6 <sup>h</sup> 8	8 <sup>h</sup> 44	3 <sup>h</sup> 8
W29	0 31 4	5 <sup>h</sup> 51'59	16 <sup>h</sup> 23	27 <sup>h</sup> 7	9 <sup>h</sup> 2	1 <sup>h</sup> 17	20 <sup>h</sup> 52	24 <sup>h</sup> 20	18 <sup>h</sup> 14	18 <sup>h</sup> 23	23 <sup>h</sup> 37	4 <sup>h</sup> 52	6 <sup>h</sup> 4	8 <sup>h</sup> 51	3 <sup>h</sup> 15
T 30	0 35 1	6 <sup>h</sup> 50'54	28 <sup>h</sup> 17	28 <sup>h</sup> 31	10 <sup>h</sup> η16	1 <sup>h</sup> η58	21 <sup>h</sup> 4	24 <sup>h</sup> 17	18 <sup>h</sup> 14	18 <sup>h</sup> D23	23 <sup>h</sup> η38	4 <sup>h</sup> 41	6 <sup>h</sup> 1	8 <sup>h</sup> Y58	3 <sup>h</sup> η22

Delta T = 59.70 sec.

## OCTOBER 1993

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
F 1	0 38 57	7♂49'51	10♂ 9	29♂53	11♂29	2♂38	21♂17	24°R15	18♂14	18♂23	23♂40	4°R30	5♂58	9♂ 4	3♂30
S 2	0 42 54	8°48'51	21°59	1♂14	12°43	3°19	21°30	24♂12	18°14	18°23	23°42	4♂21	5°55	9°11	3°37
S 3	0 46 50	9°47'52	3♂51	2°34	13°57	4° 0	21°43	24°10	18°14	18°23	23°44	4°14	5°52	9°18	3°44
M 4	0 50 47	10°46'56	15°45	3°52	15°10	4°41	21°56	24° 7	18°15	18°23	23°46	4°10	5°49	9°24	3°51
T 5	0 54 44	11°46'01	27°46	5° 9	16°24	5°22	22° 9	24° 5	18°15	18°23	23°48	4° 8	5°45	9°31	3°58
W 6	0 58 40	12°45'10	9♂55	6°25	17°38	6° 3	22°22	24° 3	18°16	18°23	23°50	4°D 8	5°42	9°38	4° 5
T 7	1 2 37	13°44'20	22°17	7°40	18°52	6°44	22°34	24° 1	18°16	18°23	23°52	4° 9	5°39	9°45	4°12
F 8	1 6 33	14°43'33	4♂56	8°53	20° 6	7°25	22°47	23°59	18°16	18°24	23°54	4°10	5°36	9°51	4°19
S 9	1 10 30	15°42'48	17°57	10° 4	21°20	8° 6	23° 0	23°57	18°17	18°24	23°56	4°R11	5°33	9°58	4°26
S 10	1 14 26	16°42'05	1♂23	11°13	22°34	8°47	23°13	23°55	18°18	18°24	23°58	4° 9	5°30	10° 5	4°33
M11	1 18 23	17°41'25	15°17	12°21	23°48	9°28	23°26	23°53	18°18	18°25	24° 0	4° 7	5°26	10°11	4°40
T 12	1 22 19	18°40'47	29°38	13°26	25° 2	10°10	23°39	23°51	18°19	18°25	24° 2	4° 2	5°23	10°18	4°47
W13	1 26 16	19°40'11	14♂25	14°30	26°16	10°51	23°52	23°50	18°20	18°25	24° 4	3°56	5°20	10°25	4°53
T 14	1 30 12	20°39'37	29°30	15°30	27°31	11°32	24° 5	23°48	18°21	18°26	24° 6	3°49	5°17	10°31	5° 0
F 15	1 34 9	21°39'06	14♂45	16°29	28°45	12°14	24°19	23°47	18°21	18°26	24° 8	3°42	5°14	10°38	5° 7
S 16	1 38 6	22°38'36	0♂ 0	17°24	29°59	12°55	24°32	23°46	18°22	18°27	24°10	3°37	5°10	10°45	5°13
S 17	1 42 2	23°38'09	15° 3	18°16	1♂14	13°37	24°45	23°44	18°23	18°27	24°12	3°34	5° 7	10°52	5°20
M18	1 45 59	24°37'44	29°46	19° 4	2°28	14°19	24°58	23°43	18°24	18°28	24°14	3°D33	5° 4	10°58	5°26
T 19	1 49 55	25°37'20	14♂ 4	19°48	3°43	15° 0	25°11	23°42	18°25	18°28	24°16	3°33	5° 1	11° 5	5°32
W20	1 53 52	26°36'58	27°54	20°29	4°57	15°42	25°24	23°41	18°27	18°29	24°19	3°34	4°58	11°12	5°39
T 21	1 57 48	27°36'38	11♂18	21° 4	6°12	16°24	25°37	23°41	18°28	18°30	24°21	3°36	4°55	11°18	5°45
F 22	2 1 45	28°36'20	24°16	21°34	7°26	17° 6	25°50	23°40	18°29	18°30	24°23	3°R37	4°51	11°25	5°51
S 23	2 5 41	29°36'03	6♂54	21°58	8°41	17°48	26° 3	23°39	18°30	18°31	24°25	3°37	4°48	11°32	5°57
S 24	2 9 38	0♂35'48	19°14	22°16	9°55	18°30	26°16	23°39	18°32	18°32	24°27	3°35	4°45	11°38	6° 3
M25	2 13 35	1°35'35	1♂22	22°27	11°10	19°12	26°29	23°39	18°33	18°33	24°30	3°32	4°42	11°45	6° 9
T 26	2 17 31	2°35'23	13°21	22°R31	12°25	19°54	26°42	23°38	18°34	18°34	24°32	3°27	4°39	11°52	6°15
W27	2 21 28	3°35'14	25°14	22°26	13°39	20°36	26°55	23°38	18°36	18°35	24°34	3°22	4°35	11°59	6°20
T 28	2 25 24	4°35'06	7♂5	22°13	14°54	21°19	27° 8	23°D38	18°37	18°35	24°36	3°17	4°32	12° 5	6°26
F 29	2 29 21	5°34'59	18°56	21°51	16° 9	22° 1	27°21	23°38	18°39	18°36	24°39	3°12	4°29	12°12	6°32
S 30	2 33 17	6°34'55	0♂50	21°19	17°24	22°43	27°34	23°38	18°40	18°37	24°41	3° 8	4°26	12°19	6°37
S 31	2 37 14	7♂34'52	12♂47	20♂38	18♂39	23♂26	27♂47	23♂38	18♂42	18♂38	24♂43	3♂ 5	4♂23	12♂25	6♂43

# SWISS EPHEMERIS for the year 1993

NOVEMBER 1993

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
M 1	2 41 10	8♈34'52	24♈50	19°R48	19♈53	24♈8	28♈0	23♈39	18♈34	18♈39	24♈46	3°R 3	4♈20	12°Y32	6♈48
T 2	2 45 7	9°34'53	7♈1	18♈50	21° 8	24°51	28°13	23°39	18°45	18°40	24°48	3°D 3	4°16	12°39	6°54
W 3	2 49 4	10°34'57	19°21	17°44	22°23	25°33	28°26	23°40	18°47	18°41	24°50	3°R 4	4°13	12°45	6°59
T 4	2 53 0	11°35'02	1♈53	16°31	23°38	26°16	28°39	23°40	18°49	18°43	24°53	3° 5	4°10	12°52	7° 4
F 5	2 56 57	12°35'10	14°40	15°15	24°53	26°59	28°52	23°41	18°51	18°44	24°55	3° 7	4° 7	12°59	7° 9
S 6	3 0 53	13°35'19	27°44	13°56	26° 8	27°41	29° 4	23°42	18°53	18°45	24°57	3° 8	4° 4	13° 5	7°14
S 7	3 4 50	14°35'31	11♈7	12°37	27°23	28°24	29°17	23°43	18°55	18°46	25° 0	3°R 9	4° 1	13°12	7°19
M 8	3 8 46	15°35'44	24°52	11°22	28°38	29° 7	29°30	23°44	18°57	18°47	25° 2	3° 9	3°57	13°19	7°24
T 9	3 12 43	16°36'00	8♈59	10°12	29°53	29°50	29°43	23°45	18°59	18°49	25° 5	3° 8	3°54	13°26	7°29
W10	3 16 39	17°36'18	23°27	9° 9	1♈9	0♈33	29°56	23°47	19° 1	18°50	25° 7	3° 6	3°51	13°32	7°33
T 11	3 20 36	18°36'37	8♈12	8°15	2°24	1°16	0♈8	23°48	19° 3	18°51	25° 9	3° 4	3°48	13°39	7°38
F 12	3 24 33	19°36'59	23° 8	7°32	3°39	1°59	0°21	23°49	19° 5	18°53	25°12	3° 2	3°45	13°46	7°42
S 13	3 28 29	20°37'23	8♈7	7° 1	4°54	2°43	0°34	23°51	19° 8	18°54	25°14	3° 1	3°41	13°52	7°47
S 14	3 32 26	21°37'48	23° 2	6°41	6° 9	3°26	0°46	23°53	19°10	18°55	25°17	3° 0	3°38	13°59	7°51
M15	3 36 22	22°38'15	7♈43	6°D32	7°24	4° 9	0°59	23°54	19°12	18°57	25°19	3°D 0	3°35	14° 6	7°55
T 16	3 40 19	23°38'43	22° 4	6°35	8°40	4°53	1°12	23°56	19°14	18°58	25°21	3° 1	3°32	14°12	7°59
W17	3 44 15	24°39'13	6♈3	6°49	9°55	5°36	1°24	23°58	19°17	19° 0	25°24	3° 1	3°29	14°19	8° 3
T 18	3 48 12	25°39'45	19°32	7°12	11°10	6°19	1°37	24° 0	19°19	19° 1	25°26	3° 2	3°26	14°26	8° 7
F 19	3 52 8	26°40'17	2♈38	7°44	12°25	7° 3	1°49	24° 3	19°22	19° 3	25°29	3° 3	3°22	14°32	8°11
S 20	3 56 5	27°40'51	15°20	8°25	13°41	7°47	2° 1	24° 5	19°24	19° 4	25°31	3° 3	3°19	14°39	8°15
S 21	4 0 2	28°41'26	27°44	9°12	14°56	8°30	2°14	24° 7	19°27	19° 6	25°33	3°R 3	3°16	14°46	8°18
M22	4 3 58	29°42'02	9♈52	10° 6	16°11	9°14	2°26	24°10	19°29	19° 8	25°36	3° 3	3°13	14°53	8°22
T 23	4 7 55	0♈42'39	21°50	11° 6	17°27	9°58	2°38	24°12	19°32	19° 9	25°38	3° 3	3°10	14°59	8°25
W24	4 11 51	1°43'18	3°Y42	12°10	18°42	10°41	2°51	24°15	19°35	19°11	25°41	3° 3	3° 7	15° 6	8°29
T 25	4 15 48	2°43'57	15°32	13°19	19°57	11°25	3° 3	24°18	19°37	19°13	25°43	3°D 3	3° 3	15°13	8°32
F 26	4 19 44	3°44'38	27°24	14°31	21°13	12° 9	3°15	24°21	19°40	19°14	25°45	3° 3	3° 0	15°19	8°35
S 27	4 23 41	4°45'20	9♈22	15°47	22°28	12°53	3°27	24°24	19°43	19°16	25°48	3° 3	2°57	15°26	8°38
S 28	4 27 37	5°46'03	21°27	17° 5	23°43	13°37	3°39	24°27	19°45	19°18	25°50	3° 3	2°54	15°33	8°41
M29	4 31 34	6°46'48	3♈42	18°25	24°59	14°21	3°51	24°30	19°48	19°20	25°53	3°R 3	2°51	15°39	8°44
T 30	4 35 31	7°47'33	16♈8	19♈47	26♈14	15♈5	4♈3	24°33	19°51	19°23	25°55	3°R 3	2°47	15°Y46	8°46

Delta T = 59.84 sec.

DECEMBER 1993

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
W 1	4 39 27	8♈48'20	28♈47	21♈11	27♈30	15♈50	4♈15	24°36	19°54	19°23	25°57	3°R 3	2♈44	15°Y53	8♈49
T 2	4 43 24	9°49'09	11♈39	22°36	28°45	16°34	4°27	24°40	19°57	19°25	26° 0	3°R 2	2°41	15°59	8°52
F 3	4 47 20	10°49'58	24°44	24° 2	0♈0	17°18	4°38	24°43	20° 0	19°27	26° 2	3° 1	2°38	16° 6	8°54
S 4	4 51 17	11°50'49	8♈3	25°29	1°16	18° 2	4°50	24°47	20° 3	19°29	26° 4	3° 0	2°35	16°13	8°56
S 5	4 55 13	12°51'41	21°35	26°58	2°31	18°47	5° 2	24°51	20° 6	19°31	26° 7	2°59	2°32	16°19	8°58
M 6	4 59 10	13°52'35	5♈21	28°27	3°47	19°31	5°13	24°54	20° 9	19°33	26° 9	2°58	2°28	16°26	9° 0
T 7	5 3 6	14°53'30	19°20	29°56	5° 2	20°16	5°25	24°58	20°12	19°35	26°11	2°D58	2°25	16°33	9° 2
W 8	5 7 3	15°54'26	3♈32	1♈26	6°18	21° 0	5°36	25° 2	20°15	19°36	26°14	2°59	2°22	16°40	9° 4
T 9	5 11 0	16°55'23	17°54	2°56	7°33	21°45	5°48	25° 6	20°18	19°38	26°16	3° 0	2°19	16°46	9° 6
F 10	5 14 56	17°56'22	2♈23	4°27	8°49	22°30	5°59	25°10	20°21	19°40	26°18	3° 1	2°16	16°53	9° 7
S 11	5 18 53	18°57'21	16°55	5°58	10° 4	23°14	6°10	25°14	20°24	19°42	26°20	3° 2	2°13	17° 0	9° 9
S 12	5 22 49	19°58'22	1♈25	7°30	11°20	23°59	6°21	25°19	20°27	19°44	26°23	3°R 2	2° 9	17° 6	9°10
M13	5 26 46	20°59'24	15°47	9° 1	12°35	24°44	6°32	25°23	20°31	19°47	26°25	3° 2	2° 6	17°13	9°12
T 14	5 30 42	22° 0'27	29°57	10°33	13°51	25°29	6°43	25°28	20°34	19°49	26°27	3° 1	2° 3	17°20	9°13
W15	5 34 39	23° 1'30	13♈48	12° 5	15° 6	26°14	6°54	25°32	20°37	19°51	26°29	2°58	2° 0	17°26	9°14
T 16	5 38 36	24° 2'34	27°19	13°38	16°22	26°59	7° 5	25°37	20°40	19°53	26°32	2°55	1°57	17°33	9°15
F 17	5 42 32	25° 3'38	10♈27	15°10	17°37	27°44	7°16	25°41	20°44	19°55	26°34	2°52	1°53	17°40	9°15
S 18	5 46 29	26° 4'43	23°14	16°43	18°53	28°29	7°26	25°46	20°47	19°57	26°36	2°48	1°50	17°46	9°16
S 19	5 50 25	27° 5'48	5♈41	18°15	20° 8	29°14	7°37	25°51	20°50	19°59	26°38	2°46	1°47	17°53	9°17
M20	5 54 22	28° 6'54	17°52	19°48	21°24	29°59	7°47	25°56	20°54	20° 1	26°40	2°44	1°44	18° 0	9°17
T 21	5 58 18	29° 7'59	29°51	21°21	22°39	0♈44	7°58	26° 1	20°57	20° 3	26°42	2°D43	1°41	18° 6	9°17
W22	6 2 15	0♈9'05	11°Y43	22°55	23°55	1°29	8° 8	26° 6	21° 0	20° 6	26°44	2°44	1°38	18°13	9°18
T 23	6 6 11	1°10'11	23°32	24°28	25°10	2°15	8°18	26°11	21° 4	20° 8	26°47	2°46	1°34	18°20	9°18
F 24	6 10 8	2°11'18	5♈25	26° 2	26°26	3° 0	8°28	26°16	21° 7	20°10	26°49	2°47	1°31	18°26	9°18
S 25	6 14 5	3°12'24	17°25	27°36	27°41	3°45	8°38	26°21	21°10	20°12	26°51	2°49	1°28	18°33	9°18
S 26	6 18 1	4°13'31	29°37	29°10	28°57	4°31	8°48	26°27	21°14	20°14	26°53	2°R50	1°25	18°40	9°17
M27	6 21 58	5°14'38	12♈2	0♈44	0♈12	5°16	8°58	26°32	21°17	20°16	26°55	2°50	1°22	18°47	9°17
T 28	6 25 54	6°15'45	24°45	2°19	1°28	6° 2	9° 8	26°38	21°21	20°19	26°57	2°48	1°19	18°53	9°16
W29	6 29 51	7°16'53	7♈44	3°54	2°43	6°47	9°17	26°43	21°24	20°21	26°59	2°44	1°15	19° 0	9°16
T 30	6 33 47	8°18'00	21° 1	5°29	3°59	7°33	9°27	26°49	21°28	20°23	27° 1	2°39	1°12	19° 7	9°15
F 31	6 37 44	9♈19'08	4♈23	7♈3	5♈14	8♈19	9♈36	26°54	21°31	20°25	27° 3	2°R33	1°R 9	19°Y13	9°14

Delta T = 59.91 sec.

created from Swiss Ephemeris, Copyright Astrodienst AG [11.2.2014]