

SWISS EPHEMERIS for the year 1970

JANUARY 1970

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|---------|----------|----------|----------|----------|----------|---------|---------|---------|----------|----------|----------|----------|---------|--------|
| T 1 | 6 40 55 | 10°23'23 | 10°42'23 | 29°31'1 | 4°32'27 | 12°14'14 | 2°20'20 | 2°R 4 | 8°43'43 | 29°53'53 | 27°R24 | 14°R 4 | 15°17'17 | 2°46'46 | 2°Y31 |
| F 2 | 6 44 52 | 11°10'32 | 23°26'26 | 29°31'54 | 5°43'43 | 12°59'59 | 2°28'28 | 2°B 3 | 8°44'44 | 29°55'55 | 27°R23 | 14°R 3 | 15°14'14 | 2°53'53 | 2°32 |
| S 3 | 6 48 49 | 12°11'42 | 6°13'37 | 29°50'50 | 6°58'58 | 13°44'44 | 2°36'36 | 2° 3 | 8°45'45 | 29°57'57 | 27°23'23 | 14° 0 | 15°11'11 | 2°59'59 | 2°33 |
| S 4 | 6 52 45 | 13°12'52 | 20°17'17 | 29°R59 | 8°14'14 | 14°28'28 | 2°44'44 | 2°D 3 | 8°45'45 | 29°59'59 | 27°23'23 | 13°55'55 | 15° 8'8 | 3° 6'6 | 2°34 |
| M 5 | 6 56 42 | 14°14'03 | 4°27'27 | 29°58'58 | 9°29'29 | 15°13'13 | 2°51'51 | 2° 3 | 8°46'46 | 0°27'27 | 27°23'23 | 13°47'47 | 15° 5'5 | 3°13'13 | 2°36 |
| T 6 | 7 0 38 | 15°15'13 | 19° 5'5 | 29°44'44 | 10°45'45 | 15°58'58 | 2°59'59 | 2° 4 | 8°46'46 | 0° 2'2 | 27°23'23 | 13°38'38 | 15° 1'1 | 3°19'19 | 2°37 |
| W 7 | 7 4 35 | 16°16'24 | 4°36'36 | 29°19'19 | 12° 0'0 | 16°43'43 | 3° 6'6 | 2° 4 | 8°46'46 | 0° 4'4 | 27°23'23 | 13°29'29 | 14°58'58 | 3°26'26 | 2°38 |
| T 8 | 7 8 31 | 17°17'35 | 19°19'19 | 28°42'42 | 13°16'16 | 17°27'27 | 3°14'14 | 2° 4 | 8°47'47 | 0° 5'5 | 27°22'22 | 13°20'20 | 14°55'55 | 3°33'33 | 2°39 |
| F 9 | 7 12 28 | 18°18'45 | 4°35'35 | 27°54'54 | 14°31'31 | 18°12'12 | 3°21'21 | 2° 5 | 8°47'47 | 0° 7'7 | 27°22'22 | 13°13'13 | 14°52'52 | 3°39'39 | 2°41 |
| S 10 | 7 16 24 | 19°19'55 | 19°42'42 | 26°55'55 | 15°47'47 | 18°57'57 | 3°28'28 | 2° 5 | 8°47'47 | 0° 9'9 | 27°22'22 | 13° 8'8 | 14°49'49 | 3°46'46 | 2°42 |
| S 11 | 7 20 21 | 20°21'05 | 4°32'32 | 25°48'48 | 17° 2'2 | 19°41'41 | 3°35'35 | 2° 6 | 8°47'47 | 0°10'10 | 27°21'21 | 13° 6'6 | 14°45'45 | 3°53'53 | 2°44 |
| M 12 | 7 24 18 | 21°22'14 | 18°59'59 | 24°35'35 | 18°18'18 | 20°26'26 | 3°42'42 | 2° 7 | 8°47'47 | 0°12'12 | 27°21'21 | 13°D 6 | 14°42'42 | 3°59'59 | 2°45 |
| T 13 | 7 28 14 | 22°23'22 | 3°Y 0 | 23°17'17 | 19°33'33 | 21°11'11 | 3°48'48 | 2° 8 | 8°R48 | 0°14'14 | 27°20'20 | 13° 7'7 | 14°39'39 | 4° 6'6 | 2°47 |
| W 14 | 7 32 11 | 23°24'30 | 16°36'36 | 21°58'58 | 20°49'49 | 21°55'55 | 3°55'55 | 2° 9 | 8°48'48 | 0°15'15 | 27°20'20 | 13° 8'8 | 14°36'36 | 4°13'13 | 2°48 |
| T 15 | 7 36 7 | 24°25'37 | 29°49'49 | 20°39'39 | 22° 4'4 | 22°40'40 | 4° 1'1 | 2°10'10 | 8°47'47 | 0°17'17 | 27°19'19 | 13°R 8 | 14°33'33 | 4°19'19 | 2°50 |
| F 16 | 7 40 4 | 25°26'43 | 12°B 41 | 19°24'24 | 23°20'20 | 23°24'24 | 4° 7'7 | 2°12'12 | 8°47'47 | 0°18'18 | 27°19'19 | 13° 6'6 | 14°30'30 | 4°26'26 | 2°52 |
| S 17 | 7 44 0 | 26°27'49 | 25°17'17 | 18°14'14 | 24°35'35 | 24° 9'9 | 4°13'13 | 2°13'13 | 8°47'47 | 0°20'20 | 27°18'18 | 13° 2'2 | 14°26'26 | 4°33'33 | 2°54 |
| S 18 | 7 47 57 | 27°28'53 | 7°II 39 | 17°10'10 | 25°50'50 | 24°54'54 | 4°19'19 | 2°14'14 | 8°47'47 | 0°21'21 | 27°18'18 | 12°56'56 | 14°23'23 | 4°39'39 | 2°55 |
| M 19 | 7 51 53 | 28°29'57 | 19°50'50 | 16°15'15 | 27° 6'6 | 25°38'38 | 4°25'25 | 2°16'16 | 8°47'47 | 0°22'22 | 27°17'17 | 12°49'49 | 14°20'20 | 4°46'46 | 2°57 |
| T 20 | 7 55 50 | 29°31'01 | 1°B 53 | 15°28'28 | 28°21'21 | 26°23'23 | 4°31'31 | 2°18'18 | 8°46'46 | 0°24'24 | 27°16'16 | 12°40'40 | 14°17'17 | 4°53'53 | 2°59 |
| W 21 | 7 59 47 | 0°32'03 | 13°50'50 | 14°51'51 | 29°37'37 | 27° 7'7 | 4°36'36 | 2°20'20 | 8°46'46 | 0°25'25 | 27°16'16 | 12°32'32 | 14°14'14 | 4°59'59 | 3° 1 |
| T 22 | 8 3 43 | 1°33'05 | 25°43'43 | 14°23'23 | 0°52'52 | 27°51'51 | 4°41'41 | 2°22'22 | 8°45'45 | 0°26'26 | 27°15'15 | 12°24'24 | 14°11'11 | 5° 6'6 | 3° 3 |
| F 23 | 8 7 40 | 2°34'06 | 7°B 33 | 14° 4'4 | 2° 7'7 | 28°36'36 | 4°46'46 | 2°24'24 | 8°45'45 | 0°28'28 | 27°14'14 | 12°17'17 | 14° 7'7 | 5°13'13 | 3° 5 |
| S 24 | 8 11 36 | 3°35'06 | 19°23'23 | 13°54'54 | 3°23'23 | 29°20'20 | 4°51'51 | 2°26'26 | 8°44'44 | 0°29'29 | 27°14'14 | 12°13'13 | 14° 4'4 | 5°20'20 | 3° 7 |
| S 25 | 8 15 33 | 4°36'06 | 1°B 13 | 13°D 52 | 4°38'38 | 0°Y 5 | 4°56'56 | 2°28'28 | 8°44'44 | 0°30'30 | 27°13'13 | 12°10'10 | 14° 1'1 | 5°26'26 | 3° 9 |
| M 26 | 8 19 29 | 5°37'05 | 13° 6'6 | 13°59'59 | 5°54'54 | 0°49'49 | 5° 1'1 | 2°31'31 | 8°43'43 | 0°31'31 | 27°12'12 | 12°D 9 | 13°58'58 | 5°33'33 | 3°12 |
| T 27 | 8 23 26 | 6°38'03 | 25° 6'6 | 14°12'12 | 7° 9'9 | 1°33'33 | 5° 5'5 | 2°33'33 | 8°42'42 | 0°33'33 | 27°11'11 | 12°10'10 | 13°55'55 | 5°40'40 | 3°14 |
| W 28 | 8 27 22 | 7°39'00 | 7°B 16 | 14°32'32 | 8°24'24 | 2°18'18 | 5° 9'9 | 2°36'36 | 8°42'42 | 0°34'34 | 27°10'10 | 12°12'12 | 13°51'51 | 5°46'46 | 3°16 |
| T 29 | 8 31 19 | 8°39'57 | 19°40'40 | 14°59'59 | 9°40'40 | 3° 2'2 | 5°14'14 | 2°38'38 | 8°41'41 | 0°35'35 | 27° 9'9 | 12°14'14 | 13°48'48 | 5°53'53 | 3°18 |
| F 30 | 8 35 16 | 9°40'53 | 2°B 22 | 15°31'31 | 10°55'55 | 3°46'46 | 5°17'17 | 2°41'41 | 8°40'40 | 0°36'36 | 27° 8'8 | 12°15'15 | 13°45'45 | 6° 0'0 | 3°21 |
| S 31 | 8 39 12 | 10°41'48 | 15°B 27 | 16°38'38 | 12°58'58 | 4°Y 30 | 5°B 21 | 2°B 44 | 8°B 39 | 0°37'37 | 27°R 7 | 12°R 15 | 13°B 42 | 6°B 6 | 3°Y 23 |

Delta T = 40.18 sec.

FEBRUARY 1970

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|----------|----------|----------|----------|----------|---------|---------|---------|---------|----------|----------|----------|---------|--------|
| S 1 | 8 43 9 | 11°42'43 | 28°B 57 | 16°35'50 | 13°26'26 | 5°Y 14 | 5°B 25 | 2°B 47 | 8°R 38 | 0°37'38 | 27°R 6 | 12°R 14 | 13°B 39 | 6°B 13 | 3°Y 26 |
| M 2 | 8 47 5 | 12°43'37 | 12°B 55 | 17°36'36 | 14°41'41 | 5°59'59 | 5°28'28 | 2°50'50 | 8°B 37 | 0°39'39 | 27°R 5 | 12°B 11 | 13°36'36 | 6°20'20 | 3°28 |
| T 3 | 8 51 2 | 13°44'31 | 27°20'20 | 18°26'26 | 15°56'56 | 6°43'43 | 5°31'31 | 2°53'53 | 8°36'36 | 0°40'40 | 27° 4'4 | 12° 8'8 | 13°32'32 | 6°26'26 | 3°30 |
| W 4 | 8 54 58 | 14°45'23 | 12°B 9 | 19°20'20 | 17°12'12 | 7°27'27 | 5°35'35 | 2°57'57 | 8°35'35 | 0°41'41 | 27° 3'3 | 12° 3'3 | 13°29'29 | 6°33'33 | 3°33 |
| T 5 | 8 58 55 | 15°46'15 | 27°16'16 | 20°17'17 | 18°27'27 | 8°11'11 | 5°37'37 | 3° 0'0 | 8°33'33 | 0°42'42 | 27° 2'2 | 12° 0'0 | 13°26'26 | 6°40'40 | 3°36 |
| F 6 | 9 2 52 | 16°47'05 | 12°B 30 | 21°16'16 | 19°42'42 | 8°55'55 | 5°40'40 | 3° 4'4 | 8°32'32 | 0°43'43 | 27° 1'1 | 11°57'57 | 13°23'23 | 6°46'46 | 3°38 |
| S 7 | 9 6 48 | 17°47'54 | 27°43'43 | 22°19'19 | 20°58'58 | 9°39'39 | 5°43'43 | 3° 7'7 | 8°31'31 | 0°43'43 | 27° 0'0 | 11°55'55 | 13°20'20 | 6°53'53 | 3°41 |
| S 8 | 9 10 45 | 18°48'42 | 12°B 44 | 23°23'23 | 22°13'13 | 10°23'23 | 5°45'45 | 3°11'11 | 8°30'30 | 0°44'44 | 26°59'59 | 11°D 54 | 13°17'17 | 7° 0'0 | 3°44 |
| M 9 | 9 14 41 | 19°49'28 | 27°25'25 | 24°31'31 | 23°28'28 | 11° 7'7 | 5°47'47 | 3°15'15 | 8°28'28 | 0°45'45 | 26°57'57 | 11°55'55 | 13°13'13 | 7° 6'6 | 3°46 |
| T 10 | 9 18 38 | 20°50'13 | 11°Y 41 | 25°40'40 | 24°43'43 | 11°51'51 | 5°49'49 | 3°18'18 | 8°27'27 | 0°46'46 | 26°56'56 | 11°56'56 | 13°10'10 | 7°13'13 | 3°49 |
| W 11 | 9 22 34 | 21°50'56 | 25°30'30 | 26°51'51 | 25°59'59 | 12°35'35 | 5°51'51 | 3°22'22 | 8°25'25 | 0°46'46 | 26°55'55 | 11°57'57 | 13° 7'7 | 7°20'20 | 3°52 |
| T 12 | 9 26 31 | 22°51'38 | 8°B 52 | 28° 4'4 | 27°14'14 | 13°19'19 | 5°52'52 | 3°27'27 | 8°24'24 | 0°47'47 | 26°54'54 | 11°59'59 | 13° 4'4 | 7°26'26 | 3°55 |
| F 13 | 9 30 27 | 23°52'18 | 21°50'50 | 29°18'18 | 28°29'29 | 14° 3'3 | 5°54'54 | 3°31'31 | 8°22'22 | 0°48'48 | 26°52'52 | 11°R 59 | 13° 1'1 | 7°33'33 | 3°57 |
| S 14 | 9 34 24 | 24°52'57 | 4°II 26 | 0°35'35 | 29°44'44 | 14°46'46 | 5°55'55 | 3°35'35 | 8°21'21 | 0°48'48 | 26°51'51 | 11°59'59 | 12°57'57 | 7°40'40 | 4° 0 |
| S 15 | 9 38 20 | 25°53'34 | 16°45'45 | 1°52'52 | 0°B 59 | 15°30'30 | 5°56'56 | 3°39'39 | 8°19'19 | 0°49'49 | 26°50'50 | 11°58'58 | 12°54'54 | 7°46'46 | 4° 3 |
| M 16 | 9 42 17 | 26°54'09 | 28°52'52 | 3°12'12 | 2°14'14 | 16°14'14 | 5°57'57 | 3°44'44 | 8°17'17 | 0°50'50 | 26°48'48 | 11°56'56 | 12°51'51 | 7°53'53 | 4° 6 |
| T 17 | 9 46 14 | 27°54'42 | 10°B 49 | 4°32'32 | 3°30'30 | 16°57'57 | 5°57'57 | 3°48'48 | 8°15'15 | 0°50'50 | 26°47'47 | 11°54'54 | 12°48'48 | 8° 0'0 | 4° 9 |
| W 18 | 9 50 10 | 28°55'14 | 22°40'40 | 5°54'54 | 4°45'45 | 17°41'41 | 5°58'58 | 3°53'53 | 8°14'14 | 0°50'50 | 26°46'46 | 11°52'52 | 12°45'45 | 8° 6'6 | 4°12 |
| T 19 | 9 54 7 | 29°55'44 | 4°B 29 | 7°17'17 | 6° 0'0 | 18°25'25 | 5°58'58 | 3°57'57 | 8°12'12 | 0°51'51 | 26°44'44 | 11°50'50 | 12°42'42 | 8°13'13 | 4°15 |
| F 20 | 9 58 3 | 0°56'12 | 16°18'18 | 8°41'41 | 7°15'15 | 19° 8'8 | 5°R 58 | 4° 2'2 | 8°10'10 | 0°51'51 | 26°43'43 | 11°48'48 | 12°38'38 | 8°20'20 | 4°18 |
| S 21 | 10 2 0 | 1°56'38 | 28°10'10 | 10° 7'7 | 8°30'30 | 19°52'52 | 5°58'58 | 4° 7'7 | 8° 8'8 | 0°52'52 | 26°41'41 | 11°48'48 | 12°35'35 | 8°26'26 | 4°21 |
| S 22 | 10 5 56 | 2°57'03 | 10°B 6 | 11°33'33 | 9°45'45 | 20°35'35 | 5°58'58 | 4°12'12 | 8° 6'6 | 0°52'52 | 26°40'40 | 11°D 47 | 12°32'32 | 8°33'33 | 4°24 |
| M 23 | 10 9 53 | 3°57'26 | 22° 9'9 | 13° 1'1 | 11° 0'0 | 21°19'19 | 5°57'57 | 4°17'17 | 8° 4'4 | 0°52'52 | 26°39'39 | 11°47'47 | 12°29'29 | 8°40'40 | 4°28 |
| T 24 | 10 13 49 | 4°57'48 | 4°B 20 | 14°30'30 | 12°15'15 | 22° 2'2 | 5°57'57 | 4°22'22 | 8° 2'2 | 0°53'53 | 26°37'37 | 11°48'48 | 12°26'26 | 8°46'46 | 4°31 |
| W 25 | 10 17 46 | 5°58'08 | 16°42'42 | 16° 0'0 | 13°30'30 | 22°46'46 | 5°56'56 | 4°27'27 | 8° 0'0 | 0°53'53 | 26°36'36 | 11°48'48 | 12°22'22 | 8°53'53 | 4°34 |
| T 26 | 10 21 43 | 6°58'27 | 29°16'16 | 17°31'31 | 14°45'45 | 23°29'29 | 5°55'55 | 4°32'32 | 7°58'58 | 0°53'53 | 26°34'34 | 11°49'49 | 12°19'19 | 9° 0'0 | 4°37 |
| F 27 | 10 25 39 | 7°58'44 | 12°B 5 | 19° 2'2 | 16° 0'0 | 24°12'12 | 5°53'53 | 4°38'38 | 7°56'56 | 0°53'53 | 26°33'33 | 11°50'50 | 12°16'16 | 9° 6'6 | 4°40 |
| S 28 | 10 29 36 | 8°59'00 | 25°B 12 | 20°36'36 | 17°B 15 | 24°Y 56 | 5°B 52 | 4°B 43 | 7°B 54 | 0°53'53 | 26°R 31 | 11°B 50 | 12°B 13 | 9°B 13 | 4°Y 44 |

Delta T = 40.26 sec.

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SWISS EPHEMERIS for the year 1970

MARCH 1970

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|----------|--------|--------|--------|--------|-------|-------|-------|-------|--------|--------|--------|--------|-------|
| S 1 | 10 33 32 | 9°59'14 | 8°39' | 22°10' | 18°30' | 25°39' | 5°R50 | 4°48' | 7°R52 | 0°53' | 26°R29 | 11°R50 | 12°10' | 9°20' | 4°Y47 |
| M 2 | 10 37 29 | 10°59'27 | 22°26' | 23°45' | 19°45' | 26°22' | 5°M49 | 4°54' | 7°49' | 0°53' | 26°M28 | 11°X50 | 12° 7' | 9°26' | 4°50 |
| T 3 | 10 41 25 | 11°59'39 | 6°35' | 25°21' | 21° 0' | 27° 5' | 5°47' | 5° 0' | 7°47' | 0°R53 | 26°26' | 11°D50 | 12° 3' | 9°33' | 4°53 |
| W 4 | 10 45 22 | 12°59'49 | 21° 4' | 26°58' | 22°14' | 27°48' | 5°44' | 5° 5' | 7°45' | 0°53' | 26°25' | 11°50 | 12° 0' | 9°40' | 4°57 |
| T 5 | 10 49 18 | 13°59'57 | 5°49' | 28°37' | 23°29' | 28°31' | 5°42' | 5°11' | 7°43' | 0°53' | 26°23' | 11°50 | 11°57' | 9°46' | 5° 0' |
| F 6 | 10 53 15 | 15° 0'04 | 20°45' | 0°16' | 24°44' | 29°14' | 5°40' | 5°17' | 7°40' | 0°53' | 26°22' | 11°50 | 11°54' | 9°53' | 5° 3' |
| S 7 | 10 57 12 | 16° 0'09 | 5°44' | 1°56' | 25°59' | 29°57' | 5°37' | 5°23' | 7°38' | 0°53' | 26°20' | 11°R50 | 11°51' | 10° 0' | 5° 7' |
| S 8 | 11 1 8 | 17° 0'12 | 20°38' | 3°38' | 27°14' | 0°40' | 5°34' | 5°29' | 7°36' | 0°53' | 26°18' | 11°50 | 11°48' | 10° 6' | 5°10 |
| M 9 | 11 5 5 | 18° 0'13 | 5°Y19 | 5°21' | 28°28' | 1°23' | 5°31' | 5°35' | 7°33' | 0°53' | 26°17' | 11°50 | 11°44' | 10°13' | 5°14 |
| T 10 | 11 9 1 | 19° 0'12 | 19°40' | 7° 4' | 29°43' | 2° 6' | 5°28' | 5°41' | 7°31' | 0°53' | 26°15' | 11°49 | 11°41' | 10°20' | 5°17 |
| W 11 | 11 12 58 | 20° 0'09 | 3°36' | 8°49' | 0°Y58 | 2°49' | 5°24' | 5°47' | 7°28' | 0°52' | 26°14' | 11°48 | 11°38' | 10°26' | 5°20 |
| T 12 | 11 16 54 | 21° 0'04 | 17° 7' | 10°35' | 2°13' | 3°32' | 5°21' | 5°53' | 7°26' | 0°52' | 26°12' | 11°47 | 11°35' | 10°33' | 5°24 |
| F 13 | 11 20 51 | 21°59'57 | 0°113 | 12°23' | 3°27' | 4°15' | 5°17' | 5°59' | 7°23' | 0°52' | 26°10' | 11°46 | 11°32' | 10°40' | 5°27 |
| S 14 | 11 24 47 | 22°59'48 | 12°55' | 14°11' | 4°42' | 4°57' | 5°13' | 6° 5' | 7°21' | 0°52' | 26° 9' | 11°46 | 11°28' | 10°46' | 5°31 |
| S 15 | 11 28 44 | 23°59'36 | 25°17' | 16° 1' | 5°56' | 5°40' | 5° 9' | 6°12' | 7°19' | 0°51' | 26° 7' | 11°D45 | 11°25' | 10°53' | 5°34 |
| M 16 | 11 32 41 | 24°59'23 | 7°23 | 17°52' | 7°11' | 6°23' | 5° 4' | 6°18' | 7°16' | 0°51' | 26° 5' | 11°46 | 11°22' | 11° 0' | 5°38 |
| T 17 | 11 36 37 | 25°59'07 | 19°19' | 19°43' | 8°26' | 7° 5' | 5° 0' | 6°25' | 7°13' | 0°50' | 26° 4' | 11°47 | 11°19' | 11° 6' | 5°41 |
| W 18 | 11 40 34 | 26°58'48 | 1°9 | 21°37' | 9°40' | 7°48' | 4°55' | 6°31' | 7°11' | 0°50' | 26° 2' | 11°48 | 11°16' | 11°13' | 5°45 |
| T 19 | 11 44 30 | 27°58'28 | 12°57' | 23°31' | 10°55' | 8°30' | 4°51' | 6°38' | 7° 8' | 0°49' | 26° 1' | 11°49 | 11°13' | 11°20' | 5°48 |
| F 20 | 11 48 27 | 28°58'05 | 24°48' | 25°26' | 12° 9' | 9°13' | 4°46' | 6°44' | 7° 6' | 0°49' | 25°59' | 11°51 | 11° 9' | 11°26' | 5°52 |
| S 21 | 11 52 23 | 29°57'40 | 6°M44 | 27°23' | 13°24' | 9°55' | 4°41' | 6°51' | 7° 3' | 0°48' | 25°57' | 11°R51 | 11° 6' | 11°33' | 5°55 |
| S 22 | 11 56 20 | 0°Y57'13 | 18°48' | 29°21' | 14°38' | 10°38' | 4°36' | 6°58' | 7° 1' | 0°48' | 25°56' | 11°51 | 11° 3' | 11°40' | 5°59 |
| M 23 | 12 0 16 | 1°56'44 | 1°13 | 1°Y19 | 15°52' | 11°20' | 4°30' | 7° 4' | 6°58' | 0°47' | 25°54' | 11°50 | 11° 0' | 11°46' | 6° 2' |
| T 24 | 12 4 13 | 2°56'13 | 13°31' | 3°19' | 17° 7' | 12° 2' | 4°25' | 7°11' | 6°56' | 0°46' | 25°52' | 11°48 | 10°57' | 11°53' | 6° 6' |
| W 25 | 12 8 10 | 3°55'40 | 26°11' | 5°19' | 18°21' | 12°45' | 4°19' | 7°18' | 6°53' | 0°46' | 25°51' | 11°45 | 10°54' | 12° 0' | 6° 9' |
| T 26 | 12 12 6 | 4°55'05 | 9°M4 | 7°21' | 19°35' | 13°27' | 4°13' | 7°25' | 6°50' | 0°45' | 25°49' | 11°42 | 10°50' | 12° 6' | 6°13 |
| F 27 | 12 16 3 | 5°54'28 | 22°11' | 9°23' | 20°50' | 14° 9' | 4° 7' | 7°32' | 6°48' | 0°44' | 25°48' | 11°38 | 10°47' | 12°13' | 6°16 |
| S 28 | 12 19 59 | 6°53'49 | 5°32 | 11°25' | 22° 4' | 14°51' | 4° 1' | 7°39' | 6°45' | 0°44' | 25°46' | 11°35 | 10°44' | 12°20' | 6°20 |
| S 29 | 12 23 56 | 7°53'09 | 19° 6' | 13°28' | 23°18' | 15°33' | 3°55' | 7°46' | 6°43' | 0°43' | 25°44' | 11°32 | 10°41' | 12°26' | 6°23 |
| M 30 | 12 27 52 | 8°52'27 | 2°353 | 15°30' | 24°32' | 16°15' | 3°49' | 7°53' | 6°40' | 0°42' | 25°43' | 11°D31 | 10°38' | 12°33' | 6°27 |
| T 31 | 12 31 49 | 9°Y51'43 | 16°354 | 17°Y33 | 25°Y47 | 16°357 | 3°M43 | 8°0 | 6°37 | 0°41 | 25°M41 | 11°X31 | 10°X34 | 12°L40 | 6°Y30 |

Delta T = 40.34 sec.

APRIL 1970

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|-----------|--------|--------|--------|--------|-------|--------|-------|-------|--------|--------|--------|--------|-------|
| W 1 | 12 35 45 | 10°Y50'58 | 1°37 | 19°Y34 | 27°Y 1 | 17°39 | 3°R36 | 8°37 | 6°R35 | 0°R40 | 25°R40 | 11°X32 | 10°X31 | 12°L46 | 6°Y34 |
| T 2 | 12 39 42 | 11°50'10 | 15°29' | 21°35' | 28°15' | 18°21' | 3°M30 | 8°14' | 6°32 | 0°X39 | 25°M38 | 11°34 | 10°28' | 12°53' | 6°37 |
| F 3 | 12 43 39 | 12°49'21 | 0°11 | 23°35' | 29°29' | 19° 3' | 3°23 | 8°21' | 6°30 | 0°38 | 25°37' | 11°35 | 10°25' | 13° 0' | 6°41 |
| S 4 | 12 47 35 | 13°48'30 | 14°33' | 25°34' | 0°43 | 19°45' | 3°16 | 8°29' | 6°27 | 0°37 | 25°35' | 11°R35 | 10°22' | 13° 6' | 6°44 |
| S 5 | 12 51 32 | 14°47'37 | 29° 5' | 27°30' | 1°57' | 20°27' | 3° 9' | 8°36' | 6°24 | 0°36 | 25°34' | 11°34 | 10°19' | 13°13' | 6°48 |
| M 6 | 12 55 28 | 15°46'42 | 13°Y29 | 29°24' | 3°11' | 21° 9' | 3° 2' | 8°43' | 6°22 | 0°35 | 25°32' | 11°31 | 10°15' | 13°20' | 6°51 |
| T 7 | 12 59 25 | 16°45'45 | 27°39 | 1°16 | 4°25' | 21°51' | 2°55' | 8°51' | 6°19 | 0°34 | 25°31' | 11°27 | 10°12' | 13°26' | 6°55 |
| W 8 | 13 3 21 | 17°44'46 | 11°31 | 3° 4' | 5°39' | 22°32' | 2°48' | 8°58' | 6°17 | 0°33 | 25°29' | 11°21 | 10° 9' | 13°33' | 6°58 |
| T 9 | 13 7 18 | 18°43'45 | 25° 1' | 4°49' | 6°53' | 23°14' | 2°41' | 9° 5' | 6°14 | 0°32 | 25°28' | 11°15 | 10° 6' | 13°40' | 7° 2' |
| F 10 | 13 11 14 | 19°42'42 | 8°11 | 6°30' | 8° 7' | 23°56' | 2°34' | 9°13' | 6°12 | 0°31 | 25°26' | 11° 9' | 10° 3' | 13°46' | 7° 5' |
| S 11 | 13 15 11 | 20°41'37 | 20°53' | 8° 8' | 9°21' | 24°37' | 2°26' | 9°20' | 6° 9' | 0°30 | 25°25' | 11° 4' | 9°59' | 13°53' | 7° 9' |
| S 12 | 13 19 8 | 21°40'29 | 3°18 | 9°41' | 10°34' | 25°19' | 2°19' | 9°28' | 6° 7' | 0°29 | 25°23' | 11° 1' | 9°56' | 14° 0' | 7°12 |
| M 13 | 13 23 4 | 22°39'19 | 15°27' | 11° 9' | 11°48' | 26° 0' | 2°11' | 9°35' | 6° 4' | 0°28 | 25°22' | 10°59 | 9°53' | 14° 6' | 7°16 |
| T 14 | 13 27 1 | 23°38'07 | 27°24' | 12°33' | 13° 2' | 26°42' | 2° 4' | 9°43' | 6° 2' | 0°26 | 25°20' | 10°D59 | 9°50' | 14°13' | 7°19 |
| W 15 | 13 30 57 | 24°36'53 | 9°L14 | 13°51' | 14°16' | 27°23' | 1°56' | 9°50' | 5°59 | 0°25 | 25°19' | 11° 0' | 9°47' | 14°20' | 7°23 |
| T 16 | 13 34 54 | 25°35'36 | 21° 3' | 15° 5' | 15°29' | 28° 5' | 1°49' | 9°58' | 5°57 | 0°24 | 25°18' | 11° 1' | 9°44' | 14°26' | 7°26 |
| F 17 | 13 38 50 | 26°34'17 | 2°M55 | 16°13' | 16°43' | 28°46' | 1°41' | 10° 5' | 5°55 | 0°23 | 25°16' | 11° 2' | 9°40' | 14°33' | 7°29 |
| S 18 | 13 42 47 | 27°32'56 | 14°56' | 17°16' | 17°57' | 29°27' | 1°34' | 10°13' | 5°52 | 0°21 | 25°15' | 11°R 3 | 9°37' | 14°40' | 7°33 |
| S 19 | 13 46 43 | 28°31'32 | 27° 8' | 18°13' | 19°10' | 0°11 9 | 1°26' | 10°20' | 5°50 | 0°20 | 25°14' | 11° 1' | 9°34' | 14°46' | 7°36 |
| M 20 | 13 50 40 | 29°30'07 | 9°35 | 19° 5' | 20°24' | 0°50 | 1°18' | 10°28' | 5°48 | 0°19 | 25°12' | 10°58 | 9°31' | 14°53' | 7°39 |
| T 21 | 13 54 36 | 0°R28'40 | 22°18 | 19°51' | 21°37' | 1°31' | 1°11' | 10°36' | 5°45 | 0°17 | 25°11' | 10°52 | 9°28' | 14°59' | 7°43 |
| W 22 | 13 58 33 | 1°27'10 | 5°M19 | 20°31' | 22°51' | 2°12' | 1° 3' | 10°43' | 5°43 | 0°16 | 25°10' | 10°45 | 9°25' | 15° 6' | 7°46 |
| T 23 | 14 2 30 | 2°25'39 | 18°36' | 21° 5' | 24° 4' | 2°53' | 0°55' | 10°51' | 5°41 | 0°15 | 25° 9' | 10°36 | 9°21' | 15°13' | 7°49 |
| F 24 | 14 6 26 | 3°24'06 | 2°11 | 21°33' | 25°17' | 3°34' | 0°48' | 10°59' | 5°39 | 0°13 | 25° 7' | 10°27 | 9°18' | 15°19' | 7°52 |
| S 25 | 14 10 23 | 4°22'32 | 15°52' | 21°56' | 26°31' | 4°15' | 0°40' | 11° 6' | 5°36 | 0°12 | 25° 6' | 10°19 | 9°15' | 15°26' | 7°56 |
| S 26 | 14 14 19 | 5°20'56 | 29°45' | 22°12' | 27°44' | 4°56' | 0°32' | 11°14' | 5°34 | 0°10 | 25° 5' | 10°12 | 9°12' | 15°33' | 7°59 |
| M 27 | 14 18 16 | 6°19'18 | 13°345 | 22°23' | 28°57' | 5°37' | 0°25' | 11°22' | 5°32 | 0° 9 | 25° 4' | 10° 8' | 9° 9' | 15°39' | 8° 2' |
| T 28 | 14 22 12 | 7°17'39 | 27°49 | 22°R29 | 0°111 | 6°18' | 0°17' | 11°29' | 5°30 | 0° 8 | 25° 3' | 10° 6' | 9° 5' | 15°46' | 8° 5' |
| W 29 | 14 26 9 | 8°15'58 | 11°356 | 22°28' | 1°24 | 6°59' | 0°10' | 11°37' | 5°28 | 0° 6 | 25° 2' | 10°D 5 | 9° 2' | 15°53' | 8° 9' |
| T 30 | 14 30 6 | 9°14'16 | 26°36 | 22°323 | 2°1137 | 7°1140 | 0°M 2 | 11°345 | 5°26 | 0°5 | 25°M 1 | 10°X 6 | 8°X59 | 15°L59 | 8°Y12 |

Delta T = 40.42 sec.

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SWISS EPHEMERIS for the year 1970

MAY 1970

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|----------|-------|--------|-------|-------|--------|-------|-------|-------|--------|--------|------|-------|------|
| F 1 | 14 34 2 | 10♈12'32 | 10♈15 | 22°R12 | 3♈50 | 8♈21 | 29°R55 | 11♈52 | 5°R24 | 0°R 3 | 25°R 0 | 10°R 6 | 8♈56 | 16♈6 | 8♈15 |
| S 2 | 14 37 59 | 11°10'46 | 24°24 | 21♈57 | 5° 3 | 9° 2 | 29♈47 | 12° 0 | 5♈22 | 0♈ 2 | 24♈59 | 10♈ 6 | 8°53 | 16°13 | 8°18 |
| S 3 | 14 41 55 | 12° 8'59 | 8♈29 | 21°37 | 6°16 | 9°42 | 29°40 | 12° 8 | 5°20 | 0° 0 | 24°58 | 10° 3 | 8°50 | 16°19 | 8°21 |
| M 4 | 14 45 52 | 13° 7'11 | 22°27 | 21°13 | 7°29 | 10°23 | 29°32 | 12°15 | 5°18 | 29♈59 | 24°57 | 9°57 | 8°46 | 16°26 | 8°24 |
| T 5 | 14 49 48 | 14° 5'21 | 6♈15 | 20°45 | 8°42 | 11° 4 | 29°25 | 12°23 | 5°16 | 29°57 | 24°56 | 9°49 | 8°43 | 16°33 | 8°27 |
| W 6 | 14 53 45 | 15° 3'29 | 19°50 | 20°15 | 9°55 | 11°44 | 29°18 | 12°31 | 5°15 | 29°55 | 24°55 | 9°39 | 8°40 | 16°39 | 8°30 |
| T 7 | 14 57 41 | 16° 1'36 | 3♈ 8 | 19°42 | 11° 8 | 12°25 | 29°11 | 12°39 | 5°13 | 29°54 | 24°54 | 9°27 | 8°37 | 16°46 | 8°33 |
| F 8 | 15 1 38 | 16°59'40 | 16° 8 | 19° 7 | 12°21 | 13° 6 | 29° 4 | 12°46 | 5°11 | 29°52 | 24°53 | 9°16 | 8°34 | 16°53 | 8°36 |
| S 9 | 15 5 35 | 17°57'44 | 28°49 | 18°31 | 13°34 | 13°46 | 28°57 | 12°54 | 5° 9 | 29°51 | 24°52 | 9° 6 | 8°31 | 16°59 | 8°39 |
| S 10 | 15 9 31 | 18°55'45 | 11♈12 | 17°54 | 14°47 | 14°27 | 28°50 | 13° 2 | 5° 8 | 29°49 | 24°51 | 8°59 | 8°27 | 17° 6 | 8°42 |
| M11 | 15 13 28 | 19°53'45 | 23°20 | 17°17 | 15°59 | 15° 7 | 28°43 | 13° 9 | 5° 6 | 29°48 | 24°51 | 8°53 | 8°24 | 17°13 | 8°44 |
| T 12 | 15 17 24 | 20°51'42 | 5♈17 | 16°42 | 17°12 | 15°48 | 28°37 | 13°17 | 5° 4 | 29°46 | 24°50 | 8°50 | 8°21 | 17°19 | 8°47 |
| W13 | 15 21 21 | 21°49'38 | 17° 7 | 16° 7 | 18°25 | 16°28 | 28°30 | 13°25 | 5° 3 | 29°44 | 24°49 | 8°D49 | 8°18 | 17°26 | 8°50 |
| T 14 | 15 25 17 | 22°47'32 | 28°56 | 15°34 | 19°37 | 17° 8 | 28°24 | 13°32 | 5° 1 | 29°43 | 24°48 | 8°49 | 8°15 | 17°33 | 8°53 |
| F 15 | 15 29 14 | 23°45'25 | 10♈49 | 15° 4 | 20°50 | 17°49 | 28°17 | 13°40 | 5° 0 | 29°41 | 24°48 | 8°R49 | 8°11 | 17°39 | 8°56 |
| S 16 | 15 33 10 | 24°43'15 | 22°51 | 14°37 | 22° 3 | 18°29 | 28°11 | 13°48 | 4°59 | 29°40 | 24°47 | 8°48 | 8° 8 | 17°46 | 8°58 |
| S 17 | 15 37 7 | 25°41'04 | 5♈ 8 | 14°13 | 23°15 | 19° 9 | 28° 5 | 13°55 | 4°57 | 29°38 | 24°46 | 8°46 | 8° 5 | 17°53 | 9° 1 |
| M18 | 15 41 4 | 26°38'51 | 17°43 | 13°52 | 24°28 | 19°49 | 27°59 | 14° 3 | 4°56 | 29°36 | 24°46 | 8°41 | 8° 2 | 17°59 | 9° 3 |
| T 19 | 15 45 0 | 27°36'37 | 0♈39 | 13°36 | 25°40 | 20°30 | 27°53 | 14°10 | 4°55 | 29°35 | 24°45 | 8°33 | 7°59 | 18° 6 | 9° 6 |
| W20 | 15 48 57 | 28°34'21 | 13°57 | 13°24 | 26°52 | 21°10 | 27°47 | 14°18 | 4°54 | 29°33 | 24°45 | 8°23 | 7°56 | 18°13 | 9° 9 |
| T 21 | 15 52 53 | 29°32'04 | 27°35 | 13°16 | 28° 5 | 21°50 | 27°41 | 14°25 | 4°52 | 29°31 | 24°44 | 8°12 | 7°52 | 18°19 | 9°11 |
| F 22 | 15 56 50 | 0♈29'45 | 11♈32 | 13°D12 | 29°17 | 22°30 | 27°36 | 14°33 | 4°51 | 29°30 | 24°44 | 8° 0 | 7°49 | 18°26 | 9°14 |
| S 23 | 16 0 46 | 1°27'25 | 25°43 | 13°13 | 0♈29 | 23°10 | 27°31 | 14°41 | 4°50 | 29°28 | 24°43 | 7°49 | 7°46 | 18°32 | 9°16 |
| S 24 | 16 4 43 | 2°25'05 | 10♈ 1 | 13°19 | 1°41 | 23°50 | 27°25 | 14°48 | 4°49 | 29°27 | 24°43 | 7°40 | 7°43 | 18°39 | 9°18 |
| M25 | 16 8 39 | 3°22'43 | 24°22 | 13°29 | 2°53 | 24°30 | 27°20 | 14°55 | 4°48 | 29°25 | 24°43 | 7°33 | 7°40 | 18°46 | 9°21 |
| T 26 | 16 12 36 | 4°20'19 | 8♈42 | 13°43 | 4° 5 | 25°10 | 27°15 | 15° 3 | 4°47 | 29°23 | 24°42 | 7°30 | 7°37 | 18°52 | 9°23 |
| W27 | 16 16 33 | 5°17'55 | 22°56 | 14° 2 | 5°18 | 25°50 | 27°11 | 15°10 | 4°46 | 29°22 | 24°42 | 7°28 | 7°33 | 18°59 | 9°25 |
| T 28 | 16 20 29 | 6°15'31 | 7♈ 4 | 14°26 | 6°30 | 26°30 | 27° 6 | 15°18 | 4°46 | 29°20 | 24°42 | 7°28 | 7°30 | 19° 6 | 9°28 |
| F 29 | 16 24 26 | 7°13'05 | 21° 4 | 14°53 | 7°41 | 27°10 | 27° 1 | 15°25 | 4°45 | 29°19 | 24°41 | 7°28 | 7°27 | 19°12 | 9°30 |
| S 30 | 16 28 22 | 8°10'38 | 4♈56 | 15°25 | 8°53 | 27°49 | 26°57 | 15°32 | 4°44 | 29°17 | 24°41 | 7°26 | 7°24 | 19°19 | 9°32 |
| S 31 | 16 32 19 | 9♈ 8'11 | 18♈39 | 16♈ 1 | 10♈ 5 | 28♈29 | 26♈53 | 15♈40 | 4♈43 | 29♈15 | 24♈41 | 7♈23 | 7♈21 | 19♈26 | 9♈34 |

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JUNE 1970

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|----------|-------|-------|-------|-------|--------|-------|-------|--------|--------|-------|------|-------|-------|
| M 1 | 16 36 15 | 10♈ 5'42 | 2♈13 | 16♈41 | 11♈17 | 29♈ 9 | 26°R49 | 15♈47 | 4°R43 | 29°R14 | 24°R41 | 7°R16 | 7♈17 | 19♈32 | 9♈36 |
| T 2 | 16 40 12 | 11° 3'13 | 15°37 | 17°25 | 12°29 | 29°49 | 26♈45 | 15°54 | 4♈42 | 29♈12 | 24♈41 | 7♈ 7 | 7°14 | 19°39 | 9°38 |
| W 3 | 16 44 8 | 12° 0'43 | 28°49 | 18°12 | 13°40 | 0♈28 | 26°41 | 16° 1 | 4°42 | 29°11 | 24°41 | 6°55 | 7°11 | 19°46 | 9°40 |
| T 4 | 16 48 5 | 12°58'12 | 11♈48 | 19° 3 | 14°52 | 1° 8 | 26°38 | 16° 9 | 4°41 | 29° 9 | 24°41 | 6°42 | 7° 8 | 19°52 | 9°42 |
| F 5 | 16 52 2 | 13°55'41 | 24°33 | 19°58 | 16° 4 | 1°48 | 26°35 | 16°16 | 4°41 | 29° 7 | 24°D41 | 6°29 | 7° 5 | 19°59 | 9°44 |
| S 6 | 16 55 58 | 14°53'08 | 7♈ 2 | 20°56 | 17°15 | 2°27 | 26°31 | 16°23 | 4°40 | 29° 6 | 24°41 | 6°18 | 7° 2 | 20° 6 | 9°46 |
| S 7 | 16 59 55 | 15°50'34 | 19°18 | 21°58 | 18°27 | 3° 7 | 26°28 | 16°30 | 4°40 | 29° 4 | 24°41 | 6° 8 | 6°58 | 20°12 | 9°48 |
| M 8 | 17 3 51 | 16°47'59 | 1♈22 | 23° 3 | 19°38 | 3°47 | 26°25 | 16°37 | 4°40 | 29° 3 | 24°41 | 6° 1 | 6°55 | 20°19 | 9°50 |
| T 9 | 17 7 48 | 17°45'23 | 13°16 | 24°11 | 20°50 | 4°26 | 26°23 | 16°44 | 4°40 | 29° 1 | 24°41 | 5°57 | 6°52 | 20°26 | 9°51 |
| W10 | 17 11 44 | 18°42'46 | 25° 4 | 25°22 | 22° 1 | 5° 6 | 26°20 | 16°51 | 4°39 | 29° 0 | 24°41 | 5°55 | 6°49 | 20°32 | 9°53 |
| T 11 | 17 15 41 | 19°40'08 | 6♈52 | 26°37 | 23°12 | 5°45 | 26°18 | 16°58 | 4°39 | 28°58 | 24°41 | 5°D55 | 6°46 | 20°39 | 9°55 |
| F 12 | 17 19 37 | 20°37'29 | 18°45 | 27°55 | 24°23 | 6°25 | 26°16 | 17° 5 | 4°D39 | 28°57 | 24°41 | 5°R55 | 6°43 | 20°46 | 9°56 |
| S 13 | 17 23 34 | 21°34'49 | 0♈47 | 29°16 | 25°34 | 7° 4 | 26°14 | 17°12 | 4°39 | 28°55 | 24°42 | 5°55 | 6°39 | 20°52 | 9°58 |
| S 14 | 17 27 31 | 22°32'08 | 13° 4 | 0♈40 | 26°45 | 7°43 | 26°12 | 17°19 | 4°39 | 28°54 | 24°42 | 5°53 | 6°36 | 20°59 | 10° 0 |
| M15 | 17 31 27 | 23°29'26 | 25°42 | 2° 7 | 27°56 | 8°23 | 26°11 | 17°25 | 4°40 | 28°52 | 24°42 | 5°49 | 6°33 | 21° 5 | 10° 1 |
| T 16 | 17 35 24 | 24°26'43 | 8♈43 | 3°37 | 29° 7 | 9° 2 | 26° 9 | 17°32 | 4°40 | 28°51 | 24°43 | 5°43 | 6°30 | 21°12 | 10° 2 |
| W17 | 17 39 20 | 25°24'00 | 22°10 | 5° 9 | 0♈18 | 9°41 | 26° 8 | 17°39 | 4°40 | 28°50 | 24°43 | 5°34 | 6°27 | 21°19 | 10° 4 |
| T 18 | 17 43 17 | 26°21'16 | 6♈ 2 | 6°45 | 1°29 | 10°21 | 26° 7 | 17°45 | 4°40 | 28°48 | 24°43 | 5°24 | 6°23 | 21°25 | 10° 5 |
| F 19 | 17 47 13 | 27°18'31 | 20°17 | 8°24 | 2°40 | 11° 0 | 26° 6 | 17°52 | 4°41 | 28°47 | 24°44 | 5°14 | 6°20 | 21°32 | 10° 6 |
| S 20 | 17 51 10 | 28°15'46 | 4♈50 | 10° 6 | 3°50 | 11°39 | 26° 5 | 17°58 | 4°41 | 28°45 | 24°44 | 5° 4 | 6°17 | 21°39 | 10° 8 |
| S 21 | 17 55 7 | 29°13'00 | 19°32 | 11°50 | 5° 1 | 12°18 | 26° 5 | 18° 5 | 4°41 | 28°44 | 24°45 | 4°56 | 6°14 | 21°45 | 10° 9 |
| M22 | 17 59 3 | 0♈10'14 | 4♈18 | 13°38 | 6°11 | 12°58 | 26° 4 | 18°11 | 4°42 | 28°43 | 24°45 | 4°51 | 6°11 | 21°52 | 10°10 |
| T 23 | 18 3 0 | 1° 7'27 | 18°59 | 15°28 | 7°22 | 13°37 | 26°D 4 | 18°18 | 4°42 | 28°41 | 24°46 | 4°48 | 6° 8 | 21°59 | 10°11 |
| W24 | 18 6 56 | 2° 4'41 | 3♈30 | 17°21 | 8°32 | 14°16 | 26° 4 | 18°24 | 4°43 | 28°40 | 24°46 | 4°D47 | 6° 4 | 22° 5 | 10°12 |
| T 25 | 18 10 53 | 3° 1'54 | 17°47 | 19°16 | 9°43 | 14°55 | 26° 4 | 18°30 | 4°44 | 28°39 | 24°47 | 4°47 | 6° 1 | 22°12 | 10°13 |
| F 26 | 18 14 49 | 3°59'07 | 1♈49 | 21°14 | 10°53 | 15°34 | 26° 5 | 18°36 | 4°44 | 28°38 | 24°48 | 4°R48 | 5°58 | 22°19 | 10°14 |
| S 27 | 18 18 46 | 4°56'20 | 15°36 | 23°14 | 12° 3 | 16°13 | 26° 5 | 18°43 | 4°45 | 28°36 | 24°48 | 4°47 | 5°55 | 22°25 | 10°15 |
| S 28 | 18 22 42 | 5°53'34 | 29° 7 | 25°16 | 13°13 | 16°52 | 26° 6 | 18°49 | 4°46 | 28°35 | 24°49 | 4°45 | 5°52 | 22°32 | 10°16 |
| M29 | 18 26 39 | 6°50'47 | 12♈25 | 27°20 | 14°23 | 17°31 | 26° 7 | 18°55 | 4°47 | 28°34 | 24°50 | 4°40 | 5°49 | 22°39 | 10°17 |
| T 30 | 18 30 36 | 7°48'01 | 25♈29 | 29♈26 | 15♈33 | 18♈10 | 26♈ 8 | 19♈ 1 | 4♈48 | 28♈33 | 24♈51 | 4♈34 | 5♈45 | 22♈45 | 10♈17 |

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SWISS EPHEMERIS for the year 1970

JULY 1970

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|----------|---------|---------|----------|----------|----------|----------|--------|--------|----------|-------|---------|----------|----------|
| W 1 | 18 34 32 | 8°45'14 | 8°11'20 | 1°34'16 | 16°43'18 | 26°49'26 | 26°49'26 | 19°08'19 | 4°49'4 | 28°R32 | 24°51'24 | 4°R25 | 5°42'22 | 22°52'10 | 10°18'10 |
| T 2 | 18 38 29 | 9°42'28 | 20°59 | 3°42 | 17°52 | 19°28 | 26°11 | 19°12 | 4°50 | 28°R30 | 24°52 | 4°R15 | 5°39 | 22°59 | 10°19 |
| F 3 | 18 42 25 | 10°39'41 | 3°26 | 5°52 | 19°2 | 20°7 | 26°12 | 19°18 | 4°51 | 28°29 | 24°53 | 4°6 | 5°36 | 23°5 | 10°19 |
| S 4 | 18 46 22 | 11°36'55 | 15°42 | 8°2 | 20°12 | 20°46 | 26°14 | 19°24 | 4°52 | 28°28 | 24°54 | 3°57 | 5°33 | 23°12 | 10°20 |
| S 5 | 18 50 18 | 12°34'09 | 27°47 | 10°12 | 21°21 | 21°25 | 26°16 | 19°30 | 4°53 | 28°27 | 24°55 | 3°50 | 5°29 | 23°18 | 10°20 |
| M 6 | 18 54 15 | 13°31'22 | 9°44 | 12°23 | 22°31 | 22°4 | 26°18 | 19°35 | 4°54 | 28°26 | 24°56 | 3°45 | 5°26 | 23°25 | 10°21 |
| T 7 | 18 58 11 | 14°28'35 | 21°34 | 14°33 | 23°40 | 22°43 | 26°21 | 19°41 | 4°55 | 28°25 | 24°57 | 3°42 | 5°23 | 23°32 | 10°21 |
| W 8 | 19 2 8 | 15°25'48 | 3°11 | 16°42 | 24°49 | 23°22 | 26°23 | 19°46 | 4°57 | 28°24 | 24°58 | 3°D41 | 5°20 | 23°38 | 10°21 |
| T 9 | 19 6 5 | 16°23'01 | 15°8 | 18°51 | 25°58 | 24°1 | 26°26 | 19°52 | 4°58 | 28°23 | 24°59 | 3°41 | 5°17 | 23°45 | 10°22 |
| F 10 | 19 10 1 | 17°20'14 | 27°0 | 20°59 | 27°7 | 24°39 | 26°29 | 19°57 | 4°59 | 28°22 | 25°0 | 3°43 | 5°14 | 23°52 | 10°22 |
| S 11 | 19 13 58 | 18°17'27 | 9°1 | 23°6 | 28°16 | 25°18 | 26°32 | 20°2 | 5°1 | 28°21 | 25°1 | 3°44 | 5°10 | 23°58 | 10°22 |
| S 12 | 19 17 54 | 19°14'40 | 21°17 | 25°12 | 29°25 | 25°57 | 26°35 | 20°7 | 5°2 | 28°20 | 25°2 | 3°R44 | 5°7 | 24°5 | 10°22 |
| M13 | 19 21 51 | 20°11'53 | 3°11 | 27°16 | 0°11 | 26°36 | 26°38 | 20°13 | 5°4 | 28°20 | 25°3 | 3°43 | 5°4 | 24°12 | 10°22 |
| T 14 | 19 25 47 | 21°9'06 | 16°53 | 29°19 | 1°42 | 27°14 | 26°42 | 20°18 | 5°6 | 28°19 | 25°5 | 3°41 | 5°1 | 24°18 | 10°R22 |
| W15 | 19 29 44 | 22°6'19 | 0°20 | 1°20 | 2°51 | 27°53 | 26°45 | 20°23 | 5°7 | 28°18 | 25°6 | 3°36 | 4°58 | 24°25 | 10°22 |
| T 16 | 19 33 40 | 23°3'32 | 14°14 | 3°20 | 3°59 | 28°32 | 26°49 | 20°27 | 5°9 | 28°17 | 25°7 | 3°31 | 4°55 | 24°32 | 10°22 |
| F 17 | 19 37 37 | 24°0'45 | 28°36 | 5°17 | 5°7 | 29°11 | 26°53 | 20°32 | 5°11 | 28°16 | 25°8 | 3°25 | 4°51 | 24°38 | 10°22 |
| S 18 | 19 41 34 | 24°57'58 | 13°19 | 7°13 | 6°15 | 29°49 | 26°58 | 20°37 | 5°12 | 28°16 | 25°10 | 3°19 | 4°48 | 24°45 | 10°22 |
| S 19 | 19 45 30 | 25°55'12 | 28°17 | 9°8 | 7°23 | 0°28 | 27°2 | 20°42 | 5°14 | 28°15 | 25°11 | 3°15 | 4°45 | 24°52 | 10°21 |
| M20 | 19 49 27 | 26°52'27 | 13°21 | 11°0 | 8°31 | 1°6 | 27°6 | 20°46 | 5°16 | 28°14 | 25°12 | 3°12 | 4°42 | 24°58 | 10°21 |
| T 21 | 19 53 23 | 27°49'41 | 28°23 | 12°51 | 9°39 | 1°45 | 27°11 | 20°51 | 5°18 | 28°14 | 25°14 | 3°D10 | 4°39 | 25°5 | 10°21 |
| W22 | 19 57 20 | 28°46'57 | 13°13 | 14°40 | 10°46 | 2°24 | 27°16 | 20°55 | 5°20 | 28°13 | 25°15 | 3°11 | 4°35 | 25°11 | 10°20 |
| T 23 | 20 1 16 | 29°44'13 | 27°47 | 16°27 | 11°54 | 3°2 | 27°21 | 21°0 | 5°22 | 28°12 | 25°16 | 3°12 | 4°32 | 25°18 | 10°20 |
| F 24 | 20 5 13 | 0°41'30 | 12°Y 0 | 18°12 | 13°1 | 3°41 | 27°26 | 21°4 | 5°24 | 28°12 | 25°18 | 3°13 | 4°29 | 25°25 | 10°19 |
| S 25 | 20 9 9 | 1°38'48 | 25°51 | 19°55 | 14°8 | 4°19 | 27°31 | 21°8 | 5°26 | 28°11 | 25°19 | 3°R14 | 4°26 | 25°31 | 10°19 |
| S 26 | 20 13 6 | 2°36'07 | 9°21 | 21°37 | 15°15 | 4°58 | 27°36 | 21°12 | 5°29 | 28°11 | 25°21 | 3°14 | 4°23 | 25°38 | 10°18 |
| M27 | 20 17 3 | 3°33'27 | 22°31 | 23°17 | 16°22 | 5°36 | 27°42 | 21°16 | 5°31 | 28°10 | 25°22 | 3°13 | 4°20 | 25°45 | 10°18 |
| T 28 | 20 20 59 | 4°30'48 | 5°11 | 24°55 | 17°29 | 6°15 | 27°48 | 21°20 | 5°33 | 28°10 | 25°24 | 3°10 | 4°16 | 25°51 | 10°17 |
| W29 | 20 24 56 | 5°28'09 | 18°0 | 26°32 | 18°36 | 6°53 | 27°54 | 21°24 | 5°35 | 28°10 | 25°25 | 3°6 | 4°13 | 25°58 | 10°16 |
| T 30 | 20 28 52 | 6°25'32 | 0°24 | 28°7 | 19°42 | 7°32 | 28°0 | 21°28 | 5°38 | 28°9 | 25°27 | 3°2 | 4°10 | 26°5 | 10°15 |
| F 31 | 20 32 49 | 7°22'56 | 12°36 | 29°40 | 20°49 | 8°10 | 28°6 | 21°31 | 5°40 | 28°8 | 25°29 | 2°58 | 4°7 | 26°11 | 10°Y14 |

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AUGUST 1970

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|----------|-------|--------|-------|-------|-------|-------|------|--------|-------|-------|------|-------|--------|
| S 1 | 20 36 45 | 8°20'21 | 24°39 | 1°11 | 21°55 | 8°49 | 28°12 | 21°35 | 5°42 | 28°R 9 | 25°30 | 2°R54 | 4°4 | 26°18 | 10°R14 |
| S 2 | 20 40 42 | 9°17'47 | 6°25 | 2°40 | 23°1 | 9°27 | 28°18 | 21°38 | 5°45 | 28°R 8 | 25°32 | 2°R51 | 4°1 | 26°25 | 10°Y13 |
| M 3 | 20 44 39 | 10°15'13 | 18°35 | 4°8 | 24°7 | 10°6 | 28°25 | 21°42 | 5°47 | 28°8 | 25°34 | 2°49 | 3°57 | 26°31 | 10°12 |
| T 4 | 20 48 35 | 11°12'40 | 0°13 | 5°33 | 25°12 | 10°44 | 28°32 | 21°45 | 5°50 | 28°8 | 25°35 | 2°D48 | 3°54 | 26°38 | 10°11 |
| W 5 | 20 52 32 | 12°10'09 | 11°59 | 6°57 | 26°18 | 11°23 | 28°38 | 21°48 | 5°52 | 28°8 | 25°37 | 2°48 | 3°51 | 26°45 | 10°9 |
| T 6 | 20 56 28 | 13°7'38 | 23°48 | 8°19 | 27°23 | 12°1 | 28°45 | 21°51 | 5°55 | 28°8 | 25°39 | 2°50 | 3°48 | 26°51 | 10°8 |
| F 7 | 21 0 25 | 14°5'07 | 5°42 | 9°40 | 28°28 | 12°39 | 28°52 | 21°54 | 5°58 | 28°7 | 25°41 | 2°51 | 3°45 | 26°58 | 10°7 |
| S 8 | 21 4 21 | 15°2'38 | 17°45 | 10°58 | 29°33 | 13°18 | 29°0 | 21°57 | 6°0 | 28°7 | 25°42 | 2°52 | 3°41 | 27°4 | 10°6 |
| S 9 | 21 8 18 | 16°0'09 | 0°2 | 12°14 | 0°38 | 13°56 | 29°7 | 22°0 | 6°3 | 28°7 | 25°44 | 2°54 | 3°38 | 27°11 | 10°5 |
| M10 | 21 12 14 | 16°57'42 | 12°36 | 13°28 | 1°42 | 14°34 | 29°15 | 22°3 | 6°6 | 28°D 7 | 25°46 | 2°R54 | 3°35 | 27°18 | 10°3 |
| T 11 | 21 16 11 | 17°55'15 | 25°32 | 14°40 | 2°47 | 15°13 | 29°22 | 22°5 | 6°9 | 28°7 | 25°48 | 2°54 | 3°32 | 27°24 | 10°2 |
| W12 | 21 20 7 | 18°52'49 | 8°53 | 15°50 | 3°51 | 15°51 | 29°30 | 22°8 | 6°11 | 28°7 | 25°50 | 2°53 | 3°29 | 27°31 | 10°0 |
| T 13 | 21 24 4 | 19°50'24 | 22°41 | 16°57 | 4°55 | 16°29 | 29°38 | 22°10 | 6°14 | 28°7 | 25°52 | 2°52 | 3°26 | 27°38 | 9°59 |
| F 14 | 21 28 1 | 20°48'00 | 6°56 | 18°3 | 5°58 | 17°8 | 29°46 | 22°13 | 6°17 | 28°8 | 25°53 | 2°51 | 3°22 | 27°44 | 9°57 |
| S 15 | 21 31 57 | 21°45'37 | 21°36 | 19°5 | 7°2 | 17°46 | 29°54 | 22°15 | 6°20 | 28°8 | 25°55 | 2°49 | 3°19 | 27°51 | 9°56 |
| S 16 | 21 35 54 | 22°43'15 | 6°35 | 20°5 | 8°5 | 18°24 | 0°2 | 22°17 | 6°23 | 28°8 | 25°57 | 2°48 | 3°16 | 27°58 | 9°54 |
| M17 | 21 39 50 | 23°40'54 | 21°45 | 21°3 | 9°8 | 19°3 | 0°10 | 22°19 | 6°26 | 28°8 | 25°59 | 2°48 | 3°13 | 28°4 | 9°53 |
| T 18 | 21 43 47 | 24°38'35 | 6°57 | 21°57 | 10°10 | 19°41 | 0°19 | 22°21 | 6°29 | 28°8 | 26°1 | 2°D48 | 3°10 | 28°11 | 9°51 |
| W19 | 21 47 43 | 25°36'16 | 22°2 | 22°49 | 11°13 | 20°19 | 0°27 | 22°23 | 6°32 | 28°9 | 26°3 | 2°48 | 3°7 | 28°18 | 9°49 |
| T 20 | 21 51 40 | 26°34'00 | 6°Y51 | 23°37 | 12°15 | 20°57 | 0°36 | 22°24 | 6°35 | 28°9 | 26°5 | 2°48 | 3°3 | 28°24 | 9°47 |
| F 21 | 21 55 36 | 27°31'44 | 21°19 | 24°22 | 13°16 | 21°36 | 0°45 | 22°26 | 6°38 | 28°9 | 26°7 | 2°49 | 3°0 | 28°31 | 9°46 |
| S 22 | 21 59 33 | 28°29'31 | 5°21 | 25°4 | 14°18 | 22°14 | 0°54 | 22°27 | 6°42 | 28°10 | 26°9 | 2°49 | 2°57 | 28°38 | 9°44 |
| S 23 | 22 3 30 | 29°27'19 | 18°57 | 25°41 | 15°19 | 22°52 | 1°3 | 22°29 | 6°45 | 28°10 | 26°11 | 2°50 | 2°54 | 28°44 | 9°42 |
| M24 | 22 7 26 | 0°25'09 | 2°11 | 26°15 | 16°20 | 23°30 | 1°12 | 22°30 | 6°48 | 28°10 | 26°13 | 2°R50 | 2°51 | 28°51 | 9°40 |
| T 25 | 22 11 23 | 1°23'01 | 14°57 | 26°45 | 17°21 | 24°8 | 1°21 | 22°31 | 6°51 | 28°11 | 26°15 | 2°50 | 2°47 | 28°57 | 9°38 |
| W26 | 22 15 19 | 2°20'54 | 27°27 | 27°10 | 18°21 | 24°47 | 1°30 | 22°32 | 6°54 | 28°11 | 26°17 | 2°D49 | 2°44 | 29°4 | 9°36 |
| T 27 | 22 19 16 | 3°18'50 | 9°41 | 27°30 | 19°21 | 25°25 | 1°40 | 22°33 | 6°58 | 28°12 | 26°20 | 2°49 | 2°41 | 29°11 | 9°34 |
| F 28 | 22 23 12 | 4°16'47 | 21°44 | 27°46 | 20°21 | 26°3 | 1°49 | 22°34 | 7°1 | 28°12 | 26°22 | 2°50 | 2°38 | 29°17 | 9°32 |
| S 29 | 22 27 9 | 5°14'46 | 3°23 | 27°56 | 21°20 | 26°41 | 1°59 | 22°35 | 7°4 | 28°13 | 26°24 | 2°50 | 2°35 | 29°24 | 9°30 |
| S 30 | 22 31 6 | 6°12'46 | 15°28 | 28°R 0 | 22°19 | 27°19 | 2°9 | 22°36 | 7°8 | 28°14 | 26°26 | 2°50 | 2°32 | 29°31 | 9°28 |
| M31 | 22 35 2 | 7°10'48 | 27°15 | 27°59 | 23°17 | 27°58 | 2°19 | 22°36 | 7°11 | 28°14 | 26°28 | 2°R50 | 2°28 | 29°37 | 9°Y26 |

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SWISS EPHEMERIS for the year 1970

SEPTEMBER 1970

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|-----------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|-------------------|--------------------|--------------------|-------------------|-------------------|--------------------|-------|
| T 1 | 22 38 59 | 8 ^h 8'52" | 9 ^h 2' | 27°R52 | 24 ^h 16 | 28 ^h 36 | 2 ^h 29 | 22 ^h 37 | 7 ^h 15 | 28 ^h 15 | 26 ^h 30 | 2°R50 | 2 ^h 25 | 29 ^h 44 | 9°R23 |
| W 2 | 22 42 55 | 9° 6'57" | 20°52 | 27 ^h 39 | 25°13 | 29°14 | 2°39 | 22°37 | 7°18 | 28°16 | 26°32 | 2 ^h 50 | 2°22 | 29°51 | 9°Y21 |
| T 3 | 22 46 52 | 10° 5'04" | 2 ^h 47 | 27°19 | 26°11 | 29°52 | 2°49 | 22°37 | 7°21 | 28°17 | 26°34 | 2°49 | 2°19 | 29°57 | 9°19 |
| F 4 | 22 50 48 | 11° 3'13" | 14°48 | 26°54 | 27° 8 | 0 ^h 30 | 2°59 | 22°37 | 7°25 | 28°17 | 26°37 | 2°48 | 2°16 | 0 ^h 4 | 9°17 |
| S 5 | 22 54 45 | 12° 1'23" | 26°58 | 26°22 | 28° 4 | 1° 8 | 3° 9 | 22°R37 | 7°28 | 28°18 | 26°39 | 2°47 | 2°12 | 0°11 | 9°14 |
| S 6 | 22 58 41 | 12°59'34" | 9 ^h 21 | 25°44 | 29° 0 | 1°47 | 3°20 | 22°37 | 7°32 | 28°19 | 26°41 | 2°46 | 2° 9 | 0°17 | 9°12 |
| M 7 | 23 2 38 | 13°57'48" | 21°59 | 25° 0 | 29°56 | 2°25 | 3°30 | 22°37 | 7°36 | 28°20 | 26°43 | 2°45 | 2° 6 | 0°24 | 9° 9 |
| T 8 | 23 6 34 | 14°56'02" | 4 ^h 54 | 24°11 | 0 ^h 51 | 3° 3 | 3°41 | 22°37 | 7°39 | 28°21 | 26°45 | 2°44 | 2° 3 | 0°30 | 9° 7 |
| W 9 | 23 10 31 | 15°54'19" | 18°10 | 23°18 | 1°45 | 3°41 | 3°51 | 22°36 | 7°43 | 28°22 | 26°48 | 2°D44 | 2° 0 | 0°37 | 9° 5 |
| T 10 | 23 14 28 | 16°52'37" | 1 ^h 34 | 22°21 | 2°39 | 4°19 | 4° 2 | 22°36 | 7°46 | 28°23 | 26°50 | 2°44 | 1°57 | 0°44 | 9° 2 |
| F 11 | 23 18 24 | 17°50'56" | 15°51 | 21°21 | 3°33 | 4°57 | 4°13 | 22°35 | 7°50 | 28°24 | 26°52 | 2°45 | 1°53 | 0°50 | 9° 0 |
| S 12 | 23 22 21 | 18°49'17" | 0 ^h 16 | 20°20 | 4°25 | 5°35 | 4°24 | 22°34 | 7°53 | 28°25 | 26°54 | 2°46 | 1°50 | 0°57 | 8°57 |
| S 13 | 23 26 17 | 19°47'39" | 15° 2 | 19°19 | 5°18 | 6°13 | 4°35 | 22°34 | 7°57 | 28°26 | 26°56 | 2°47 | 1°47 | 1° 4 | 8°55 |
| M14 | 23 30 14 | 20°46'03" | 0 ^h 1 | 18°20 | 6° 9 | 6°52 | 4°46 | 22°33 | 8° 1 | 28°27 | 26°59 | 2°R48 | 1°44 | 1°10 | 8°52 |
| T 15 | 23 34 10 | 21°44'29" | 15°10 | 17°23 | 7° 0 | 7°30 | 4°57 | 22°32 | 8° 4 | 28°28 | 27° 1 | 2°47 | 1°41 | 1°17 | 8°50 |
| W16 | 23 38 7 | 22°42'56" | 0 ^h Y16 | 16°30 | 7°50 | 8° 8 | 5° 8 | 22°30 | 8° 8 | 28°29 | 27° 3 | 2°46 | 1°38 | 1°24 | 8°47 |
| T 17 | 23 42 3 | 23°41'25" | 15°11 | 15°43 | 8°40 | 8°46 | 5°19 | 22°29 | 8°12 | 28°30 | 27° 5 | 2°44 | 1°34 | 1°30 | 8°45 |
| F 18 | 23 46 0 | 24°39'57" | 29°48 | 15° 3 | 9°29 | 9°24 | 5°30 | 22°28 | 8°15 | 28°31 | 27° 8 | 2°41 | 1°31 | 1°37 | 8°42 |
| S 19 | 23 49 57 | 25°38'31" | 14 ^h 0 | 14°30 | 10°17 | 10° 2 | 5°42 | 22°26 | 8°19 | 28°33 | 27°10 | 2°38 | 1°28 | 1°44 | 8°39 |
| S 20 | 23 53 53 | 26°37'06" | 27°44 | 14° 6 | 11° 4 | 10°40 | 5°53 | 22°25 | 8°23 | 28°34 | 27°12 | 2°35 | 1°25 | 1°50 | 8°37 |
| M21 | 23 57 50 | 27°35'44" | 11 ^h 1 | 13°51 | 11°51 | 11°18 | 6° 5 | 22°23 | 8°27 | 28°35 | 27°14 | 2°33 | 1°22 | 1°57 | 8°34 |
| T 22 | 0 1 46 | 28°34'25" | 23°53 | 13°D46 | 12°36 | 11°56 | 6°16 | 22°21 | 8°30 | 28°37 | 27°17 | 2°D32 | 1°18 | 2° 3 | 8°31 |
| W23 | 0 5 43 | 29°33'07" | 6 ^h 22 | 13°51 | 13°21 | 12°34 | 6°28 | 22°19 | 8°34 | 28°38 | 27°19 | 2°32 | 1°15 | 2°10 | 8°29 |
| T 24 | 0 9 39 | 0 ^h 31'52" | 18°24 | 14° 6 | 14° 5 | 13°13 | 6°40 | 22°17 | 8°38 | 28°39 | 27°21 | 2°33 | 1°12 | 2°17 | 8°26 |
| F 25 | 0 13 36 | 1°30'39" | 0 ^h 233 | 14°30 | 14°48 | 13°51 | 6°52 | 22°15 | 8°42 | 28°41 | 27°23 | 2°35 | 1° 9 | 2°23 | 8°23 |
| S 26 | 0 17 32 | 2°29'28" | 12°23 | 15° 4 | 15°30 | 14°29 | 7° 3 | 22°13 | 8°45 | 28°42 | 27°26 | 2°37 | 1° 6 | 2°30 | 8°21 |
| S 27 | 0 21 29 | 3°28'20" | 24°10 | 15°47 | 16°11 | 15° 7 | 7°15 | 22°11 | 8°49 | 28°44 | 27°28 | 2°38 | 1° 3 | 2°37 | 8°18 |
| M28 | 0 25 26 | 4°27'13" | 5 ^h 17 | 16°38 | 16°51 | 15°45 | 7°27 | 22° 8 | 8°53 | 28°45 | 27°30 | 2°R38 | 0°59 | 2°43 | 8°15 |
| T 29 | 0 29 22 | 5°26'09" | 17°47 | 17°37 | 17°29 | 16°23 | 7°39 | 22° 6 | 8°57 | 28°46 | 27°32 | 2°37 | 0°56 | 2°50 | 8°13 |
| W30 | 0 33 19 | 6°25'06" | 29 ^h 43 | 18 ^h 43 | 18 ^h 7 | 17 ^h 1 | 7 ^h 51 | 22 ^h 3 | 9 ^h 1 | 28 ^h 48 | 27 ^h 34 | 2 ^h 34 | 0 ^h 53 | 2 ^h 57 | 8°Y10 |

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OCTOBER 1970

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|---------|-----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|-------------------|-------|
| T 1 | 0 37 15 | 7 ^h 24'06" | 11 ^h 48 | 19 ^h 55 | 18 ^h 43 | 17 ^h 39 | 8 ^h 4 | 22°R 1 | 9 ^h 4 | 28 ^h 50 | 27 ^h 37 | 2°R30 | 0 ^h 50 | 3 ^h 3 | 8°R 7 |
| F 2 | 0 41 12 | 8°23'08" | 24° 2 | 21°13 | 19°19 | 18°17 | 8°16 | 21 ^h 58 | 9° 8 | 28°51 | 27°39 | 2 ^h 24 | 0°47 | 3°10 | 8°Y 4 |
| S 3 | 0 45 8 | 9°22'11" | 6 ^h 27 | 22°36 | 19°52 | 18°55 | 8°28 | 21°55 | 9°12 | 28°53 | 27°41 | 2°17 | 0°44 | 3°17 | 8° 2 |
| S 4 | 0 49 5 | 10°21'17" | 19° 3 | 24° 3 | 20°25 | 19°33 | 8°40 | 21°52 | 9°16 | 28°54 | 27°43 | 2°11 | 0°40 | 3°23 | 7°59 |
| M 5 | 0 53 1 | 11°20'25" | 1 ^h 52 | 25°35 | 20°56 | 20°11 | 8°53 | 21°49 | 9°19 | 28°56 | 27°46 | 2° 5 | 0°37 | 3°30 | 7°56 |
| T 6 | 0 56 58 | 12°19'34" | 14°55 | 27° 9 | 21°26 | 20°50 | 9° 5 | 21°46 | 9°23 | 28°58 | 27°48 | 2° 0 | 0°34 | 3°36 | 7°54 |
| W 7 | 1 0 55 | 13°18'45" | 28°13 | 28°46 | 21°54 | 21°28 | 9°17 | 21°43 | 9°27 | 28°59 | 27°50 | 1°57 | 0°31 | 3°43 | 7°51 |
| T 8 | 1 4 51 | 14°17'58" | 11 ^h 34 | 0 ^h 25 | 22°20 | 22° 6 | 9°30 | 21°40 | 9°31 | 29° 1 | 27°52 | 1°D56 | 0°28 | 3°50 | 7°48 |
| F 9 | 1 8 48 | 15°17'13" | 25°39 | 2° 5 | 22°45 | 22°44 | 9°42 | 21°36 | 9°35 | 29° 3 | 27°54 | 1°56 | 0°24 | 3°56 | 7°45 |
| S 10 | 1 12 44 | 16°16'30" | 9 ^h 48 | 3°47 | 23° 8 | 23°22 | 9°55 | 21°33 | 9°38 | 29° 5 | 27°56 | 1°57 | 0°21 | 4° 3 | 7°43 |
| S 11 | 1 16 41 | 17°15'48" | 24°13 | 5°30 | 23°30 | 24° 0 | 10° 8 | 21°29 | 9°42 | 29° 6 | 27°59 | 1°59 | 0°18 | 4°10 | 7°40 |
| M12 | 1 20 37 | 18°15'08" | 8 ^h 53 | 7°14 | 23°49 | 24°38 | 10°20 | 21°26 | 9°46 | 29° 8 | 28° 1 | 1°R59 | 0°15 | 4°16 | 7°37 |
| T 13 | 1 24 34 | 19°14'29" | 23°41 | 8°58 | 24° 7 | 25°16 | 10°33 | 21°22 | 9°50 | 29°10 | 28° 3 | 1°57 | 0°12 | 4°23 | 7°35 |
| W14 | 1 28 30 | 20°13'53" | 8°Y32 | 10°42 | 24°23 | 25°54 | 10°46 | 21°18 | 9°53 | 29°12 | 28° 5 | 1°53 | 0° 9 | 4°30 | 7°32 |
| T 15 | 1 32 27 | 21°13'18" | 23°18 | 12°27 | 24°36 | 26°32 | 10°58 | 21°14 | 9°57 | 29°14 | 28° 7 | 1°47 | 0° 5 | 4°36 | 7°30 |
| F 16 | 1 36 24 | 22°12'46" | 7 ^h 51 | 14°11 | 24°48 | 27°10 | 11°11 | 21°10 | 10° 1 | 29°15 | 28° 9 | 1°39 | 0° 2 | 4°43 | 7°27 |
| S 17 | 1 40 20 | 23°12'16" | 22° 4 | 15°55 | 24°57 | 27°48 | 11°24 | 21° 7 | 10° 5 | 29°17 | 28°11 | 1°30 | 29 ^h 59 | 4°50 | 7°24 |
| S 18 | 1 44 17 | 24°11'48" | 5 ^h 52 | 17°39 | 25° 5 | 28°26 | 11°37 | 21° 2 | 10° 8 | 29°19 | 28°13 | 1°22 | 29°56 | 4°56 | 7°22 |
| M19 | 1 48 13 | 25°11'22" | 19°13 | 19°22 | 25°10 | 29° 5 | 11°50 | 20°58 | 10°12 | 29°21 | 28°15 | 1°15 | 29°53 | 5° 3 | 7°19 |
| T 20 | 1 52 10 | 26°10'59" | 2 ^h 8 | 21° 6 | 25°12 | 29°43 | 12° 2 | 20°54 | 10°16 | 29°23 | 28°17 | 1°10 | 29°50 | 5°10 | 7°17 |
| W21 | 1 56 6 | 27°10'37" | 14°40 | 22°48 | 25°R13 | 0 ^h 21 | 12°15 | 20°50 | 10°19 | 29°25 | 28°19 | 1° 7 | 29°46 | 5°16 | 7°14 |
| T 22 | 2 0 3 | 28°10'19" | 26°53 | 24°30 | 25°11 | 0°59 | 12°28 | 20°46 | 10°23 | 29°27 | 28°21 | 1°D 6 | 29°43 | 5°23 | 7°12 |
| F 23 | 2 3 59 | 29°10'02" | 8 ^h 52 | 26°12 | 25° 6 | 1°37 | 12°41 | 20°41 | 10°27 | 29°29 | 28°23 | 1° 7 | 29°40 | 5°29 | 7° 9 |
| S 24 | 2 7 56 | 0 ^h 9'47" | 20°42 | 27°53 | 25° 0 | 2°15 | 12°54 | 20°37 | 10°30 | 29°31 | 28°25 | 1° 7 | 29°37 | 5°36 | 7° 7 |
| S 25 | 2 11 53 | 1° 9'35" | 2 ^h 29 | 29°34 | 24°50 | 2°53 | 13° 7 | 20°33 | 10°34 | 29°33 | 28°27 | 1°R 8 | 29°34 | 5°43 | 7° 4 |
| M26 | 2 15 49 | 2° 9'25" | 14°17 | 1 ^h 14 | 24°39 | 3°31 | 13°20 | 20°28 | 10°38 | 29°35 | 28°29 | 1° 7 | 29°30 | 5°49 | 7° 2 |
| T 27 | 2 19 46 | 3° 9'17" | 26°12 | 2°53 | 24°25 | 4° 9 | 13°34 | 20°24 | 10°41 | 29°37 | 28°31 | 1° 4 | 29°27 | 5°56 | 7° 0 |
| W28 | 2 23 42 | 4° 9'11" | 8 ^h 15 | 4°32 | 24° 9 | 4°47 | 13°47 | 20°19 | 10°45 | 29°39 | 28°33 | 0°58 | 29°24 | 6° 3 | 6°57 |
| T 29 | 2 27 39 | 5° 9'07" | 20°31 | 6°11 | 23°50 | 5°25 | 14° 0 | 20°15 | 10°48 | 29°41 | 28°35 | 0°49 | 29°21 | 6° 9 | 6°55 |
| F 30 | 2 31 35 | 6° 9'05" | 3 ^h 1 | 7°49 | 23°29 | 6° 4 | 14°13 | 20°10 | 10°52 | 29°43 | 28°37 | 0°39 | 29°18 | 6°16 | 6°53 |
| S 31 | 2 35 32 | 7 ^h 9'05" | 15 ^h 44 | 9 ^h 26 | 23 ^h 6 | 6 ^h 42 | 14 ^h 26 | 20 ^h 5 | 10 ^h 55 | 29 ^h 46 | 28 ^h 39 | 0 ^h 27 | 29 ^h 15 | 6 ^h 23 | 6°Y50 |

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SWISS EPHEMERIS for the year 1970

NOVEMBER 1970

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|---------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|-------------------|------------------|
| S 1 | 2 39 28 | 8 ^m 9'07 | 28 ^m 42 | 11 ^m 3 | 22°R41 | 7 ^h 20 | 14 ^m 39 | 20°R 1 | 10 ^h 59 | 29 ^m 48 | 28 ^m 41 | 0°R15 | 29 ^m 11 | 6 ^m 29 | 6°R48 |
| M 2 | 2 43 25 | 9° 9'11 | 11 ^m 51 | 12°40 | 22 ^m 14 | 7°58 | 14°52 | 19 ^h 56 | 11° 2 | 29°50 | 28°43 | 0 ^h 3 | 29° 8 | 6°36 | 6°Y46 |
| T 3 | 2 47 21 | 10° 9'17 | 25°12 | 14°16 | 21°45 | 8°36 | 15° 6 | 19°51 | 11° 6 | 29°52 | 28°44 | 29°54 | 29° 5 | 6°43 | 6°44 |
| W 4 | 2 51 18 | 11° 9'24 | 8 ^h 44 | 15°52 | 21°14 | 9°14 | 15°19 | 19°46 | 11° 9 | 29°54 | 28°46 | 29°47 | 29° 2 | 6°49 | 6°42 |
| T 5 | 2 55 15 | 12° 9'33 | 22°25 | 17°27 | 20°42 | 9°52 | 15°32 | 19°41 | 11°13 | 29°56 | 28°48 | 29°44 | 28°59 | 6°56 | 6°40 |
| F 6 | 2 59 11 | 13° 9'43 | 6 ^h 16 | 19° 2 | 20° 9 | 10°30 | 15°45 | 19°37 | 11°16 | 29°58 | 28°50 | 29°42 | 28°55 | 7° 3 | 6°37 |
| S 7 | 3 3 8 | 14° 9'55 | 20°16 | 20°36 | 19°34 | 11° 8 | 15°58 | 19°32 | 11°19 | 0 ^h 1 | 28°51 | 29°D42 | 28°52 | 7° 9 | 6°35 |
| S 8 | 3 7 4 | 15°10'08 | 4 ^h 25 | 22°10 | 18°59 | 11°47 | 16°12 | 19°27 | 11°23 | 0° 3 | 28°53 | 29°R42 | 28°49 | 7°16 | 6°33 |
| M 9 | 3 11 1 | 16°10'23 | 18°42 | 23°44 | 18°23 | 12°25 | 16°25 | 19°22 | 11°26 | 0° 5 | 28°55 | 29°41 | 28°46 | 7°22 | 6°31 |
| T 10 | 3 14 57 | 17°10'39 | 3 ^h 5 | 25°17 | 17°46 | 13° 3 | 16°38 | 19°17 | 11°29 | 0° 7 | 28°56 | 29°38 | 28°43 | 7°29 | 6°30 |
| W 11 | 3 18 54 | 18°10'56 | 17°31 | 26°50 | 17°10 | 13°41 | 16°51 | 19°12 | 11°32 | 0° 9 | 28°58 | 29°31 | 28°40 | 7°36 | 6°28 |
| T 12 | 3 22 50 | 19°11'15 | 1 ^h 54 | 28°23 | 16°33 | 14°19 | 17° 4 | 19° 7 | 11°36 | 0°12 | 29° 0 | 29°22 | 28°36 | 7°42 | 6°26 |
| F 13 | 3 26 47 | 20°11'36 | 16° 7 | 29°55 | 15°57 | 14°57 | 17°18 | 19° 2 | 11°39 | 0°14 | 29° 1 | 29°11 | 28°33 | 7°49 | 6°24 |
| S 14 | 3 30 44 | 21°11'59 | 0 ^h 11 | 1 ^h 27 | 15°22 | 15°35 | 17°31 | 18°58 | 11°42 | 0°16 | 29° 3 | 28°58 | 28°30 | 7°56 | 6°22 |
| S 15 | 3 34 40 | 22°12'23 | 13°47 | 2°59 | 14°47 | 16°13 | 17°44 | 18°53 | 11°45 | 0°18 | 29° 4 | 28°46 | 28°27 | 8° 2 | 6°21 |
| M 16 | 3 38 37 | 23°12'49 | 27° 4 | 4°30 | 14°13 | 16°51 | 17°57 | 18°48 | 11°48 | 0°21 | 29° 6 | 28°35 | 28°24 | 8° 9 | 6°19 |
| T 17 | 3 42 33 | 24°13'16 | 9 ^h 59 | 6° 2 | 13°41 | 17°29 | 18°10 | 18°43 | 11°51 | 0°23 | 29° 7 | 28°26 | 28°21 | 8°16 | 6°17 |
| W 18 | 3 46 30 | 25°13'46 | 22°32 | 7°33 | 13°11 | 18° 8 | 18°24 | 18°38 | 11°54 | 0°25 | 29° 9 | 28°20 | 28°17 | 8°22 | 6°16 |
| T 19 | 3 50 26 | 26°14'17 | 4 ^h 46 | 9° 3 | 12°42 | 18°46 | 18°37 | 18°33 | 11°57 | 0°27 | 29°10 | 28°17 | 28°14 | 8°29 | 6°14 |
| F 20 | 3 54 23 | 27°14'50 | 16°46 | 10°33 | 12°14 | 19°24 | 18°50 | 18°29 | 12° 0 | 0°30 | 29°12 | 28°15 | 28°11 | 8°36 | 6°13 |
| S 21 | 3 58 20 | 28°15'25 | 28°37 | 12° 3 | 11°49 | 20° 2 | 19° 3 | 18°24 | 12° 3 | 0°32 | 29°13 | 28°15 | 28° 8 | 8°42 | 6°11 |
| S 22 | 4 2 16 | 29°16'01 | 10 ^h 24 | 13°33 | 11°26 | 20°40 | 19°16 | 18°19 | 12° 6 | 0°34 | 29°14 | 28°15 | 28° 5 | 8°49 | 6°10 |
| M 23 | 4 6 13 | 0 ^h 16'39 | 22°14 | 15° 2 | 11° 6 | 21°18 | 19°29 | 18°14 | 12° 9 | 0°36 | 29°16 | 28°13 | 28° 1 | 8°56 | 6° 9 |
| T 24 | 4 10 9 | 1°17'19 | 4 ^h 11 | 16°31 | 10°47 | 21°56 | 19°43 | 18°10 | 12°12 | 0°39 | 29°17 | 28°10 | 27°58 | 9° 2 | 6° 7 |
| W 25 | 4 14 6 | 2°18'00 | 16°20 | 18° 0 | 10°31 | 22°34 | 19°56 | 18° 5 | 12°14 | 0°41 | 29°18 | 28° 4 | 27°55 | 9° 9 | 6° 6 |
| T 26 | 4 18 2 | 3°18'43 | 28°44 | 19°28 | 10°18 | 23°13 | 20° 9 | 18° 0 | 12°17 | 0°43 | 29°19 | 27°55 | 27°52 | 9°15 | 6° 5 |
| F 27 | 4 21 59 | 4°19'28 | 11 ^m 27 | 20°56 | 10° 7 | 23°51 | 20°22 | 17°56 | 12°20 | 0°45 | 29°21 | 27°43 | 27°49 | 9°22 | 6° 4 |
| S 28 | 4 25 55 | 5°20'14 | 24°28 | 22°23 | 9°58 | 24°29 | 20°35 | 17°51 | 12°23 | 0°48 | 29°22 | 27°30 | 27°46 | 9°29 | 6° 3 |
| S 29 | 4 29 52 | 6°21'01 | 7 ^h 47 | 23°49 | 9°52 | 25° 7 | 20°48 | 17°47 | 12°25 | 0°50 | 29°23 | 27°17 | 27°42 | 9°35 | 6° 2 |
| M 30 | 4 33 49 | 7 ^h 21'50 | 21 ^m 21 | 25 ^m 14 | 9 ^m 48 | 25 ^m 45 | 21 ^m 1 | 17 ^h 42 | 12 ^h 28 | 0 ^h 52 | 29 ^m 24 | 27 ^h 4 | 27 ^h 39 | 9 ^m 42 | 6 ^h 1 |

Delta T = 41.00 sec.

DECEMBER 1970

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|---------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|-------------------|-------------------|
| T 1 | 4 37 45 | 8 ^h 22'40 | 5 ^h 8 | 26 ^m 39 | 9°D47 | 26 ^m 23 | 21 ^m 14 | 17°R38 | 12 ^h 30 | 0 ^h 54 | 29 ^m 25 | 26°R54 | 27 ^m 36 | 9 ^m 49 | 6°R 0 |
| W 2 | 4 41 42 | 9°23'31 | 19° 4 | 28° 3 | 9 ^m 48 | 27° 1 | 21°27 | 17 ^h 33 | 12°33 | 0°57 | 29°26 | 26°46 | 27°33 | 9°55 | 5°Y59 |
| T 3 | 4 45 38 | 10°24'23 | 3 ^h 4 | 29°25 | 9°52 | 27°39 | 21°40 | 17°29 | 12°35 | 0°59 | 29°27 | 26°42 | 27°30 | 10° 2 | 5°58 |
| F 4 | 4 49 35 | 11°25'15 | 17° 8 | 0 ^h 46 | 9°58 | 28°17 | 21°53 | 17°25 | 12°38 | 1° 1 | 29°28 | 26°40 | 27°27 | 10° 9 | 5°57 |
| S 5 | 4 53 31 | 12°26'09 | 1 ^h 13 | 2° 6 | 10° 6 | 28°56 | 22° 5 | 17°21 | 12°40 | 1° 3 | 29°29 | 26°D39 | 27°23 | 10°15 | 5°57 |
| S 6 | 4 57 28 | 13°27'03 | 15°18 | 3°24 | 10°16 | 29°34 | 22°18 | 17°17 | 12°42 | 1° 6 | 29°30 | 26°R40 | 27°20 | 10°22 | 5°56 |
| M 7 | 5 1 24 | 14°27'58 | 29°23 | 4°39 | 10°29 | 0 ^h 12 | 22°31 | 17°12 | 12°45 | 1° 8 | 29°31 | 26°39 | 27°17 | 10°29 | 5°55 |
| T 8 | 5 5 21 | 15°28'53 | 13 ^h 26 | 5°53 | 10°44 | 0°50 | 22°44 | 17° 8 | 12°47 | 1°10 | 29°32 | 26°36 | 27°14 | 10°35 | 5°55 |
| W 9 | 5 9 18 | 16°29'49 | 27°26 | 7° 3 | 11° 1 | 1°28 | 22°56 | 17° 5 | 12°49 | 1°12 | 29°33 | 26°30 | 27°11 | 10°42 | 5°54 |
| T 10 | 5 13 14 | 17°30'46 | 11 ^h 21 | 8°10 | 11°19 | 2° 6 | 23° 9 | 17° 1 | 12°51 | 1°14 | 29°33 | 26°22 | 27° 7 | 10°49 | 5°54 |
| F 11 | 5 17 11 | 18°31'44 | 25° 8 | 9°14 | 11°40 | 2°44 | 23°22 | 16°57 | 12°53 | 1°17 | 29°34 | 26°11 | 27° 4 | 10°55 | 5°53 |
| S 12 | 5 21 7 | 19°32'43 | 8 ^h 43 | 10°13 | 12° 3 | 3°22 | 23°34 | 16°53 | 12°55 | 1°19 | 29°35 | 26° 0 | 27° 1 | 11° 2 | 5°53 |
| S 13 | 5 25 4 | 20°33'42 | 22° 4 | 11° 7 | 12°28 | 4° 0 | 23°47 | 16°50 | 12°57 | 1°21 | 29°36 | 25°48 | 26°58 | 11° 8 | 5°53 |
| M 14 | 5 29 0 | 21°34'42 | 5 ^h 7 | 11°56 | 12°54 | 4°38 | 23°59 | 16°46 | 12°59 | 1°23 | 29°36 | 25°37 | 26°55 | 11°15 | 5°52 |
| T 15 | 5 32 57 | 22°35'43 | 17°52 | 12°38 | 13°22 | 5°17 | 24°12 | 16°42 | 13° 1 | 1°25 | 29°37 | 25°29 | 26°52 | 11°22 | 5°52 |
| W 16 | 5 36 54 | 23°36'45 | 0 ^h 20 | 13°13 | 13°52 | 5°55 | 24°24 | 16°39 | 13° 3 | 1°27 | 29°37 | 25°23 | 26°48 | 11°28 | 5°52 |
| T 17 | 5 40 50 | 24°37'47 | 12°32 | 13°40 | 14°23 | 6°33 | 24°37 | 16°36 | 13° 5 | 1°30 | 29°38 | 25°20 | 26°45 | 11°35 | 5°52 |
| F 18 | 5 44 47 | 25°38'51 | 24°31 | 13°57 | 14°56 | 7°11 | 24°49 | 16°33 | 13° 6 | 1°32 | 29°39 | 25°D19 | 26°42 | 11°42 | 5°D52 |
| S 19 | 5 48 43 | 26°39'55 | 6 ^h 22 | 14°R 5 | 15°31 | 7°49 | 25° 1 | 16°29 | 13° 8 | 1°34 | 29°39 | 25°20 | 26°39 | 11°48 | 5°52 |
| S 20 | 5 52 40 | 27°41'00 | 18°10 | 14° 3 | 16° 6 | 8°27 | 25°13 | 16°26 | 13°10 | 1°36 | 29°40 | 25°21 | 26°36 | 11°55 | 5°52 |
| M 21 | 5 56 36 | 28°42'06 | 29°59 | 13°48 | 16°43 | 9° 5 | 25°25 | 16°23 | 13°11 | 1°38 | 29°40 | 25°R21 | 26°33 | 12° 2 | 5°52 |
| T 22 | 6 0 33 | 29°43'12 | 11 ^h 56 | 13°23 | 17°22 | 9°43 | 25°38 | 16°20 | 13°13 | 1°40 | 29°40 | 25°20 | 26°29 | 12° 8 | 5°53 |
| W 23 | 6 4 29 | 0 ^h 34'20 | 24° 6 | 12°45 | 18° 2 | 10°21 | 25°50 | 16°18 | 13°14 | 1°42 | 29°41 | 25°17 | 26°26 | 12°15 | 5°53 |
| T 24 | 6 8 26 | 1°45'28 | 6 ^m 33 | 11°56 | 18°42 | 10°59 | 26° 2 | 16°15 | 13°16 | 1°44 | 29°41 | 25°12 | 26°23 | 12°22 | 5°53 |
| F 25 | 6 12 22 | 2°46'37 | 19°21 | 10°57 | 19°25 | 11°37 | 26°13 | 16°12 | 13°17 | 1°46 | 29°41 | 25° 5 | 26°20 | 12°28 | 5°53 |
| S 26 | 6 16 19 | 3°47'46 | 2 ^h 31 | 9°49 | 20° 8 | 12°15 | 26°25 | 16°10 | 13°19 | 1°48 | 29°42 | 24°56 | 26°17 | 12°35 | 5°54 |
| S 27 | 6 20 16 | 4°48'56 | 16° 5 | 8°34 | 20°52 | 12°53 | 26°37 | 16° 8 | 13°20 | 1°50 | 29°42 | 24°47 | 26°13 | 12°42 | 5°54 |
| M 28 | 6 24 12 | 5°50'06 | 29°59 | 7°14 | 21°37 | 13°31 | 26°49 | 16° 5 | 13°21 | 1°52 | 29°42 | 24°38 | 26°10 | 12°48 | 5°55 |
| T 29 | 6 28 9 | 6°51'17 | 14 ^h 31 | 5°52 | 22°24 | 14°10 | 27° 0 | 16° 3 | 13°22 | 1°54 | 29°42 | 24°31 | 26° 7 | 12°55 | 5°56 |
| W 30 | 6 32 5 | 7°52'28 | 28°34 | 4°30 | 23°11 | 14°48 | 27°12 | 16° 1 | 13°23 | 1°56 | 29°42 | 24°26 | 26° 4 | 13° 2 | 5°56 |
| T 31 | 6 36 2 | 8 ^h 53'38 | 13 ^m 2 | 3 ^h 12 | 23 ^m 59 | 15 ^m 26 | 27 ^m 24 | 15 ^h 59 | 13 ^h 24 | 1 ^h 58 | 29 ^m 42 | 24 ^h 23 | 26 ^h 1 | 13 ^m 8 | 5 ^h 57 |

Delta T = 41.08 sec.

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