

SWISS EPHEMERIS for the year 2077

JANUARY 2077

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|---------|-----------|--------|--------|--------|--------|--------|-------|--------|--------|-------|---------|---------|-------|--------|
| F 1 | 6 45 10 | 11°12'04" | 1°43' | 18°56' | 25°4' | 12°25' | 9°49' | 3°19' | 18°47' | 25°35' | 8°59' | 16°R54 | 15°45' | 6°28' | 25°R18 |
| S 2 | 6 49 7 | 12°13'13" | 15°45' | 19°42' | 26°19' | 13°12' | 9°58' | 3°26' | 18°51' | 25°33' | 8°59' | 16°D54 | 15°41' | 6°35' | 25°V18 |
| S 3 | 6 53 3 | 13°14'22" | 29°30' | 20°33' | 27°34' | 13°59' | 10°7' | 3°33' | 18°54' | 25°31' | 9°0' | 16°II55 | 15°38' | 6°42' | 25°17 |
| M 4 | 6 57 0 | 14°15'31" | 13°8' | 21°28' | 28°50' | 14°46' | 10°16' | 3°40' | 18°58' | 25°30' | 9°0' | 16°56' | 15°35' | 6°49' | 25°17 |
| T 5 | 7 0 56 | 15°16'39" | 26°15' | 22°26' | 0°5' | 15°34' | 10°24' | 3°47' | 19°1' | 25°28' | 9°0' | 16°58' | 15°32' | 6°55' | 25°D17 |
| W 6 | 7 4 53 | 16°17'47" | 9°11' | 23°28' | 1°20' | 16°21' | 10°33' | 3°54' | 19°5' | 25°26' | 9°0' | 16°59' | 15°29' | 7°2' | 25°17 |
| T 7 | 7 8 50 | 17°18'55" | 22°6' | 24°33' | 2°36' | 17°8' | 10°41' | 4°1' | 19°8' | 25°25' | 9°1' | 16°R59 | 15°26' | 7°9' | 25°17 |
| F 8 | 7 12 46 | 18°20'03" | 4°43' | 25°40' | 3°51' | 17°55' | 10°50' | 4°8' | 19°12' | 25°23' | 9°1' | 16°58' | 15°22' | 7°16' | 25°18 |
| S 9 | 7 16 43 | 19°21'10" | 17°10' | 26°50' | 5°6' | 18°43' | 10°58' | 4°15' | 19°16' | 25°21' | 9°2' | 16°55' | 15°19' | 7°22' | 25°18 |
| S 10 | 7 20 39 | 20°22'18" | 29°28' | 28°2' | 6°22' | 19°30' | 11°6' | 4°22' | 19°19' | 25°20' | 9°2' | 16°50' | 15°16' | 7°29' | 25°18 |
| M 11 | 7 24 36 | 21°23'25" | 11°12' | 29°16' | 7°37' | 20°17' | 11°14' | 4°29' | 19°23' | 25°18' | 9°2' | 16°44' | 15°13' | 7°36' | 25°18 |
| T 12 | 7 28 32 | 22°24'32" | 23°37' | 0°31' | 8°52' | 21°5' | 11°22' | 4°36' | 19°26' | 25°16' | 9°3' | 16°37' | 15°10' | 7°42' | 25°19 |
| W 13 | 7 32 29 | 23°25'38" | 5°11' | 1°48' | 10°8' | 21°52' | 11°30' | 4°43' | 19°30' | 25°14' | 9°3' | 16°30' | 15°6' | 7°49' | 25°19 |
| T 14 | 7 36 25 | 24°26'45" | 17°24' | 3°7' | 11°23' | 22°39' | 11°37' | 4°49' | 19°33' | 25°13' | 9°4' | 16°24' | 15°3' | 7°56' | 25°20 |
| F 15 | 7 40 22 | 25°27'51" | 29°16' | 4°26' | 12°38' | 23°27' | 11°45' | 4°56' | 19°37' | 25°11' | 9°4' | 16°19' | 15°0' | 8°3' | 25°20 |
| S 16 | 7 44 19 | 26°28'57" | 11°11' | 5°47' | 13°54' | 24°14' | 11°52' | 5°3' | 19°40' | 25°9' | 9°5' | 16°15' | 14°57' | 8°9' | 25°21 |
| S 17 | 7 48 15 | 27°30'03" | 23°14' | 7°9' | 15°9' | 25°1' | 11°59' | 5°10' | 19°44' | 25°8' | 9°6' | 16°D14 | 14°54' | 8°16' | 25°22 |
| M 18 | 7 52 12 | 28°31'08" | 5°11' | 8°32' | 16°24' | 25°49' | 12°6' | 5°16' | 19°48' | 25°6' | 9°6' | 16°14' | 14°51' | 8°23' | 25°22 |
| T 19 | 7 56 8 | 29°32'14" | 18°5' | 9°56' | 17°40' | 26°36' | 12°13' | 5°23' | 19°51' | 25°4' | 9°7' | 16°15' | 14°47' | 8°29' | 25°23 |
| W 20 | 8 0 5 | 0°33'19" | 1°1' | 11°21' | 18°55' | 27°23' | 12°20' | 5°30' | 19°55' | 25°3' | 9°7' | 16°17' | 14°44' | 8°36' | 25°24 |
| T 21 | 8 4 1 | 1°34'24" | 14°24' | 12°47' | 20°10' | 28°11' | 12°26' | 5°36' | 19°58' | 25°1' | 9°8' | 16°R18 | 14°41' | 8°43' | 25°25 |
| F 22 | 8 7 58 | 2°35'28" | 28°14' | 14°13' | 21°26' | 28°58' | 12°33' | 5°43' | 20°2' | 24°59' | 9°9' | 16°17' | 14°38' | 8°50' | 25°26 |
| S 23 | 8 11 55 | 3°36'32" | 12°32' | 15°40' | 22°41' | 29°45' | 12°39' | 5°50' | 20°5' | 24°58' | 9°9' | 16°14' | 14°35' | 8°56' | 25°27 |
| S 24 | 8 15 51 | 4°37'35" | 27°14' | 17°8' | 23°56' | 0°32' | 12°45' | 5°56' | 20°9' | 24°56' | 9°10' | 16°9' | 14°32' | 9°3' | 25°28 |
| M 25 | 8 19 48 | 5°38'38" | 12°13' | 18°37' | 25°12' | 1°20' | 12°51' | 6°3' | 20°12' | 24°54' | 9°11' | 16°2' | 14°28' | 9°10' | 25°29 |
| T 26 | 8 23 44 | 6°39'40" | 27°20' | 20°6' | 26°27' | 2°7' | 12°57' | 6°9' | 20°16' | 24°53' | 9°12' | 15°54' | 14°25' | 9°17' | 25°30 |
| W 27 | 8 27 41 | 7°40'41" | 12°26' | 21°37' | 27°42' | 2°54' | 13°3' | 6°15' | 20°19' | 24°51' | 9°12' | 15°46' | 14°22' | 9°23' | 25°31 |
| T 28 | 8 31 37 | 8°41'40" | 27°19' | 23°7' | 28°58' | 3°42' | 13°8' | 6°22' | 20°23' | 24°49' | 9°13' | 15°39' | 14°19' | 9°30' | 25°33 |
| F 29 | 8 35 34 | 9°42'39" | 11°54' | 24°39' | 0°13' | 4°29' | 13°13' | 6°28' | 20°26' | 24°48' | 9°14' | 15°33' | 14°16' | 9°37' | 25°34 |
| S 30 | 8 39 30 | 10°43'36" | 26°5' | 26°11' | 1°28' | 5°16' | 13°19' | 6°34' | 20°29' | 24°46' | 9°15' | 15°30' | 14°12' | 9°43' | 25°35 |
| S 31 | 8 43 27 | 11°44'43" | 9°52' | 27°34' | 2°43' | 6°4' | 13°24' | 6°41' | 20°33' | 24°44' | 9°16' | 15°D29 | 14°II 9 | 9°50' | 25°V37 |

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FEBRUARY 2077

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|-----------|--------|--------|--------|--------|--------|-------|--------|--------|-------|---------|---------|--------|--------|
| M 1 | 8 47 23 | 12°45'27" | 23°16' | 29°17' | 3°59' | 6°51' | 13°29' | 6°47' | 20°36' | 24°R43 | 9°17' | 15°II30 | 14°II 6 | 9°57' | 25°V38 |
| T 2 | 8 51 20 | 13°46'21" | 6°11' | 0°52' | 5°14' | 7°38' | 13°33' | 6°53' | 20°39' | 24°41' | 9°18' | 15°30' | 14°3' | 10°4' | 25°40 |
| W 3 | 8 55 17 | 14°47'13" | 19°5' | 2°27' | 6°29' | 8°25' | 13°38' | 6°59' | 20°43' | 24°40' | 9°19' | 15°R31 | 14°0' | 10°10' | 25°41 |
| T 4 | 8 59 13 | 15°48'04" | 1°37' | 4°2' | 7°45' | 9°13' | 13°42' | 7°5' | 20°46' | 24°38' | 9°19' | 15°29' | 13°57' | 10°17' | 25°43 |
| F 5 | 9 3 10 | 16°48'54" | 13°57' | 5°38' | 9°0' | 10°0' | 13°46' | 7°11' | 20°49' | 24°37' | 9°20' | 15°25' | 13°53' | 10°24' | 25°45 |
| S 6 | 9 7 6 | 17°49'42" | 26°10' | 7°16' | 10°15' | 10°47' | 13°50' | 7°17' | 20°53' | 24°35' | 9°21' | 15°19' | 13°50' | 10°31' | 25°47 |
| S 7 | 9 11 3 | 18°50'29" | 8°15' | 8°53' | 11°30' | 11°34' | 13°54' | 7°23' | 20°56' | 24°33' | 9°22' | 15°9' | 13°47' | 10°37' | 25°48 |
| M 8 | 9 14 59 | 19°51'15" | 20°15' | 10°32' | 12°45' | 12°21' | 13°58' | 7°29' | 20°59' | 24°32' | 9°23' | 14°58' | 13°44' | 10°44' | 25°50 |
| T 9 | 9 18 56 | 20°51'59" | 2°11' | 12°11' | 14°1' | 13°8' | 14°1' | 7°35' | 21°2' | 24°30' | 9°24' | 14°45' | 13°41' | 10°51' | 25°52 |
| W 10 | 9 22 53 | 21°52'43" | 14°4' | 13°52' | 15°16' | 13°55' | 14°5' | 7°41' | 21°6' | 24°29' | 9°25' | 14°31' | 13°38' | 10°57' | 25°54 |
| T 11 | 9 26 49 | 22°53'25" | 25°56' | 15°32' | 16°31' | 14°43' | 14°8' | 7°46' | 21°9' | 24°28' | 9°27' | 14°19' | 13°34' | 11°4' | 25°56 |
| F 12 | 9 30 46 | 23°54'06" | 7°49' | 17°14' | 17°46' | 15°30' | 14°11' | 7°52' | 21°12' | 24°26' | 9°28' | 14°8' | 13°31' | 11°11' | 25°58 |
| S 13 | 9 34 42 | 24°54'45" | 19°45' | 18°57' | 19°1' | 16°17' | 14°14' | 7°57' | 21°15' | 24°25' | 9°29' | 14°0' | 13°28' | 11°18' | 26°0 |
| S 14 | 9 38 39 | 25°55'24" | 1°48' | 20°40' | 20°17' | 17°4' | 14°16' | 8°3' | 21°18' | 24°23' | 9°30' | 13°55' | 13°25' | 11°24' | 26°2 |
| M 15 | 9 42 35 | 26°56'01" | 14°1' | 22°25' | 21°32' | 17°51' | 14°19' | 8°8' | 21°21' | 24°22' | 9°31' | 13°52' | 13°22' | 11°31' | 26°4 |
| T 16 | 9 46 32 | 27°56'37" | 26°30' | 24°10' | 22°47' | 18°38' | 14°21' | 8°14' | 21°24' | 24°20' | 9°32' | 13°D52 | 13°18' | 11°38' | 26°7 |
| W 17 | 9 50 28 | 28°57'13" | 9°20' | 25°56' | 24°2' | 19°25' | 14°23' | 8°19' | 21°27' | 24°19' | 9°33' | 13°R52 | 13°15' | 11°44' | 26°9 |
| T 18 | 9 54 25 | 29°57'47" | 22°34' | 27°43' | 25°17' | 20°12' | 14°25' | 8°24' | 21°30' | 24°18' | 9°34' | 13°52' | 13°12' | 11°51' | 26°11 |
| F 19 | 9 58 21 | 0°58'19" | 6°17' | 29°31' | 26°32' | 20°58' | 14°27' | 8°30' | 21°33' | 24°17' | 9°36' | 13°50' | 13°9' | 11°58' | 26°13 |
| S 20 | 10 2 18 | 1°58'51" | 20°29' | 1°11' | 27°48' | 21°45' | 14°28' | 8°35' | 21°36' | 24°15' | 9°37' | 13°46' | 13°6' | 12°5' | 26°16 |
| S 21 | 10 6 15 | 2°59'21" | 5°10' | 3°9' | 29°3' | 22°32' | 14°30' | 8°40' | 21°39' | 24°14' | 9°38' | 13°39' | 13°3' | 12°11' | 26°18 |
| M 22 | 10 10 11 | 3°59'50" | 20°14' | 4°59' | 0°18' | 23°19' | 14°31' | 8°45' | 21°42' | 24°13' | 9°39' | 13°29' | 12°59' | 12°18' | 26°21 |
| T 23 | 10 14 8 | 5°0'17" | 5°32' | 6°50' | 1°33' | 24°6' | 14°32' | 8°50' | 21°45' | 24°12' | 9°40' | 13°18' | 12°56' | 12°25' | 26°23 |
| W 24 | 10 18 4 | 6°0'42" | 20°53' | 8°42' | 2°48' | 24°53' | 14°32' | 8°55' | 21°48' | 24°10' | 9°42' | 13°7' | 12°53' | 12°32' | 26°26 |
| T 25 | 10 22 1 | 7°1'06" | 6°5' | 10°35' | 4°3' | 25°39' | 14°33' | 9°0' | 21°51' | 24°9' | 9°43' | 12°56' | 12°50' | 12°38' | 26°28 |
| F 26 | 10 25 57 | 8°1'28" | 20°58' | 12°28' | 5°18' | 26°26' | 14°33' | 9°4' | 21°53' | 24°8' | 9°44' | 12°48' | 12°47' | 12°45' | 26°31 |
| S 27 | 10 29 54 | 9°1'47" | 5°25' | 14°22' | 6°33' | 27°13' | 14°34' | 9°9' | 21°56' | 24°7' | 9°45' | 12°42' | 12°43' | 12°52' | 26°34 |
| S 28 | 10 33 50 | 10°1'20" | 19°23' | 16°16' | 7°48' | 28°10' | 14°R34 | 9°14' | 21°59' | 24°6' | 9°47' | 12°II39 | 12°II40 | 12°58' | 26°V36 |

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SWISS EPHEMERIS for the year 2077

MARCH 2077

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|-------------|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| M 1 | 10 37 47 | 11° 2' 21" | 2° 11' 52" | 18° 11' | 9° 3' | 28° 46' | 14° 33' | 9° 18' | 22° 3' | 24° 5' | 9° 48' | 12° 38' | 12° 37' | 13° 5' | 26° 39' |
| T 2 | 10 41 44 | 12° 2' 35" | 15° 56' | 20° 5' | 10° 18' | 29° 33' | 14° 33' | 9° 23' | 22° 4' | 24° 6' | 9° 49' | 12° 38' | 12° 34' | 13° 12' | 26° 42' |
| W 3 | 10 45 40 | 13° 2' 47" | 28° 38' | 22° 0' | 11° 33' | 0° 19' | 14° 32' | 9° 27' | 22° 6' | 24° 3' | 9° 51' | 12° 38' | 12° 31' | 13° 19' | 26° 45' |
| T 4 | 10 49 37 | 14° 2' 57" | 11° 53' | 23° 54' | 12° 48' | 1° 6' | 14° 32' | 9° 31' | 22° 9' | 24° 2' | 9° 52' | 12° 36' | 12° 28' | 13° 25' | 26° 47' |
| F 5 | 10 53 33 | 15° 3' 05" | 23° 15' | 25° 47' | 14° 3' | 1° 52' | 14° 31' | 9° 35' | 22° 12' | 24° 1' | 9° 53' | 12° 31' | 12° 24' | 13° 32' | 26° 50' |
| S 6 | 10 57 30 | 16° 3' 11" | 5° 18' | 27° 40' | 15° 18' | 2° 39' | 14° 30' | 9° 40' | 22° 14' | 24° 0' | 9° 55' | 12° 24' | 12° 21' | 13° 39' | 26° 53' |
| S 7 | 11 1 26 | 17° 3' 14" | 17° 15' | 29° 31' | 16° 33' | 3° 25' | 14° 28' | 9° 44' | 22° 16' | 23° 59' | 9° 56' | 12° 13' | 12° 18' | 13° 46' | 26° 56' |
| M 8 | 11 5 23 | 18° 3' 16" | 29° 9' | 1° 21' | 17° 48' | 4° 12' | 14° 27' | 9° 48' | 22° 19' | 23° 58' | 9° 57' | 12° 0' | 12° 15' | 13° 52' | 26° 59' |
| T 9 | 11 9 19 | 19° 3' 16" | 11° 2' | 3° 8' | 19° 3' | 4° 58' | 14° 25' | 9° 52' | 22° 21' | 23° 57' | 9° 59' | 11° 46' | 12° 12' | 13° 59' | 27° 2' |
| W 10 | 11 13 16 | 20° 3' 13" | 22° 55' | 4° 53' | 20° 18' | 5° 44' | 14° 23' | 9° 55' | 22° 23' | 23° 57' | 10° 0' | 11° 31' | 12° 9' | 14° 6' | 27° 5' |
| T 11 | 11 17 13 | 21° 3' 09" | 4° 49' | 6° 35' | 21° 33' | 6° 31' | 14° 21' | 9° 59' | 22° 26' | 23° 56' | 10° 2' | 11° 18' | 12° 5' | 14° 12' | 27° 8' |
| F 12 | 11 21 9 | 22° 3' 03" | 16° 46' | 8° 14' | 22° 47' | 7° 17' | 14° 19' | 10° 3' | 22° 28' | 23° 55' | 10° 3' | 11° 6' | 12° 2' | 14° 19' | 27° 11' |
| S 13 | 11 25 6 | 23° 2' 56" | 28° 47' | 9° 48' | 24° 2' | 8° 3' | 14° 17' | 10° 6' | 22° 30' | 23° 54' | 10° 4' | 10° 56' | 11° 59' | 14° 26' | 27° 14' |
| S 14 | 11 29 2 | 24° 2' 46" | 10° 55' | 11° 18' | 25° 17' | 8° 49' | 14° 14' | 10° 10' | 22° 32' | 23° 54' | 10° 6' | 10° 50' | 11° 56' | 14° 33' | 27° 18' |
| M 15 | 11 32 59 | 25° 2' 35" | 23° 12' | 12° 43' | 26° 32' | 9° 35' | 14° 11' | 10° 13' | 22° 34' | 23° 53' | 10° 7' | 10° 46' | 11° 53' | 14° 39' | 27° 21' |
| T 16 | 11 36 55 | 26° 2' 22" | 5° 43' | 14° 2' | 27° 47' | 10° 21' | 14° 8' | 10° 17' | 22° 36' | 23° 52' | 10° 9' | 10° 45' | 11° 49' | 14° 46' | 27° 24' |
| W 17 | 11 40 52 | 27° 2' 07" | 18° 30' | 15° 15' | 29° 1' | 11° 8' | 14° 5' | 10° 20' | 22° 38' | 23° 52' | 10° 10' | 10° 45' | 11° 46' | 14° 53' | 27° 27' |
| T 18 | 11 44 48 | 28° 1' 51" | 1° 39' | 16° 22' | 0° 16' | 11° 54' | 14° 2' | 10° 23' | 22° 40' | 23° 51' | 10° 12' | 10° 44' | 11° 43' | 14° 59' | 27° 30' |
| F 19 | 11 48 45 | 29° 1' 33" | 15° 13' | 17° 22' | 1° 31' | 12° 40' | 13° 58' | 10° 26' | 22° 42' | 23° 51' | 10° 13' | 10° 44' | 11° 40' | 15° 6' | 27° 34' |
| S 20 | 11 52 42 | 0° 1' 14" | 29° 14' | 18° 14' | 2° 46' | 13° 25' | 13° 55' | 10° 29' | 22° 44' | 23° 50' | 10° 14' | 10° 41' | 11° 37' | 15° 13' | 27° 37' |
| S 21 | 11 56 38 | 1° 0' 52" | 13° 42' | 19° 0' | 4° 0' | 14° 11' | 13° 51' | 10° 32' | 22° 46' | 23° 50' | 10° 16' | 10° 36' | 11° 34' | 15° 20' | 27° 40' |
| M 22 | 12 0 35 | 2° 0' 29" | 28° 34' | 19° 37' | 5° 15' | 14° 57' | 13° 47' | 10° 35' | 22° 48' | 23° 49' | 10° 17' | 10° 28' | 11° 30' | 15° 26' | 27° 44' |
| T 23 | 12 4 31 | 3° 0' 04" | 13° 43' | 20° 7' | 6° 30' | 15° 43' | 13° 43' | 10° 37' | 22° 50' | 23° 49' | 10° 19' | 10° 18' | 11° 27' | 15° 33' | 27° 47' |
| W 24 | 12 8 28 | 3° 59' 37" | 29° 0' | 20° 29' | 7° 44' | 16° 29' | 13° 39' | 10° 40' | 22° 51' | 23° 49' | 10° 20' | 10° 8' | 11° 24' | 15° 40' | 27° 50' |
| T 25 | 12 12 24 | 4° 59' 08" | 14° 13' | 20° 42' | 8° 59' | 17° 15' | 13° 34' | 10° 43' | 22° 53' | 23° 48' | 10° 22' | 9° 59' | 11° 21' | 15° 47' | 27° 54' |
| F 26 | 12 16 21 | 5° 58' 37" | 29° 12' | 20° 48' | 10° 14' | 18° 0' | 13° 29' | 10° 45' | 22° 55' | 23° 48' | 10° 23' | 9° 51' | 11° 18' | 15° 53' | 27° 57' |
| S 27 | 12 20 17 | 6° 58' 04" | 13° 48' | 20° 47' | 11° 28' | 18° 46' | 13° 25' | 10° 47' | 22° 56' | 23° 48' | 10° 25' | 9° 46' | 11° 15' | 16° 0' | 28° 1' |
| S 28 | 12 24 14 | 7° 57' 28" | 27° 56' | 20° 37' | 12° 43' | 19° 31' | 13° 20' | 10° 50' | 22° 58' | 23° 47' | 10° 26' | 9° 43' | 11° 11' | 16° 7' | 28° 4' |
| M 29 | 12 28 10 | 8° 56' 51" | 11° 35' | 20° 21' | 13° 57' | 20° 17' | 13° 15' | 10° 52' | 22° 59' | 23° 47' | 10° 28' | 9° 40' | 11° 8' | 16° 13' | 28° 7' |
| T 30 | 12 32 7 | 9° 56' 11" | 24° 46' | 19° 58' | 15° 12' | 21° 2' | 13° 9' | 10° 54' | 23° 1' | 23° 47' | 10° 29' | 9° 43' | 11° 5' | 16° 20' | 28° 11' |
| W 31 | 12 36 4 | 10° 55' 29" | 7° 33' | 19° 29' | 16° 26' | 21° 48' | 13° 4' | 10° 56' | 23° 2' | 23° 47' | 10° 31' | 9° 44' | 11° 2' | 16° 27' | 28° 14' |

Delta T = 171.31 sec.

APRIL 2077

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|
| T 1 | 12 40 0 | 11° 54' 44" | 19° 59' | 18° 55' | 17° 41' | 22° 33' | 12° 58' | 10° 58' | 23° 3' | 23° 47' | 10° 32' | 9° 44' | 10° 59' | 16° 34' | 28° 18' |
| F 2 | 12 43 57 | 12° 53' 57" | 2° 10' | 18° 16' | 18° 55' | 23° 19' | 12° 53' | 10° 59' | 23° 5' | 23° 47' | 10° 33' | 9° 41' | 10° 55' | 16° 40' | 28° 22' |
| S 3 | 12 47 53 | 13° 53' 08" | 14° 11' | 17° 33' | 20° 10' | 24° 4' | 12° 47' | 11° 1' | 23° 6' | 23° 47' | 10° 35' | 9° 37' | 10° 52' | 16° 47' | 28° 25' |
| S 4 | 12 51 50 | 14° 52' 17" | 26° 5' | 16° 48' | 21° 24' | 24° 49' | 12° 41' | 11° 3' | 23° 7' | 23° 47' | 10° 36' | 9° 30' | 10° 49' | 16° 54' | 28° 29' |
| M 5 | 12 55 46 | 15° 51' 23" | 7° 57' | 16° 0' | 22° 39' | 25° 34' | 12° 35' | 11° 4' | 23° 8' | 23° 47' | 10° 38' | 9° 22' | 10° 46' | 17° 0' | 28° 32' |
| T 6 | 12 59 43 | 16° 50' 27" | 19° 49' | 15° 12' | 23° 53' | 26° 20' | 12° 29' | 11° 5' | 23° 9' | 23° 47' | 10° 39' | 9° 12' | 10° 43' | 17° 7' | 28° 36' |
| W 7 | 13 3 39 | 17° 49' 29" | 1° 43' | 14° 24' | 25° 7' | 27° 5' | 12° 23' | 11° 7' | 23° 10' | 23° 47' | 10° 41' | 9° 2' | 10° 40' | 17° 14' | 28° 39' |
| T 8 | 13 7 36 | 18° 48' 29" | 13° 42' | 13° 36' | 26° 22' | 27° 50' | 12° 16' | 11° 8' | 23° 11' | 23° 47' | 10° 42' | 8° 52' | 10° 36' | 17° 21' | 28° 43' |
| F 9 | 13 11 32 | 19° 47' 27" | 25° 46' | 12° 51' | 27° 36' | 28° 35' | 12° 10' | 11° 9' | 23° 12' | 23° 47' | 10° 44' | 8° 44' | 10° 33' | 17° 27' | 28° 46' |
| S 10 | 13 15 29 | 20° 46' 22" | 7° 58' | 12° 8' | 28° 50' | 29° 20' | 12° 3' | 11° 10' | 23° 13' | 23° 47' | 10° 45' | 8° 38' | 10° 30' | 17° 34' | 28° 50' |
| S 11 | 13 19 26 | 21° 45' 16" | 20° 17' | 11° 28' | 0° 8' | 0° 5' | 11° 56' | 11° 11' | 23° 14' | 23° 48' | 10° 47' | 8° 34' | 10° 27' | 17° 41' | 28° 54' |
| M 12 | 13 23 22 | 22° 44' 08" | 2° 47' | 10° 53' | 1° 19' | 0° 50' | 11° 50' | 11° 12' | 23° 15' | 23° 48' | 10° 48' | 8° 32' | 10° 24' | 17° 48' | 28° 57' |
| T 13 | 13 27 19 | 23° 42' 59" | 15° 28' | 10° 21' | 2° 33' | 1° 34' | 11° 43' | 11° 12' | 23° 15' | 23° 48' | 10° 49' | 8° 32' | 10° 20' | 17° 54' | 29° 1' |
| W 14 | 13 31 15 | 24° 41' 47" | 28° 24' | 9° 54' | 3° 47' | 2° 19' | 11° 36' | 11° 13' | 23° 16' | 23° 49' | 10° 51' | 8° 33' | 10° 17' | 18° 1' | 29° 5' |
| T 15 | 13 35 12 | 25° 40' 34" | 11° 33' | 9° 33' | 5° 1' | 3° 4' | 11° 29' | 11° 13' | 23° 17' | 23° 49' | 10° 52' | 8° 35' | 10° 14' | 18° 8' | 29° 8' |
| F 16 | 13 39 8 | 26° 39' 19" | 25° 9' | 9° 16' | 6° 15' | 3° 49' | 11° 22' | 11° 14' | 23° 17' | 23° 49' | 10° 54' | 8° 35' | 10° 11' | 18° 14' | 29° 12' |
| S 17 | 13 43 5 | 27° 38' 03" | 9° 2' | 9° 4' | 7° 30' | 4° 33' | 11° 14' | 11° 14' | 23° 18' | 23° 50' | 10° 55' | 8° 35' | 10° 8' | 18° 21' | 29° 15' |
| S 18 | 13 47 2 | 28° 36' 45" | 23° 17' | 8° 58' | 8° 44' | 5° 18' | 11° 7' | 11° 14' | 23° 18' | 23° 50' | 10° 57' | 8° 33' | 10° 5' | 18° 28' | 29° 19' |
| M 19 | 13 50 58 | 29° 35' 25" | 7° 50' | 8° 57' | 9° 58' | 6° 2' | 11° 0' | 11° 14' | 23° 19' | 23° 51' | 10° 58' | 8° 29' | 10° 1' | 18° 35' | 29° 23' |
| T 20 | 13 54 55 | 0° 34' 03" | 22° 39' | 9° 1' | 11° 12' | 6° 47' | 10° 52' | 11° 14' | 23° 19' | 23° 51' | 10° 59' | 8° 24' | 9° 58' | 18° 41' | 29° 26' |
| W 21 | 13 58 51 | 1° 32' 40" | 7° 35' | 9° 10' | 12° 26' | 7° 31' | 10° 45' | 11° 14' | 23° 19' | 23° 52' | 11° 1' | 8° 18' | 9° 55' | 18° 48' | 29° 30' |
| T 22 | 14 2 48 | 2° 31' 14" | 22° 32' | 9° 24' | 13° 40' | 8° 16' | 10° 37' | 11° 14' | 23° 20' | 23° 52' | 11° 2' | 8° 13' | 9° 52' | 18° 55' | 29° 34' |
| F 23 | 14 6 44 | 3° 29' 47" | 7° 19' | 9° 42' | 14° 54' | 9° 0' | 10° 30' | 11° 14' | 23° 20' | 23° 53' | 11° 4' | 8° 9' | 9° 49' | 19° 1' | 29° 37' |
| S 24 | 14 10 41 | 4° 28' 19" | 21° 49' | 10° 6' | 16° 8' | 9° 44' | 10° 22' | 11° 13' | 23° 20' | 23° 54' | 11° 5' | 8° 6' | 9° 46' | 19° 8' | 29° 41' |
| S 25 | 14 14 37 | 5° 26' 48" | 5° 57' | 10° 33' | 17° 22' | 10° 29' | 10° 15' | 11° 13' | 23° 20' | 23° 54' | 11° 6' | 8° 5' | 9° 42' | 19° 15' | 29° 45' |
| M 26 | 14 18 34 | 6° 25' 15" | 19° 39' | 11° 5' | 18° 36' | 11° 13' | 10° 7' | 11° 12' | 23° 20' | 23° 55' | 11° 8' | 8° 6' | 9° 39' | 19° 22' | 29° 48' |
| T 27 | 14 22 30 | 7° 23' 40" | 2° 55' | 11° 41' | 19° 50' | 11° 57' | 10° 0' | 11° 12' | 23° 20' | 23° 56' | 11° 9' | 8° 7' | 9° 36' | 19° 28' | 29° 52' |
| W 28 | 14 26 27 | 8° 22' 04" | 15° 48' | 12° 20' | 21° 4' | 12° 41' | 9° 52' | 11° 11' | 23° 20' | 23° 57' | 11° 10' | 8° 9' | 9° 33' | 19° 35' | 29° 55' |
| T 29 | 14 30 24 | 9° 20' 25" | 28° 19' | 13° 4' | 22° 18' | 13° 25' | 9° 44' | 11° 10' | 23° 20' | 23° 58' | 11° 12' | 8° 10' | 9° 30' | 19° 42' | 29° 59' |
| F 30 | 14 34 20 | 10° 18' 44" | 10° 34' | 13° 51' | 23° 32' | 14° 8' | 9° 37' | 11° 9' | 23° 20' | 23° 58' | 11° 13' | 8° 10' | 9° 26' | 19° 49' | 30° 3' |

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SWISS EPHEMERIS for the year 2077

MAY 2077

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|-----------|--------|-------|--------|--------|-------|--------|--------|-------|-------|--------|--------|-------|-------|
| S 1 | 14 38 17 | 11°17'01 | 22°36 | 14°41 | 24°45 | 14°53 | 9°R29 | 11°R 8 | 23°R20 | 23°59 | 11°14 | 8°R10 | 9°23 | 19°55 | 0°8 6 |
| S 2 | 14 42 13 | 12°15'15 | 4°31 | 15°35 | 25°59 | 15°37 | 9°M21 | 11°3 7 | 23°320 | 24° 0 | 11°16 | 8°II 8 | 9°20 | 20° 2 | 0°10 |
| M 3 | 14 46 10 | 13°13'28 | 16°24 | 16°31 | 27°13 | 16°21 | 9°14 | 11° 6 | 23°19 | 24° 1 | 11°17 | 8° 5 | 9°17 | 20° 9 | 0°13 |
| T 4 | 14 50 6 | 14°11'39 | 28°17 | 17°31 | 28°27 | 17° 4 | 9° 6 | 11° 4 | 23°19 | 24° 2 | 11°18 | 8° 2 | 9°14 | 20°15 | 0°17 |
| W 5 | 14 54 3 | 15° 9'48 | 10°14 | 18°34 | 29°40 | 17°48 | 8°58 | 11° 3 | 23°19 | 24° 3 | 11°19 | 7°58 | 9°11 | 20°22 | 0°21 |
| T 6 | 14 57 59 | 16° 7'55 | 22°18 | 19°39 | 0°II54 | 18°32 | 8°51 | 11° 1 | 23°18 | 24° 4 | 11°21 | 7°54 | 9° 7 | 20°29 | 0°24 |
| F 7 | 15 1 56 | 17° 6'00 | 4°M31 | 20°47 | 2° 8 | 19°15 | 8°43 | 11° 0 | 23°18 | 24° 5 | 11°22 | 7°51 | 9° 4 | 20°36 | 0°28 |
| S 8 | 15 5 53 | 18° 4'04 | 16°56 | 21°58 | 3°21 | 19°59 | 8°36 | 10°58 | 23°17 | 24° 6 | 11°23 | 7°49 | 9° 1 | 20°42 | 0°31 |
| S 9 | 15 9 49 | 19° 2'06 | 29°31 | 23°11 | 4°35 | 20°42 | 8°28 | 10°56 | 23°17 | 24° 8 | 11°24 | 7°48 | 8°58 | 20°49 | 0°35 |
| M10 | 15 13 46 | 20° 0'06 | 12°20 | 24°27 | 5°49 | 21°26 | 8°21 | 10°54 | 23°16 | 24° 9 | 11°25 | 7°D48 | 8°55 | 20°56 | 0°38 |
| T 11 | 15 17 42 | 20°58'05 | 25°21 | 25°45 | 7° 2 | 22° 9 | 8°14 | 10°52 | 23°15 | 24°10 | 11°27 | 7°48 | 8°52 | 21° 2 | 0°42 |
| W12 | 15 21 39 | 21°56'03 | 8°35 | 27° 6 | 8°16 | 22°53 | 8° 6 | 10°50 | 23°15 | 24°11 | 11°28 | 7°49 | 8°48 | 21° 9 | 0°45 |
| T 13 | 15 25 35 | 22°53'59 | 22° 3 | 28°28 | 9°29 | 23°36 | 7°59 | 10°48 | 23°14 | 24°12 | 11°29 | 7°51 | 8°45 | 21°16 | 0°48 |
| F 14 | 15 29 32 | 23°51'54 | 5°45 | 29°54 | 10°43 | 24°19 | 7°52 | 10°46 | 23°13 | 24°14 | 11°30 | 7°52 | 8°42 | 21°23 | 0°52 |
| S 15 | 15 33 29 | 24°49'47 | 19°41 | 1°R21 | 11°56 | 25° 2 | 7°45 | 10°43 | 23°12 | 24°15 | 11°31 | 7°R52 | 8°39 | 21°29 | 0°55 |
| S 16 | 15 37 25 | 25°47'40 | 3°49 | 2°50 | 13°10 | 25°46 | 7°38 | 10°41 | 23°11 | 24°16 | 11°32 | 7°52 | 8°36 | 21°36 | 0°59 |
| M17 | 15 41 22 | 26°45'31 | 18° 8 | 4°22 | 14°23 | 26°29 | 7°31 | 10°39 | 23°10 | 24°18 | 11°33 | 7°51 | 8°32 | 21°43 | 1° 2 |
| T 18 | 15 45 18 | 27°43'21 | 2°35 | 5°56 | 15°37 | 27°12 | 7°24 | 10°36 | 23° 9 | 24°19 | 11°35 | 7°51 | 8°29 | 21°50 | 1° 5 |
| W19 | 15 49 15 | 28°41'10 | 17° 6 | 7°32 | 16°50 | 27°55 | 7°17 | 10°33 | 23° 8 | 24°20 | 11°36 | 7°49 | 8°26 | 21°56 | 1° 9 |
| T 20 | 15 53 11 | 29°38'58 | 1°36 | 9°11 | 18° 3 | 28°38 | 7°11 | 10°31 | 23° 7 | 24°22 | 11°37 | 7°48 | 8°23 | 22° 3 | 1°12 |
| F 21 | 15 57 8 | 0°II36'44 | 15°58 | 10°51 | 19°17 | 29°21 | 7° 4 | 10°28 | 23° 6 | 24°23 | 11°38 | 7°48 | 8°20 | 22°10 | 1°15 |
| S 22 | 16 1 4 | 1°34'29 | 0°II 9 | 12°34 | 20°30 | 0°II 3 | 6°58 | 10°25 | 23° 5 | 24°25 | 11°39 | 7°47 | 8°17 | 22°16 | 1°19 |
| S 23 | 16 5 1 | 2°32'13 | 14° 3 | 14°19 | 21°43 | 0°46 | 6°51 | 10°22 | 23° 4 | 24°26 | 11°40 | 7°D47 | 8°13 | 22°23 | 1°22 |
| M24 | 16 8 58 | 3°29'56 | 27°37 | 16° 6 | 22°57 | 1°29 | 6°45 | 10°19 | 23° 2 | 24°28 | 11°41 | 7°48 | 8°10 | 22°30 | 1°25 |
| T 25 | 16 12 54 | 4°27'37 | 10°51 | 17°55 | 24°10 | 2°12 | 6°39 | 10°16 | 23° 1 | 24°29 | 11°42 | 7°48 | 8° 7 | 22°37 | 1°28 |
| W26 | 16 16 51 | 5°25'17 | 23°43 | 19°46 | 25°23 | 2°54 | 6°33 | 10°13 | 23° 0 | 24°31 | 11°43 | 7°48 | 8° 4 | 22°43 | 1°31 |
| T 27 | 16 20 47 | 6°22'56 | 6°17 | 21°39 | 26°37 | 3°37 | 6°27 | 10°10 | 22°58 | 24°32 | 11°44 | 7°48 | 8° 1 | 22°50 | 1°35 |
| F 28 | 16 24 44 | 7°20'33 | 18°34 | 23°35 | 27°50 | 4°19 | 6°21 | 10° 6 | 22°57 | 24°34 | 11°45 | 7°49 | 7°58 | 22°57 | 1°38 |
| S 29 | 16 28 40 | 8°18'08 | 0°39 | 25°32 | 29° 3 | 5° 2 | 6°16 | 10° 3 | 22°56 | 24°36 | 11°45 | 7°R49 | 7°54 | 23° 3 | 1°41 |
| S 30 | 16 32 37 | 9°15'42 | 12°35 | 27°32 | 0°516 | 5°44 | 6°10 | 9°59 | 22°54 | 24°37 | 11°46 | 7°D49 | 7°51 | 23°10 | 1°44 |
| M31 | 16 36 33 | 10°13'15 | 24°28 | 29°34 | 1°529 | 6°II27 | 6°M 5 | 9°356 | 22°53 | 24°39 | 11°47 | 7°II49 | 7°II48 | 23°17 | 1°47 |

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JUNE 2077

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|------|----------|------------|--------|--------|-------|---------|-------|-------|--------|-------|--------|--------|--------|-------|------|
| T 1 | 16 40 30 | 11°II10'46 | 6°22 | 1°II37 | 2°542 | 7°II 9 | 6°R 0 | 9°R52 | 22°R51 | 24°41 | 11°48 | 7°II49 | 7°II45 | 23°24 | 1°50 |
| W 2 | 16 44 27 | 12° 8'16 | 18°22 | 3°42 | 3°55 | 7°51 | 5°M55 | 9°349 | 22°349 | 24°42 | 11°49 | 7°49 | 7°42 | 23°30 | 1°53 |
| T 3 | 16 48 23 | 13° 5'45 | 0°M30 | 5°49 | 5° 8 | 8°34 | 5°50 | 9°45 | 22°48 | 24°44 | 11°50 | 7°50 | 7°38 | 23°37 | 1°56 |
| F 4 | 16 52 20 | 14° 3'12 | 12°51 | 7°57 | 6°21 | 9°16 | 5°45 | 9°41 | 22°46 | 24°46 | 11°51 | 7°50 | 7°35 | 23°44 | 1°59 |
| S 5 | 16 56 16 | 15° 0'39 | 25°27 | 10° 6 | 7°34 | 9°58 | 5°41 | 9°38 | 22°44 | 24°48 | 11°51 | 7°51 | 7°32 | 23°50 | 2° 2 |
| S 6 | 17 0 13 | 15°58'04 | 8°20 | 12°17 | 8°47 | 10°40 | 5°36 | 9°34 | 22°43 | 24°50 | 11°52 | 7°R51 | 7°29 | 23°57 | 2° 4 |
| M 7 | 17 4 9 | 16°55'29 | 21°29 | 14°28 | 10° 0 | 11°22 | 5°32 | 9°30 | 22°41 | 24°51 | 11°53 | 7°51 | 7°26 | 24° 4 | 2° 7 |
| T 8 | 17 8 6 | 17°52'52 | 4°34 | 16°40 | 11°13 | 12° 4 | 5°28 | 9°26 | 22°39 | 24°53 | 11°54 | 7°50 | 7°23 | 24°11 | 2°10 |
| W 9 | 17 12 2 | 18°50'15 | 18°34 | 18°52 | 12°26 | 12°46 | 5°24 | 9°22 | 22°37 | 24°55 | 11°54 | 7°49 | 7°19 | 24°17 | 2°13 |
| T 10 | 17 15 59 | 19°47'38 | 2°26 | 21° 4 | 13°39 | 13°28 | 5°20 | 9°18 | 22°35 | 24°57 | 11°55 | 7°47 | 7°16 | 24°24 | 2°16 |
| F 11 | 17 19 56 | 20°44'59 | 16°29 | 23°16 | 14°51 | 14°10 | 5°16 | 9°14 | 22°33 | 24°59 | 11°56 | 7°46 | 7°13 | 24°31 | 2°18 |
| S 12 | 17 23 52 | 21°42'20 | 0°38 | 25°27 | 16° 4 | 14°51 | 5°13 | 9°10 | 22°32 | 25° 1 | 11°56 | 7°45 | 7°10 | 24°37 | 2°21 |
| S 13 | 17 27 49 | 22°39'41 | 14°51 | 27°38 | 17°17 | 15°33 | 5°10 | 9° 6 | 22°30 | 25° 3 | 11°57 | 7°44 | 7° 7 | 24°44 | 2°23 |
| M14 | 17 31 45 | 23°37'01 | 29° 5 | 29°47 | 18°30 | 16°15 | 5° 6 | 9° 2 | 22°28 | 25° 5 | 11°57 | 7°D44 | 7° 4 | 24°51 | 2°26 |
| T 15 | 17 35 42 | 24°34'20 | 13°Y18 | 1°55 | 19°42 | 16°56 | 5° 4 | 8°58 | 22°26 | 25° 7 | 11°58 | 7°45 | 7° 0 | 24°58 | 2°29 |
| W16 | 17 39 38 | 25°31'40 | 27°17 | 4° 2 | 20°55 | 17°38 | 5° 1 | 8°53 | 22°23 | 25° 9 | 11°59 | 7°46 | 6°57 | 25° 4 | 2°31 |
| T 17 | 17 43 35 | 26°28'59 | 11°30 | 6° 7 | 22° 8 | 18°19 | 4°58 | 8°49 | 22°21 | 25°11 | 11°59 | 7°47 | 6°54 | 25°11 | 2°34 |
| F 18 | 17 47 31 | 27°26'17 | 25°25 | 8°11 | 23°20 | 19° 1 | 4°56 | 8°45 | 22°19 | 25°13 | 12° 0 | 7°48 | 6°51 | 25°18 | 2°36 |
| S 19 | 17 51 28 | 28°23'36 | 9°II 9 | 10°12 | 24°33 | 19°42 | 4°53 | 8°41 | 22°17 | 25°15 | 12° 0 | 7°R48 | 6°48 | 25°24 | 2°38 |
| S 20 | 17 55 25 | 29°20'54 | 22°41 | 12°12 | 25°45 | 20°24 | 4°51 | 8°36 | 22°15 | 25°17 | 12° 1 | 7°48 | 6°44 | 25°31 | 2°41 |
| M21 | 17 59 21 | 0°518'11 | 5°58 | 14° 9 | 26°58 | 21° 5 | 4°49 | 8°32 | 22°13 | 25°19 | 12° 1 | 7°46 | 6°41 | 25°38 | 2°43 |
| T 22 | 18 3 18 | 1°15'28 | 19° 0 | 16° 5 | 28°10 | 21°46 | 4°48 | 8°28 | 22°11 | 25°21 | 12° 2 | 7°43 | 6°38 | 25°45 | 2°45 |
| W23 | 18 7 14 | 2°12'45 | 1°145 | 17°58 | 29°23 | 22°28 | 4°46 | 8°23 | 22° 8 | 25°23 | 12° 2 | 7°40 | 6°35 | 25°51 | 2°47 |
| T 24 | 18 11 11 | 3°10'01 | 14°14 | 19°49 | 0°L35 | 23° 9 | 4°45 | 8°19 | 22° 6 | 25°25 | 12° 2 | 7°36 | 6°32 | 25°58 | 2°50 |
| F 25 | 18 15 7 | 4° 7'16 | 26°30 | 21°38 | 1°48 | 23°50 | 4°44 | 8°14 | 22° 4 | 25°27 | 12° 3 | 7°32 | 6°29 | 26° 5 | 2°52 |
| S 26 | 18 19 4 | 5° 4'31 | 8°34 | 23°25 | 3° 0 | 24°31 | 4°43 | 8°10 | 22° 2 | 25°29 | 12° 3 | 7°28 | 6°25 | 26°12 | 2°54 |
| S 27 | 18 23 1 | 6° 1'45 | 20°31 | 25° 9 | 4°12 | 25°12 | 4°42 | 8° 6 | 21°59 | 25°31 | 12° 3 | 7°26 | 6°22 | 26°18 | 2°56 |
| M28 | 18 26 57 | 6°58'58 | 2°24 | 26°51 | 5°25 | 25°53 | 4°41 | 8° 1 | 21°57 | 25°33 | 12° 4 | 7°D25 | 6°19 | 26°25 | 2°58 |
| T 29 | 18 30 54 | 7°56'12 | 14°17 | 28°31 | 6°37 | 26°34 | 4°41 | 7°57 | 21°55 | 25°35 | 12° 4 | 7°25 | 6°16 | 26°32 | 3° 0 |
| W30 | 18 34 50 | 8°53'24 | 26°17 | 0°L 9 | 7°L49 | 27°II15 | 4°M40 | 7°352 | 21°353 | 25°38 | 12°Y 4 | 7°II26 | 6°II13 | 26°38 | 3° 2 |

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SWISS EPHEMERIS for the year 2077

JULY 2077

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|------|----------|----------|---------|--------|-------|-------|-------|-------|--------|-------|--------|--------|--------|-------|-------|
| T 1 | 18 38 47 | 9°50'36 | 8°26' | 1°44' | 9°1 | 27°56 | 4°D40 | 7°R48 | 21°R50 | 25°40 | 12°Y 5 | 7°II28 | 6°II10 | 26°45 | 3°8 4 |
| F 2 | 18 42 43 | 10°47'48 | 20°51 | 3°17 | 10°14 | 28°37 | 4°M40 | 7°344 | 21°348 | 25°42 | 12° 5 | 7°29 | 6° 6 | 26°52 | 3° 5 |
| S 3 | 18 46 40 | 11°45'00 | 3°34 | 4°48 | 11°26 | 29°18 | 4°40 | 7°39 | 21°46 | 25°44 | 12° 5 | 7°R30 | 6° 3 | 26°59 | 3° 7 |
| S 4 | 18 50 36 | 12°42'11 | 16°38 | 6°16 | 12°38 | 29°58 | 4°41 | 7°35 | 21°43 | 25°46 | 12° 5 | 7°30 | 6° 0 | 27° 5 | 3° 9 |
| M 5 | 18 54 33 | 13°39'23 | 0°3 5 | 7°42 | 13°50 | 0°39 | 4°42 | 7°30 | 21°41 | 25°48 | 12° 5 | 7°28 | 5°57 | 27°12 | 3°11 |
| T 6 | 18 58 30 | 14°36'34 | 13°53 | 9° 6 | 15° 2 | 1°20 | 4°42 | 7°26 | 21°38 | 25°51 | 12° 5 | 7°24 | 5°54 | 27°19 | 3°12 |
| W 7 | 19 2 26 | 15°33'45 | 27°59 | 10°28 | 16°14 | 2° 0 | 4°43 | 7°22 | 21°36 | 25°53 | 12° 6 | 7°20 | 5°50 | 27°25 | 3°14 |
| T 8 | 19 6 23 | 16°30'56 | 12°19 | 11°47 | 17°25 | 2°41 | 4°44 | 7°17 | 21°34 | 25°55 | 12° 6 | 7°14 | 5°47 | 27°32 | 3°15 |
| F 9 | 19 10 19 | 17°28'07 | 26°48 | 13° 3 | 18°37 | 3°21 | 4°46 | 7°13 | 21°31 | 25°57 | 12° 6 | 7° 8 | 5°44 | 27°39 | 3°17 |
| S 10 | 19 14 16 | 18°25'19 | 11°19 | 14°17 | 19°49 | 4° 2 | 4°47 | 7° 9 | 21°29 | 25°59 | 12° 6 | 7° 3 | 5°41 | 27°46 | 3°18 |
| S 11 | 19 18 12 | 19°22'31 | 25°47 | 15°28 | 21° 1 | 4°42 | 4°49 | 7° 4 | 21°26 | 26° 2 | 12° 6 | 6°59 | 5°38 | 27°52 | 3°20 |
| M 12 | 19 22 9 | 20°19'44 | 10°Y 7 | 16°37 | 22°13 | 5°23 | 4°51 | 7° 0 | 21°24 | 26° 4 | 12°R 6 | 6°57 | 5°35 | 27°59 | 3°21 |
| T 13 | 19 26 6 | 21°16'56 | 24°16 | 17°43 | 23°24 | 6° 3 | 4°53 | 6°56 | 21°22 | 26° 6 | 12° 6 | 6°D57 | 5°31 | 28° 6 | 3°22 |
| W 14 | 19 30 2 | 22°14'10 | 8°13 | 18°46 | 24°36 | 6°43 | 4°55 | 6°52 | 21°19 | 26° 8 | 12° 6 | 6°57 | 5°28 | 28°12 | 3°24 |
| T 15 | 19 33 59 | 23°11'24 | 21°57 | 19°46 | 25°48 | 7°23 | 4°57 | 6°48 | 21°17 | 26°11 | 12° 6 | 6°59 | 5°25 | 28°19 | 3°25 |
| F 16 | 19 37 55 | 24° 8'39 | 5°II29 | 20°43 | 26°59 | 8° 4 | 5° 0 | 6°43 | 21°14 | 26°13 | 12° 6 | 6°R59 | 5°22 | 28°26 | 3°26 |
| S 17 | 19 41 52 | 25° 5'54 | 18°49 | 21°37 | 28°11 | 8°44 | 5° 3 | 6°39 | 21°12 | 26°15 | 12° 5 | 6°59 | 5°19 | 28°33 | 3°27 |
| S 18 | 19 45 48 | 26° 3'10 | 1°57 | 22°28 | 29°22 | 9°24 | 5° 6 | 6°35 | 21° 9 | 26°17 | 12° 5 | 6°56 | 5°16 | 28°39 | 3°28 |
| M 19 | 19 49 45 | 27° 0'27 | 14°54 | 23°15 | 0°33 | 10° 4 | 5° 9 | 6°31 | 21° 7 | 26°19 | 12° 5 | 6°51 | 5°12 | 28°46 | 3°29 |
| T 20 | 19 53 41 | 27°57'44 | 27°38 | 23°59 | 1°45 | 10°44 | 5°12 | 6°27 | 21° 5 | 26°22 | 12° 5 | 6°44 | 5° 9 | 28°53 | 3°30 |
| W 21 | 19 57 38 | 28°55'01 | 10°II10 | 24°40 | 2°56 | 11°24 | 5°15 | 6°23 | 21° 2 | 26°24 | 12° 5 | 6°35 | 5° 6 | 28°59 | 3°31 |
| T 22 | 20 1 35 | 29°52'19 | 22°31 | 25°16 | 4° 7 | 12° 4 | 5°19 | 6°20 | 21° 0 | 26°26 | 12° 5 | 6°26 | 5° 3 | 29° 6 | 3°32 |
| F 23 | 20 5 31 | 0°49'37 | 4°17 | 25°48 | 5°19 | 12°44 | 5°23 | 6°16 | 20°58 | 26°28 | 12° 4 | 6°16 | 5° 0 | 29°13 | 3°33 |
| S 24 | 20 9 28 | 1°46'55 | 16°42 | 26°17 | 6°30 | 13°24 | 5°26 | 6°12 | 20°55 | 26°31 | 12° 4 | 6° 7 | 4°56 | 29°19 | 3°33 |
| S 25 | 20 13 24 | 2°44'14 | 28°36 | 26°41 | 7°41 | 14° 3 | 5°30 | 6° 8 | 20°53 | 26°33 | 12° 4 | 6° 0 | 4°53 | 29°26 | 3°34 |
| M 26 | 20 17 21 | 3°41'33 | 10°427 | 27° 0 | 8°52 | 14°43 | 5°35 | 6° 5 | 20°50 | 26°35 | 12° 4 | 5°55 | 4°50 | 29°33 | 3°35 |
| T 27 | 20 21 17 | 4°38'53 | 22°18 | 27°15 | 10° 3 | 15°23 | 5°39 | 6° 1 | 20°48 | 26°37 | 12° 3 | 5°52 | 4°47 | 29°40 | 3°35 |
| W 28 | 20 25 14 | 5°36'13 | 4°16 | 27°25 | 11°14 | 16° 3 | 5°44 | 5°57 | 20°46 | 26°39 | 12° 3 | 5°D51 | 4°44 | 29°46 | 3°36 |
| T 29 | 20 29 10 | 6°33'34 | 16°23 | 27°30 | 12°25 | 16°42 | 5°48 | 5°54 | 20°44 | 26°42 | 12° 2 | 5°52 | 4°41 | 29°53 | 3°36 |
| F 30 | 20 33 7 | 7°30'55 | 28°47 | 27°R31 | 13°36 | 17°22 | 5°53 | 5°50 | 20°41 | 26°44 | 12° 2 | 5°52 | 4°37 | 0°4 0 | 3°37 |
| S 31 | 20 37 4 | 8°28'17 | 11°31 | 27°26 | 14°46 | 18° 1 | 5°58 | 5°47 | 20°39 | 26°46 | 12°Y 2 | 5°R52 | 4°II34 | 0°4 6 | 3°37 |

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AUGUST 2077

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|----------|--------|--------|-------|-------|-------|-------|--------|-------|--------|--------|--------|-------|-------|
| S 1 | 20 41 0 | 9°25'39 | 24°40 | 27°R15 | 15°57 | 18°41 | 6°M 3 | 5°R44 | 20°R37 | 26°48 | 12°R 1 | 5°R51 | 4°II31 | 0°413 | 3°37 |
| M 2 | 20 44 57 | 10°23'02 | 8°315 | 27°R 0 | 17° 8 | 19°20 | 6° 9 | 5°341 | 20°35 | 26°50 | 12°Y 1 | 5°II47 | 4°28 | 0°20 | 3°38 |
| T 3 | 20 48 53 | 11°20'26 | 22°17 | 26°40 | 18°18 | 20° 0 | 6°14 | 5°37 | 20°32 | 26°53 | 12° 0 | 5°41 | 4°25 | 0°27 | 3°38 |
| W 4 | 20 52 50 | 12°17'50 | 6°343 | 26°15 | 19°29 | 20°39 | 6°20 | 5°34 | 20°30 | 26°55 | 12° 0 | 5°33 | 4°22 | 0°33 | 3°38 |
| T 5 | 20 56 46 | 13°15'15 | 21°27 | 25°45 | 20°39 | 21°19 | 6°25 | 5°31 | 20°28 | 26°57 | 11°59 | 5°23 | 4°18 | 0°40 | 3°38 |
| F 6 | 21 0 43 | 14°12'41 | 6°22 | 25°10 | 21°50 | 21°58 | 6°31 | 5°28 | 20°26 | 26°59 | 11°59 | 5°13 | 4°15 | 0°47 | 3°R38 |
| S 7 | 21 4 40 | 15°10'09 | 21°18 | 24°32 | 23° 0 | 22°37 | 6°37 | 5°25 | 20°24 | 27° 1 | 11°58 | 5° 4 | 4°12 | 0°53 | 3°38 |
| S 8 | 21 8 36 | 16° 7'37 | 6°Y 6 | 23°50 | 24°10 | 23°16 | 6°44 | 5°23 | 20°22 | 27° 3 | 11°58 | 4°57 | 4° 9 | 1° 0 | 3°38 |
| M 9 | 21 12 33 | 17° 5'06 | 20°40 | 23° 6 | 25°20 | 23°55 | 6°50 | 5°20 | 20°20 | 27° 5 | 11°57 | 4°52 | 4° 6 | 1° 7 | 3°38 |
| T 10 | 21 16 29 | 18° 2'38 | 4°356 | 22°19 | 26°30 | 24°35 | 6°56 | 5°17 | 20°17 | 27° 8 | 11°57 | 4°50 | 4° 2 | 1°14 | 3°38 |
| W 11 | 21 20 26 | 19° 0'10 | 18°52 | 21°31 | 27°40 | 25°14 | 7° 3 | 5°15 | 20°15 | 27°10 | 11°56 | 4°D49 | 3°59 | 1°20 | 3°37 |
| T 12 | 21 24 22 | 19°57'44 | 2°II28 | 20°42 | 28°50 | 25°53 | 7°10 | 5°12 | 20°13 | 27°12 | 11°55 | 4°R50 | 3°56 | 1°27 | 3°37 |
| F 13 | 21 28 19 | 20°55'19 | 15°47 | 19°54 | 0°4 0 | 26°32 | 7°17 | 5°10 | 20°11 | 27°14 | 11°55 | 4°49 | 3°53 | 1°34 | 3°37 |
| S 14 | 21 32 15 | 21°52'56 | 28°50 | 19° 7 | 1°10 | 27°11 | 7°24 | 5° 7 | 20°10 | 27°16 | 11°54 | 4°47 | 3°50 | 1°40 | 3°36 |
| S 15 | 21 36 12 | 22°50'35 | 11°39 | 18°22 | 2°20 | 27°50 | 7°31 | 5° 5 | 20° 8 | 27°18 | 11°53 | 4°43 | 3°47 | 1°47 | 3°36 |
| M 16 | 21 40 9 | 23°48'14 | 24°17 | 17°41 | 3°29 | 28°29 | 7°38 | 5° 3 | 20° 6 | 27°20 | 11°53 | 4°36 | 3°43 | 1°54 | 3°35 |
| T 17 | 21 44 5 | 24°45'55 | 6°44 | 17° 3 | 4°39 | 29° 8 | 7°46 | 5° 1 | 20° 4 | 27°22 | 11°52 | 4°25 | 3°40 | 2° 0 | 3°35 |
| W 18 | 21 48 2 | 25°43'38 | 19° 3 | 16°31 | 5°48 | 29°46 | 7°53 | 4°59 | 20° 2 | 27°24 | 11°51 | 4°13 | 3°37 | 2° 7 | 3°34 |
| T 19 | 21 51 58 | 26°41'21 | 1°17 | 16° 4 | 6°58 | 0°25 | 8° 1 | 4°57 | 20° 0 | 27°26 | 11°50 | 4° 0 | 3°34 | 2°14 | 3°34 |
| F 20 | 21 55 55 | 27°39'06 | 13°15 | 15°43 | 8° 7 | 1° 4 | 8° 9 | 4°55 | 19°59 | 27°28 | 11°50 | 3°46 | 3°31 | 2°21 | 3°33 |
| S 21 | 21 59 51 | 28°36'52 | 25°11 | 15°29 | 9°16 | 1°43 | 8°17 | 4°53 | 19°57 | 27°30 | 11°49 | 3°33 | 3°27 | 2°27 | 3°32 |
| S 22 | 22 3 48 | 29°34'40 | 7°4 2 | 15°D22 | 10°26 | 2°21 | 8°25 | 4°52 | 19°55 | 27°32 | 11°48 | 3°22 | 3°24 | 2°34 | 3°31 |
| M 23 | 22 7 44 | 0°32'28 | 18°51 | 15°23 | 11°35 | 3° 0 | 8°33 | 4°50 | 19°53 | 27°34 | 11°47 | 3°14 | 3°21 | 2°41 | 3°30 |
| T 24 | 22 11 41 | 1°30'18 | 0°M41 | 15°31 | 12°44 | 3°39 | 8°41 | 4°49 | 19°52 | 27°36 | 11°46 | 3° 9 | 3°18 | 2°47 | 3°29 |
| W 25 | 22 15 37 | 2°28'10 | 12°36 | 15°47 | 13°52 | 4°17 | 8°49 | 4°47 | 19°50 | 27°38 | 11°45 | 3° 6 | 3°15 | 2°54 | 3°28 |
| T 26 | 22 19 34 | 3°26'02 | 24°41 | 16°11 | 15° 1 | 4°56 | 8°58 | 4°46 | 19°49 | 27°40 | 11°45 | 3° 5 | 3°12 | 3° 1 | 3°27 |
| F 27 | 22 23 31 | 4°23'56 | 7°2 2 | 16°43 | 16°10 | 5°34 | 9° 7 | 4°45 | 19°47 | 27°42 | 11°44 | 3° 5 | 3° 8 | 3° 8 | 3°26 |
| S 28 | 22 27 27 | 5°21'51 | 19°43 | 17°23 | 17°18 | 6°13 | 9°15 | 4°44 | 19°46 | 27°43 | 11°43 | 3° 5 | 3° 5 | 3°14 | 3°25 |
| S 29 | 22 31 24 | 6°19'47 | 2°348 | 18°10 | 18°27 | 6°51 | 9°24 | 4°43 | 19°44 | 27°45 | 11°42 | 3° 3 | 3° 2 | 3°21 | 3°24 |
| M 30 | 22 35 20 | 7°17'45 | 16°23 | 19° 4 | 19°35 | 7°29 | 9°33 | 4°42 | 19°43 | 27°47 | 11°41 | 2°59 | 2°59 | 3°28 | 3°23 |
| T 31 | 22 39 17 | 8°15'44 | 0°27 | 20°4 6 | 20°44 | 8°4 8 | 9°M42 | 4°341 | 19°342 | 27°49 | 11°Y40 | 2°II53 | 2°II56 | 3°434 | 3°21 |

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SWISS EPHEMERIS for the year 2077

SEPTEMBER 2077

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|----------|------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| W 1 | 22 43 13 | 9 ^h 13'44" | 15 ^h 00' | 21 ^h 14' | 21 ^h 52' | 8 ^h 46' | 9 ^h 51' | 4 ^h 40' | 19 ^h 40' | 27 ^h 51' | 11 ^h 39' | 2 ^h 44' | 2 ^h 53' | 3 ^h 41' | 3 ^h 20' |
| T 2 | 22 47 10 | 10 ^h 11'46" | 29 ^h 55' | 22 ^h 29' | 23 ^h 00' | 9 ^h 24' | 10 ^h 01' | 4 ^h 40' | 19 ^h 39' | 27 ^h 52' | 11 ^h 38' | 2 ^h 44' | 2 ^h 53' | 3 ^h 48' | 3 ^h 19' |
| F 3 | 22 51 6 | 11 ^h 09'49" | 15 ^h 06' | 23 ^h 49' | 24 ^h 07' | 10 ^h 02' | 10 ^h 10' | 4 ^h 39' | 19 ^h 38' | 27 ^h 54' | 11 ^h 37' | 2 ^h 22' | 2 ^h 46' | 3 ^h 54' | 3 ^h 17' |
| S 4 | 22 55 3 | 12 ^h 07'54" | 0 ^h 20' | 25 ^h 15' | 25 ^h 15' | 10 ^h 40' | 10 ^h 20' | 4 ^h 39' | 19 ^h 37' | 27 ^h 56' | 11 ^h 36' | 2 ^h 12' | 2 ^h 43' | 4 ^h 01' | 3 ^h 16' |
| S 5 | 22 59 0 | 13 ^h 06'00" | 15 ^h 28' | 26 ^h 45' | 26 ^h 23' | 11 ^h 19' | 10 ^h 29' | 4 ^h 38' | 19 ^h 36' | 27 ^h 58' | 11 ^h 35' | 2 ^h 04' | 2 ^h 40' | 4 ^h 08' | 3 ^h 14' |
| M 6 | 23 2 56 | 14 ^h 04'09" | 0 ^h 20' | 28 ^h 21' | 27 ^h 30' | 11 ^h 57' | 10 ^h 39' | 4 ^h 38' | 19 ^h 35' | 27 ^h 59' | 11 ^h 34' | 1 ^h 59' | 2 ^h 37' | 4 ^h 15' | 3 ^h 13' |
| T 7 | 23 6 53 | 15 ^h 02'19" | 14 ^h 49' | 0 ^h 00' | 28 ^h 38' | 12 ^h 35' | 10 ^h 49' | 4 ^h 38' | 19 ^h 33' | 28 ^h 01' | 11 ^h 33' | 1 ^h 56' | 2 ^h 33' | 4 ^h 21' | 3 ^h 11' |
| W 8 | 23 10 49 | 16 ^h 03'32" | 28 ^h 53' | 1 ^h 42' | 29 ^h 45' | 13 ^h 13' | 10 ^h 59' | 4 ^h 38' | 19 ^h 32' | 28 ^h 03' | 11 ^h 32' | 1 ^h 55' | 2 ^h 30' | 4 ^h 28' | 3 ^h 09' |
| T 9 | 23 14 46 | 16 ^h 58'42" | 12 ^h 32' | 3 ^h 27' | 0 ^h 52' | 13 ^h 51' | 11 ^h 09' | 4 ^h 38' | 19 ^h 32' | 28 ^h 04' | 11 ^h 31' | 1 ^h 55' | 2 ^h 27' | 4 ^h 35' | 3 ^h 08' |
| F 10 | 23 18 42 | 17 ^h 57'04" | 25 ^h 48' | 5 ^h 15' | 1 ^h 59' | 14 ^h 29' | 11 ^h 19' | 4 ^h 38' | 19 ^h 31' | 28 ^h 06' | 11 ^h 30' | 1 ^h 55' | 2 ^h 24' | 4 ^h 41' | 3 ^h 06' |
| S 11 | 23 22 39 | 18 ^h 55'23" | 8 ^h 44' | 7 ^h 04' | 3 ^h 06' | 15 ^h 07' | 11 ^h 29' | 4 ^h 38' | 19 ^h 30' | 28 ^h 07' | 11 ^h 29' | 1 ^h 53' | 2 ^h 21' | 4 ^h 48' | 3 ^h 04' |
| S 12 | 23 26 35 | 19 ^h 53'44" | 21 ^h 23' | 8 ^h 55' | 4 ^h 13' | 15 ^h 44' | 11 ^h 39' | 4 ^h 39' | 19 ^h 29' | 28 ^h 09' | 11 ^h 28' | 1 ^h 49' | 2 ^h 18' | 4 ^h 55' | 3 ^h 02' |
| M 13 | 23 30 32 | 20 ^h 52'07" | 3 ^h 49' | 10 ^h 47' | 5 ^h 19' | 16 ^h 22' | 11 ^h 49' | 4 ^h 39' | 19 ^h 28' | 28 ^h 10' | 11 ^h 27' | 1 ^h 43' | 2 ^h 14' | 5 ^h 01' | 3 ^h 01' |
| T 14 | 23 34 29 | 21 ^h 50'32" | 16 ^h 03' | 12 ^h 40' | 6 ^h 26' | 17 ^h 00' | 12 ^h 00' | 4 ^h 40' | 19 ^h 27' | 28 ^h 12' | 11 ^h 26' | 1 ^h 34' | 2 ^h 11' | 5 ^h 08' | 2 ^h 59' |
| W 15 | 23 38 25 | 22 ^h 48'59" | 28 ^h 10' | 14 ^h 33' | 7 ^h 32' | 17 ^h 38' | 12 ^h 10' | 4 ^h 40' | 19 ^h 27' | 28 ^h 13' | 11 ^h 25' | 1 ^h 22' | 2 ^h 08' | 5 ^h 15' | 2 ^h 57' |
| T 16 | 23 42 22 | 23 ^h 47'27" | 10 ^h 11' | 16 ^h 27' | 8 ^h 38' | 18 ^h 15' | 12 ^h 21' | 4 ^h 41' | 19 ^h 26' | 28 ^h 15' | 11 ^h 24' | 1 ^h 10' | 2 ^h 05' | 5 ^h 22' | 2 ^h 55' |
| F 17 | 23 46 18 | 24 ^h 45'58" | 22 ^h 06' | 18 ^h 20' | 9 ^h 44' | 18 ^h 53' | 12 ^h 32' | 4 ^h 42' | 19 ^h 26' | 28 ^h 16' | 11 ^h 22' | 0 ^h 57' | 2 ^h 02' | 5 ^h 28' | 2 ^h 53' |
| S 18 | 23 50 15 | 25 ^h 44'31" | 3 ^h 58' | 20 ^h 14' | 10 ^h 50' | 19 ^h 31' | 12 ^h 43' | 4 ^h 43' | 19 ^h 25' | 28 ^h 18' | 11 ^h 21' | 0 ^h 45' | 1 ^h 59' | 5 ^h 35' | 2 ^h 51' |
| S 19 | 23 54 11 | 26 ^h 43'05" | 15 ^h 47' | 22 ^h 07' | 11 ^h 55' | 20 ^h 08' | 12 ^h 53' | 4 ^h 44' | 19 ^h 25' | 28 ^h 19' | 11 ^h 20' | 0 ^h 35' | 1 ^h 55' | 5 ^h 42' | 2 ^h 48' |
| M 20 | 23 58 8 | 27 ^h 41'42" | 27 ^h 37' | 23 ^h 59' | 13 ^h 01' | 20 ^h 46' | 13 ^h 04' | 4 ^h 45' | 19 ^h 24' | 28 ^h 20' | 11 ^h 19' | 0 ^h 28' | 1 ^h 52' | 5 ^h 48' | 2 ^h 46' |
| T 21 | 0 2 4 | 28 ^h 40'20" | 9 ^h 29' | 25 ^h 51' | 14 ^h 06' | 21 ^h 23' | 13 ^h 15' | 4 ^h 46' | 19 ^h 24' | 28 ^h 22' | 11 ^h 18' | 0 ^h 23' | 1 ^h 49' | 5 ^h 55' | 2 ^h 44' |
| W 22 | 0 6 1 | 29 ^h 39'00" | 21 ^h 26' | 27 ^h 42' | 15 ^h 11' | 22 ^h 01' | 13 ^h 27' | 4 ^h 48' | 19 ^h 23' | 28 ^h 23' | 11 ^h 17' | 0 ^h 21' | 1 ^h 46' | 6 ^h 02' | 2 ^h 42' |
| T 23 | 0 9 57 | 0 ^h 37'42" | 3 ^h 52' | 29 ^h 32' | 16 ^h 16' | 22 ^h 38' | 13 ^h 38' | 4 ^h 49' | 19 ^h 23' | 28 ^h 24' | 11 ^h 16' | 0 ^h 20' | 1 ^h 43' | 6 ^h 08' | 2 ^h 40' |
| F 24 | 0 13 54 | 1 ^h 36'26" | 15 ^h 52' | 1 ^h 22' | 17 ^h 20' | 23 ^h 16' | 13 ^h 49' | 4 ^h 51' | 19 ^h 23' | 28 ^h 25' | 11 ^h 14' | 0 ^h 21' | 1 ^h 39' | 6 ^h 15' | 2 ^h 37' |
| S 25 | 0 17 51 | 2 ^h 35'11" | 28 ^h 30' | 3 ^h 10' | 18 ^h 25' | 23 ^h 53' | 14 ^h 00' | 4 ^h 52' | 19 ^h 23' | 28 ^h 26' | 11 ^h 13' | 0 ^h 22' | 1 ^h 36' | 6 ^h 22' | 2 ^h 35' |
| S 26 | 0 21 47 | 3 ^h 33'58" | 11 ^h 31' | 4 ^h 58' | 19 ^h 29' | 24 ^h 30' | 14 ^h 12' | 4 ^h 54' | 19 ^h 23' | 28 ^h 28' | 11 ^h 12' | 0 ^h 22' | 1 ^h 33' | 6 ^h 29' | 2 ^h 33' |
| M 27 | 0 25 44 | 4 ^h 32'47" | 24 ^h 58' | 6 ^h 45' | 20 ^h 33' | 25 ^h 07' | 14 ^h 23' | 4 ^h 56' | 19 ^h 23' | 28 ^h 29' | 11 ^h 11' | 0 ^h 20' | 1 ^h 30' | 6 ^h 35' | 2 ^h 30' |
| T 28 | 0 29 40 | 5 ^h 31'37" | 8 ^h 55' | 8 ^h 31' | 21 ^h 37' | 25 ^h 45' | 14 ^h 35' | 4 ^h 58' | 19 ^h 23' | 28 ^h 30' | 11 ^h 10' | 0 ^h 16' | 1 ^h 27' | 6 ^h 42' | 2 ^h 28' |
| W 29 | 0 33 37 | 6 ^h 30'29" | 23 ^h 20' | 10 ^h 16' | 22 ^h 40' | 26 ^h 22' | 14 ^h 46' | 5 ^h 00' | 19 ^h 23' | 28 ^h 31' | 11 ^h 09' | 0 ^h 10' | 1 ^h 24' | 6 ^h 49' | 2 ^h 25' |
| T 30 | 0 37 33 | 7 ^h 29'23" | 8 ^h 11' | 12 ^h 00' | 23 ^h 44' | 26 ^h 59' | 14 ^h 58' | 5 ^h 02' | 19 ^h 23' | 28 ^h 32' | 11 ^h 07' | 0 ^h 11' | 1 ^h 20' | 6 ^h 55' | 2 ^h 23' |

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OCTOBER 2077

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| Day | Sid.t | ☉ | ☾ | ♂ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|---------|------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|----------------------|---------------------|----------------------|---------------------|---------------------|--------------------|
| F 1 | 0 41 30 | 8 ^h 28'19" | 23 ^h 21' | 13 ^h 43' | 24 ^h 47' | 27 ^h 36' | 15 ^h 10' | 5 ^h 04' | 19 ^h 23' | 28 ^h 33' | 11 ^h 06' | 29 ^h 54' | 1 ^h 17' | 7 ^h 02' | 2 ^h 20' |
| S 2 | 0 45 26 | 9 ^h 27'16" | 8 ^h 39' | 15 ^h 25' | 25 ^h 50' | 28 ^h 13' | 15 ^h 22' | 5 ^h 06' | 19 ^h 23' | 28 ^h 34' | 11 ^h 05' | 29 ^h 54' | 1 ^h 14' | 7 ^h 09' | 2 ^h 18' |
| S 3 | 0 49 23 | 10 ^h 26'16" | 23 ^h 56' | 17 ^h 06' | 26 ^h 52' | 28 ^h 50' | 15 ^h 33' | 5 ^h 09' | 19 ^h 23' | 28 ^h 35' | 11 ^h 04' | 29 ^h 41' | 1 ^h 11' | 7 ^h 15' | 2 ^h 15' |
| M 4 | 0 53 19 | 11 ^h 25'17" | 8 ^h 59' | 18 ^h 47' | 27 ^h 54' | 29 ^h 27' | 15 ^h 45' | 5 ^h 11' | 19 ^h 23' | 28 ^h 36' | 11 ^h 03' | 29 ^h 37' | 1 ^h 08' | 7 ^h 22' | 2 ^h 13' |
| T 5 | 0 57 16 | 12 ^h 24'21" | 23 ^h 42' | 20 ^h 27' | 28 ^h 56' | 0 ^h 00' | 15 ^h 57' | 5 ^h 14' | 19 ^h 24' | 28 ^h 37' | 11 ^h 02' | 29 ^h D35' | 1 ^h 04' | 7 ^h 29' | 2 ^h 10' |
| W 6 | 1 1 13 | 13 ^h 23'27" | 7 ^h 15' | 22 ^h 05' | 29 ^h 58' | 0 ^h 41' | 16 ^h 09' | 5 ^h 16' | 19 ^h 24' | 28 ^h 38' | 11 ^h 00' | 29 ^h 35' | 1 ^h 01' | 7 ^h 36' | 2 ^h 07' |
| T 7 | 1 5 9 | 14 ^h 22'36" | 21 ^h 47' | 23 ^h 44' | 0 ^h 57' | 1 ^h 18' | 16 ^h 21' | 5 ^h 19' | 19 ^h 25' | 28 ^h 38' | 10 ^h 59' | 29 ^h 37' | 0 ^h 58' | 7 ^h 42' | 2 ^h 05' |
| F 8 | 1 9 6 | 15 ^h 21'47" | 5 ^h 09' | 25 ^h 21' | 2 ^h 00' | 1 ^h 54' | 16 ^h 34' | 5 ^h 22' | 19 ^h 25' | 28 ^h 39' | 10 ^h 58' | 29 ^h 38' | 0 ^h 55' | 7 ^h 49' | 2 ^h 02' |
| S 9 | 1 13 2 | 16 ^h 21'00" | 18 ^h 07' | 26 ^h 57' | 3 ^h 01' | 2 ^h 31' | 16 ^h 46' | 5 ^h 25' | 19 ^h 26' | 28 ^h 40' | 10 ^h 57' | 29 ^h R38' | 0 ^h 52' | 7 ^h 56' | 2 ^h 00' |
| S 10 | 1 16 59 | 17 ^h 20'16" | 0 ^h 44' | 28 ^h 33' | 4 ^h 01' | 3 ^h 08' | 16 ^h 58' | 5 ^h 28' | 19 ^h 26' | 28 ^h 41' | 10 ^h 56' | 29 ^h 37' | 0 ^h 49' | 8 ^h 02' | 1 ^h 57' |
| M 11 | 1 20 55 | 18 ^h 19'34" | 13 ^h 05' | 0 ^h 18' | 5 ^h 01' | 3 ^h 45' | 17 ^h 10' | 5 ^h 31' | 19 ^h 27' | 28 ^h 41' | 10 ^h 55' | 29 ^h 34' | 0 ^h 45' | 8 ^h 09' | 1 ^h 54' |
| T 12 | 1 24 52 | 19 ^h 18'54" | 25 ^h 14' | 1 ^h 42' | 6 ^h 01' | 4 ^h 21' | 17 ^h 23' | 5 ^h 34' | 19 ^h 28' | 28 ^h 42' | 10 ^h 53' | 29 ^h 30' | 0 ^h 42' | 8 ^h 16' | 1 ^h 51' |
| W 13 | 1 28 49 | 20 ^h 18'16" | 7 ^h 14' | 3 ^h 16' | 7 ^h 00' | 4 ^h 58' | 17 ^h 35' | 5 ^h 37' | 19 ^h 28' | 28 ^h 43' | 10 ^h 52' | 29 ^h 23' | 0 ^h 39' | 8 ^h 22' | 1 ^h 49' |
| T 14 | 1 32 45 | 21 ^h 17'40" | 19 ^h 08' | 4 ^h 49' | 7 ^h 59' | 5 ^h 34' | 17 ^h 48' | 5 ^h 41' | 19 ^h 29' | 28 ^h 43' | 10 ^h 51' | 29 ^h 16' | 0 ^h 36' | 8 ^h 29' | 1 ^h 46' |
| F 15 | 1 36 42 | 22 ^h 17'07" | 0 ^h 59' | 6 ^h 21' | 8 ^h 58' | 6 ^h 11' | 18 ^h 00' | 5 ^h 44' | 19 ^h 30' | 28 ^h 44' | 10 ^h 50' | 29 ^h 09' | 0 ^h 33' | 8 ^h 36' | 1 ^h 43' |
| S 16 | 1 40 38 | 23 ^h 16'36" | 12 ^h 49' | 7 ^h 52' | 9 ^h 56' | 6 ^h 47' | 18 ^h 13' | 5 ^h 48' | 19 ^h 31' | 28 ^h 44' | 10 ^h 49' | 29 ^h 02' | 0 ^h 30' | 8 ^h 42' | 1 ^h 40' |
| S 17 | 1 44 35 | 24 ^h 16'06" | 24 ^h 40' | 9 ^h 23' | 10 ^h 53' | 7 ^h 24' | 18 ^h 25' | 5 ^h 51' | 19 ^h 32' | 28 ^h 45' | 10 ^h 48' | 28 ^h 57' | 0 ^h 26' | 8 ^h 49' | 1 ^h 38' |
| M 18 | 1 48 31 | 25 ^h 15'39" | 6 ^h 14' | 10 ^h 53' | 11 ^h 51' | 8 ^h 00' | 18 ^h 38' | 5 ^h 55' | 19 ^h 33' | 28 ^h 45' | 10 ^h 47' | 28 ^h 53' | 0 ^h 23' | 8 ^h 56' | 1 ^h 35' |
| T 19 | 1 52 28 | 26 ^h 15'14" | 18 ^h 33' | 12 ^h 23' | 12 ^h 47' | 8 ^h 36' | 18 ^h 51' | 5 ^h 59' | 19 ^h 34' | 28 ^h 46' | 10 ^h 45' | 28 ^h 51' | 0 ^h 20' | 9 ^h 03' | 1 ^h 32' |
| W 20 | 1 56 24 | 27 ^h 14'51" | 0 ^h 38' | 13 ^h 51' | 13 ^h 44' | 9 ^h 13' | 19 ^h 03' | 6 ^h 03' | 19 ^h 35' | 28 ^h 46' | 10 ^h 44' | 28 ^h D50' | 0 ^h 17' | 9 ^h 09' | 1 ^h 29' |
| T 21 | 2 0 21 | 28 ^h 14'30" | 12 ^h 52' | 15 ^h 19' | 14 ^h 40' | 9 ^h 49' | 19 ^h 16' | 6 ^h 07' | 19 ^h 36' | 28 ^h 47' | 10 ^h 43' | 28 ^h 51' | 0 ^h 14' | 9 ^h 16' | 1 ^h 26' |
| F 22 | 2 4 17 | 29 ^h 14'10" | 25 ^h 19' | 16 ^h 47' | 15 ^h 35' | 10 ^h 25' | 19 ^h 29' | 6 ^h 11' | 19 ^h 37' | 28 ^h 47' | 10 ^h 42' | 28 ^h 53' | 0 ^h 10' | 9 ^h 23' | 1 ^h 23' |
| S 23 | 2 8 14 | 0 ^h 13'53" | 8 ^h 03' | 18 ^h 14' | 16 ^h 30' | 11 ^h 01' | 19 ^h 42' | 6 ^h 15' | 19 ^h 38' | 28 ^h 47' | 10 ^h 41' | 28 ^h 54' | 0 ^h 07' | 9 ^h 29' | 1 ^h 21' |
| S 24 | 2 12 11 | 1 ^h 13'37" | 2 ^h 01' | 19 ^h 39' | 17 ^h 24' | 11 ^h 37' | 19 ^h 54' | 6 ^h 19' | 19 ^h 40' | 28 ^h 48' | 10 ^h 40' | 28 ^h 56' | 0 ^h 04' | 9 ^h 36' | 1 ^h 18' |
| M 25 | 2 16 7 | 2 ^h 13'23" | 4 ^h 22' | 21 ^h 05' | 18 ^h 17' | 12 ^h 13' | 20 ^h 07' | 6 ^h 23' | 19 ^h 41' | 28 ^h 48' | 10 ^h 39' | 28 ^h R56' | 0 ^h 01' | 9 ^h 43' | 1 ^h 15' |
| T 26 | 2 20 4 | 3 ^h 13'10" | 18 ^h 10' | 22 ^h 29' | 19 ^h 10' | 12 ^h 49' | 20 ^h 20' | 6 ^h 27' | 19 ^h 42' | 28 ^h 48' | 10 ^h 38' | 28 ^h 55' | 29 ^h 58' | 9 ^h 49' | 1 ^h 12' |
| W 27 | 2 24 0 | 4 ^h 12'59" | 2 ^h 21' | 23 ^h 53' | 20 ^h 03' | 13 ^h 25' | 20 ^h 33' | 6 ^h 32' | 19 ^h 44' | 28 ^h 48' | 10 ^h 37' | 28 ^h 53' | 29 ^h 55' | 9 ^h 56' | 1 ^h 09' |
| T 28 | 2 27 57 | 5 ^h 12'49" | 16 ^h 55' | 25 ^h 15' | 20 ^h 54' | 14 ^h 01' | 20 ^h 46' | 6 ^h 36' | 19 ^h 45' | 28 ^h 48' | 10 ^h 36' | 28 ^h 50' | 29 ^h 51' | 10 ^h 03' | 1 ^h 06' |
| F 29 | 2 31 53 | 6 ^h 12'42" | 1 ^h 48' | 26 ^h 37' | 21 ^h 45' | 14 ^h 36' | 20 ^h 59' | 6 ^h 41' | 19 ^h 47' | 28 ^h 48' | 10 ^h 35' | 28 ^h 47' | 29 ^h 48' | 10 ^h 09' | 1 ^h 04' |
| S 30 | 2 35 50 | 7 ^h 12'36" | 16 ^h 53' | 27 ^h 58' | 22 ^h 36' | 15 ^h 12' | 21 ^h 12' | 6 ^h 45' | 19 ^h 48' | 28 ^h 48' | 10 ^h 33' | 28 ^h 44' | 29 ^h 45' | 10 ^h 16' | 1 ^h 01' |
| S 31 | 2 39 46 | 8 ^h 12'31" | 2 ^h 00' | 29 ^h 18' | 23 ^h 25' | 15 ^h 48' | 21 ^h 12' | 6 ^h 50' | 19 ^h 50' | 28 ^h R49' | 10 ^h 32' | 28 ^h 42' | 29 ^h 42' | 10 ^h 23' | 0 ^h 58' |

SWISS EPHEMERIS for the year 2077

NOVEMBER 2077

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M 1 | 2 43 43 | 9 ^h 12 ^m 29 ^s | 17 ^h 8 ^m 1 ^s | 0 ^h 36 ^m 24 ^s | 24 ^h 14 ^m 16 ^s | 16 ^h 23 ^m 21 ^s | 21 ^h 38 ^m 6 ^s | 19 ^h 52 ^m 19 ^s | 28 ^h 49 ^m 10 ^s | 28 ^h 41 ^m 29 ^s | 28 ^h 41 ^m 29 ^s | 28 ^h 41 ^m 29 ^s | 28 ^h 41 ^m 29 ^s | 28 ^h 41 ^m 29 ^s | 28 ^h 41 ^m 29 ^s |
| T 2 | 2 47 40 | 10 ^h 12 ^m 29 ^s | 1 ^h 46 ^m 1 ^s | 1 ^h 54 ^m 25 ^s | 2 ^h 5 ^m 16 ^s | 21 ^h 51 ^m 7 ^s | 19 ^h 53 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 40 ^m 29 ^s | 28 ^h 40 ^m 29 ^s | 28 ^h 40 ^m 29 ^s | 28 ^h 40 ^m 29 ^s | 28 ^h 40 ^m 29 ^s | 28 ^h 40 ^m 29 ^s | 28 ^h 40 ^m 29 ^s |
| W 3 | 2 51 36 | 11 ^h 12 ^m 31 ^s | 16 ^h 10 ^m 3 ^s | 2 ^h 54 ^m 17 ^s | 3 ^h 22 ^m 22 ^s | 7 ^h 5 ^m 19 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| T 4 | 2 55 33 | 12 ^h 12 ^m 34 ^s | 0 ^h 8 ^m 4 ^s | 4 ^h 24 ^m 26 ^s | 18 ^h 10 ^m 22 ^s | 7 ^h 10 ^m 19 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| F 5 | 2 59 29 | 13 ^h 12 ^m 40 ^s | 13 ^h 38 ^m 5 ^s | 5 ^h 37 ^m 27 ^s | 18 ^h 45 ^m 22 ^s | 7 ^h 15 ^m 19 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| S 6 | 3 3 26 | 14 ^h 12 ^m 48 ^s | 26 ^h 43 ^m 6 ^s | 28 ^h 5 ^m 19 ^s | 22 ^h 44 ^m 7 ^s | 20 ^h 1 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| S 7 | 3 7 22 | 15 ^h 12 ^m 58 ^s | 9 ^h 26 ^m 7 ^s | 28 ^h 48 ^m 19 ^s | 22 ^h 57 ^m 7 ^s | 20 ^h 3 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| M 8 | 3 11 19 | 16 ^h 13 ^m 10 ^s | 21 ^h 48 ^m 9 ^s | 29 ^h 31 ^m 20 ^s | 23 ^h 10 ^m 7 ^s | 20 ^h 5 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| T 9 | 3 15 15 | 17 ^h 13 ^m 24 ^s | 3 ^h 57 ^m 10 ^s | 0 ^h 12 ^m 21 ^s | 23 ^h 24 ^m 7 ^s | 20 ^h 7 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| W10 | 3 19 12 | 18 ^h 13 ^m 40 ^s | 15 ^h 54 ^m 11 ^s | 0 ^h 52 ^m 21 ^s | 23 ^h 37 ^m 7 ^s | 20 ^h 9 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| T 11 | 3 23 9 | 19 ^h 13 ^m 58 ^s | 27 ^h 46 ^m 12 ^s | 1 ^h 31 ^m 22 ^s | 23 ^h 50 ^m 7 ^s | 20 ^h 11 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| F 12 | 3 27 5 | 20 ^h 14 ^m 18 ^s | 9 ^h 36 ^m 13 ^s | 2 ^h 9 ^m 22 ^s | 24 ^h 3 ^m 7 ^s | 20 ^h 13 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| S 13 | 3 31 2 | 21 ^h 14 ^m 40 ^s | 21 ^h 27 ^m 13 ^s | 2 ^h 46 ^m 23 ^s | 24 ^h 17 ^m 7 ^s | 20 ^h 15 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| S 14 | 3 34 58 | 22 ^h 15 ^m 04 ^s | 3 ^h 21 ^m 14 ^s | 3 ^h 21 ^m 24 ^s | 24 ^h 30 ^m 8 ^s | 20 ^h 18 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| M15 | 3 38 55 | 23 ^h 15 ^m 29 ^s | 15 ^h 23 ^m 15 ^s | 3 ^h 55 ^m 24 ^s | 24 ^h 36 ^m 8 ^s | 20 ^h 20 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| T 16 | 3 42 51 | 24 ^h 15 ^m 56 ^s | 27 ^h 32 ^m 15 ^s | 4 ^h 27 ^m 25 ^s | 24 ^h 57 ^m 8 ^s | 20 ^h 22 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| W17 | 3 46 48 | 25 ^h 16 ^m 25 ^s | 9 ^h 52 ^m 16 ^s | 4 ^h 58 ^m 25 ^s | 25 ^h 10 ^m 8 ^s | 20 ^h 24 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| T 18 | 3 50 44 | 26 ^h 16 ^m 55 ^s | 22 ^h 22 ^m 16 ^s | 5 ^h 28 ^m 26 ^s | 26 ^h 20 ^m 8 ^s | 20 ^h 27 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| F 19 | 3 54 41 | 27 ^h 17 ^m 27 ^s | 5 ^h 3 ^m 17 ^s | 5 ^h 56 ^m 26 ^s | 26 ^h 55 ^m 8 ^s | 20 ^h 29 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| S 20 | 3 58 38 | 28 ^h 18 ^m 00 ^s | 18 ^h 1 ^m 17 ^s | 6 ^h 22 ^m 27 ^s | 25 ^h 50 ^m 8 ^s | 20 ^h 32 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| S 21 | 4 2 34 | 29 ^h 18 ^m 34 ^s | 1 ^h 12 ^m 17 ^s | 6 ^h 47 ^m 28 ^s | 26 ^h 3 ^m 8 ^s | 20 ^h 34 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| M22 | 4 6 31 | 0 ^h 19 ^m 10 ^s | 14 ^h 39 ^m 16 ^s | 7 ^h 10 ^m 28 ^s | 26 ^h 16 ^m 8 ^s | 20 ^h 37 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| T 23 | 4 10 27 | 1 ^h 19 ^m 46 ^s | 28 ^h 22 ^m 16 ^s | 7 ^h 30 ^m 29 ^s | 26 ^h 30 ^m 8 ^s | 20 ^h 39 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| W24 | 4 14 24 | 2 ^h 20 ^m 24 ^s | 12 ^h 22 ^m 15 ^s | 7 ^h 49 ^m 29 ^s | 26 ^h 43 ^m 9 ^s | 20 ^h 42 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| T 25 | 4 18 20 | 3 ^h 21 ^m 03 ^s | 26 ^h 38 ^m 15 ^s | 8 ^h 6 ^m 0 ^s | 26 ^h 56 ^m 9 ^s | 20 ^h 45 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| F 26 | 4 22 17 | 4 ^h 21 ^m 43 ^s | 11 ^h 7 ^m 14 ^s | 8 ^h 21 ^m 0 ^s | 27 ^h 9 ^m 9 ^s | 20 ^h 47 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| S 27 | 4 26 13 | 5 ^h 22 ^m 24 ^s | 25 ^h 46 ^m 13 ^s | 8 ^h 34 ^m 1 ^s | 27 ^h 23 ^m 9 ^s | 20 ^h 50 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| S 28 | 4 30 10 | 6 ^h 23 ^m 06 ^s | 10 ^h 8 ^m 29 ^s | 8 ^h 45 ^m 2 ^s | 27 ^h 36 ^m 9 ^s | 20 ^h 53 ^m 28 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s | 28 ^h 48 ^m 10 ^s |
| M29 | 4 34 7 | 7 ^h 23 ^m 49 ^s | 25 ^h 10 ^m 10 ^s | 8 ^h 53 ^m 2 ^s | 27 ^h 49 ^m 9 ^s | 20 ^h 56 ^m 28 | | | | | | | | | |