

SWISS EPHEMERIS for the year 1991 BCE

JANUARY 1991 BCE (-1990) JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ♁ | ♂ | ♁ | ♃ | ♄ |
|------|---------|-----------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|--------|------|
| T 1 | 5 32 36 | 25♌9°52' | 1♏1 | 2°R30 | 17♌44 | 15♌58 | 1♏52 | 18♌2 | 19°R11 | 23♏46 | 17°R51 | 19♌38 | 19♌30 | 15♌45 | n.a. |
| W 2 | 5 36 33 | 26°10'25" | 12°59' | 1♌35 | 18°59' | 16°37' | 2°2' | 18°6' | 19II 9 | 23°46' | 17♌50 | 19°38' | 19°26' | 15°51' | n.a. |
| T 3 | 5 40 29 | 27°10'57" | 24°51' | 0°34' | 20°14' | 17°16' | 2°13' | 18°9' | 19°6' | 23°47' | 17°48' | 19°39' | 19°23' | 15°58' | n.a. |
| F 4 | 5 44 26 | 28°11'27" | 6♌38 | 29♌29 | 21°29' | 17°55' | 2°23' | 18°13' | 19°4' | 23°47' | 17°47' | 19°40' | 19°20' | 16°5' | n.a. |
| S 5 | 5 48 23 | 29°11'55" | 18°25' | 28°22' | 22°44' | 18°34' | 2°34' | 18°17' | 19°1' | 23°47' | 17°46' | 19°R40 | 19°17' | 16°11' | n.a. |
| S 6 | 5 52 19 | 0♌12'21" | 0♌13 | 27°15' | 23°58' | 19°14' | 2°44' | 18°21' | 18°58' | 23°47' | 17°44' | 19°40' | 19°14' | 16°18' | n.a. |
| M 7 | 5 56 16 | 1°12'46" | 12°5 | 26°9' | 25°13' | 19°53' | 2°54' | 18°24' | 18°56' | 23°48' | 17°43' | 19°39' | 19°11' | 16°24' | n.a. |
| T 8 | 6 0 12 | 2°13'09" | 24°2 | 25°6' | 26°28' | 20°32' | 3°4' | 18°28' | 18°53' | 23°48' | 17°41' | 19°38' | 19°7' | 16°31' | n.a. |
| W 9 | 6 4 9 | 3°13'29" | 6♌8 | 24°6' | 27°43' | 21°11' | 3°14' | 18°31' | 18°51' | 23°48' | 17°40' | 19°36' | 19°4' | 16°38' | n.a. |
| T 10 | 6 8 5 | 4°13'47" | 18°23' | 23°12' | 28°58' | 21°50' | 3°24' | 18°34' | 18°48' | 23°48' | 17°38' | 19°33' | 19°1' | 16°44' | n.a. |
| F 11 | 6 12 2 | 5°14'04" | 0♌50 | 22°24' | 0♌13 | 22°29' | 3°34' | 18°37' | 18°46' | 23°R48 | 17°37' | 19°31' | 18°58' | 16°51' | n.a. |
| S 12 | 6 15 58 | 6°14'18" | 13°32' | 21°42' | 1°27' | 23°8' | 3°43' | 18°40' | 18°43' | 23°48' | 17°35' | 19°29' | 18°55' | 16°58' | n.a. |
| S 13 | 6 19 55 | 7°14'29" | 26°31' | 21°8' | 2°42' | 23°47' | 3°53' | 18°44' | 18°41' | 23°48' | 17°34' | 19°28' | 18°52' | 17°4' | n.a. |
| M 14 | 6 23 52 | 8°14'39" | 9♌51 | 20°40' | 3°57' | 24°26' | 4°2' | 18°46' | 18°38' | 23°48' | 17°32' | 19°D28 | 18°48' | 17°11' | n.a. |
| T 15 | 6 27 48 | 9°14'46" | 23°32' | 20°20' | 5°12' | 25°5' | 4°11' | 18°49' | 18°36' | 23°48' | 17°30' | 19°28' | 18°45' | 17°18' | n.a. |
| W 16 | 6 31 45 | 10°14'50" | 7♌36 | 20°6' | 6°26' | 25°44' | 4°21' | 18°52' | 18°34' | 23°47' | 17°29' | 19°30' | 18°42' | 17°24' | n.a. |
| T 17 | 6 35 41 | 11°14'53" | 2♌3 | 20°D 0 | 7°41' | 26°23' | 4°30' | 18°55' | 18°31' | 23°47' | 17°27' | 19°31' | 18°39' | 17°31' | n.a. |
| F 18 | 6 39 38 | 12°14'53" | 6II 49 | 20°0' | 8°56' | 27°2' | 4°38' | 18°57' | 18°29' | 23°47' | 17°26' | 19°32' | 18°36' | 17°38' | n.a. |
| S 19 | 6 43 34 | 13°14'51" | 21°49' | 20°6' | 10°10' | 27°41' | 4°47' | 19°0' | 18°27' | 23°47' | 17°24' | 19°R32 | 18°32' | 17°44' | n.a. |
| S 20 | 6 47 31 | 14°14'47" | 6♌55 | 20°19' | 11°25' | 28°20' | 4°56' | 19°2' | 18°24' | 23°47' | 17°23' | 19°32' | 18°29' | 17°51' | n.a. |
| M 21 | 6 51 28 | 15°14'40" | 21°59' | 20°36' | 12°40' | 28°59' | 5°4' | 19°4' | 18°22' | 23°46' | 17°21' | 19°30' | 18°26' | 17°58' | n.a. |
| T 22 | 6 55 24 | 16°14'31" | 6♌52 | 21°0' | 13°54' | 29°38' | 5°13' | 19°7' | 18°20' | 23°46' | 17°20' | 19°26' | 18°23' | 18°0' | n.a. |
| W 23 | 6 59 21 | 17°14'21" | 21°25' | 21°28' | 15°9' | 0♏17 | 5°21' | 19°9' | 18°18' | 23°46' | 17°18' | 19°22' | 18°20' | 18°11' | n.a. |
| T 24 | 7 3 17 | 18°14'08" | 5♏33 | 22°1' | 16°23' | 0°55' | 5°29' | 19°11' | 18°15' | 23°45' | 17°16' | 19°18' | 18°17' | 18°17' | n.a. |
| F 25 | 7 7 14 | 19°13'53" | 19°13' | 22°38' | 17°38' | 1°34' | 5°37' | 19°13' | 18°13' | 23°45' | 17°15' | 19°14' | 18°13' | 18°24' | n.a. |
| S 26 | 7 11 10 | 20°13'37" | 2♌25 | 23°19' | 18°53' | 2°13' | 5°45' | 19°14' | 18°11' | 23°44' | 17°13' | 19°12' | 18°10' | 18°31' | n.a. |
| S 27 | 7 15 7 | 21°13'18" | 15°12' | 24°4' | 20°7' | 2°52' | 5°53' | 19°16' | 18°9' | 23°44' | 17°12' | 19°10' | 18°7' | 18°37' | n.a. |
| M 28 | 7 19 3 | 22°12'58" | 27°37' | 24°52' | 21°22' | 3°31' | 6°0' | 19°18' | 18°7' | 23°43' | 17°10' | 19°D10 | 18°4' | 18°44' | n.a. |
| T 29 | 7 23 0 | 23°12'35" | 9♏45 | 25°44' | 22°36' | 4°9' | 6°8' | 19°19' | 18°5' | 23°43' | 17°9' | 19°11' | 18°1' | 18°51' | n.a. |
| W 30 | 7 26 57 | 24°12'11" | 21°41' | 26°39' | 23°51' | 4°48' | 6°15' | 19°21' | 18°3' | 23°42' | 17°7' | 19°13' | 17°58' | 18°57' | n.a. |
| T 31 | 7 30 53 | 25♌11'45" | 3♌29 | 27♌36 | 25♌5 | 5♏27 | 6♏22 | 19♌22 | 18II 1 | 23♏41 | 17♌5 | 19♌15 | 17♌54 | 19♌4 | n.a. |

Delta T = 13h22m52s Julian Calendar 1 Jan. 1991 BCE == Greg. Calendar 15 Dec. 1992 BCE
 The year -1990 astronomical counting style corresponds to year 1991 B.C.E historical counting style.

FEBRUARY 1991 BCE (-1990) JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ♁ | ♂ | ♁ | ♃ | ♄ |
|------|---------|-----------|--------|--------|--------|--------|-------|--------|---------|--------|--------|--------|--------|--------|------|
| F 1 | 7 34 50 | 26♌11'17" | 15♌15 | 28♌37 | 26♌20 | 6♏5 | 6♏29 | 19♌23 | 17°R59 | 23°R41 | 17°R 4 | 19°R16 | 17♌51 | 19♌11 | n.a. |
| S 2 | 7 38 46 | 27°10'46" | 27°2' | 29°40' | 27°34' | 6°44' | 6°36' | 19°24' | 17II 57 | 23♏40 | 17♌2 | 19°R15 | 17°48' | 19°17' | n.a. |
| S 3 | 7 42 43 | 28°10'14" | 8♌54 | 0♌45 | 28°49' | 7°22' | 6°43' | 19°26' | 17°55' | 23°39' | 17°1 | 19°13' | 17°45' | 19°24' | n.a. |
| M 4 | 7 46 39 | 29°9'40" | 20°53' | 1°53' | 0♌3 | 8°1' | 6°50' | 19°26' | 17°54' | 23°39' | 16°59' | 19°9' | 17°42' | 19°31' | n.a. |
| T 5 | 7 50 36 | 0♌9'03" | 3♌2 | 3°3' | 1°18' | 8°39' | 6°56' | 19°27' | 17°52' | 23°38' | 16°58' | 19°4' | 17°38' | 19°37' | n.a. |
| W 6 | 7 54 32 | 1°8'24" | 15°21' | 4°15' | 2°32' | 9°18' | 7°2' | 19°28' | 17°50' | 23°37' | 16°56' | 18°56' | 17°35' | 19°44' | n.a. |
| T 7 | 7 58 29 | 2°7'43" | 27°52' | 5°29' | 3°46' | 9°56' | 7°8' | 19°29' | 17°48' | 23°36' | 16°55' | 18°48' | 17°32' | 19°51' | n.a. |
| F 8 | 8 2 26 | 3°6'59" | 10♌35 | 6°45' | 5°1' | 10°35' | 7°14' | 19°29' | 17°47' | 23°35' | 16°53' | 18°41' | 17°29' | 19°57' | n.a. |
| S 9 | 8 6 22 | 4°6'13" | 23°31' | 8°3' | 6°15' | 11°13' | 7°20' | 19°30' | 17°45' | 23°34' | 16°52' | 18°34' | 17°26' | 20°4' | n.a. |
| S 10 | 8 10 19 | 5°5'25" | 6♌40 | 9°23' | 7°29' | 11°51' | 7°26' | 19°30' | 17°44' | 23°33' | 16°50' | 18°28' | 17°23' | 20°10' | n.a. |
| M 11 | 8 14 15 | 6°4'34" | 20°3 | 10°44' | 8°44' | 12°29' | 7°31' | 19°30' | 17°42' | 23°33' | 16°49' | 18°25' | 17°19' | 20°17' | n.a. |
| T 12 | 8 18 12 | 7°3'40" | 3♌41 | 12°7' | 9°58' | 13°8' | 7°37' | 19°30' | 17°41' | 23°32' | 16°47' | 18°D24 | 17°16' | 20°24' | n.a. |
| W 13 | 8 22 8 | 8°2'44" | 17°35' | 13°32' | 11°12' | 13°46' | 7°42' | 19°R31 | 17°39' | 23°31' | 16°46' | 18°24' | 17°13' | 20°30' | n.a. |
| T 14 | 8 26 5 | 9°1'46" | 1II 45 | 14°59' | 12°27' | 14°24' | 7°47' | 19°30' | 17°38' | 23°30' | 16°44' | 18°25' | 17°10' | 20°37' | n.a. |
| F 15 | 8 30 1 | 10°0'45" | 16°10' | 16°26' | 13°41' | 15°2' | 7°52' | 19°30' | 17°37' | 23°29' | 16°43' | 18°R26 | 17°7' | 20°44' | n.a. |
| S 16 | 8 33 58 | 10°59'42" | 0♌47 | 17°56' | 14°55' | 15°40' | 7°56' | 19°30' | 17°35' | 23°27' | 16°42' | 18°25' | 17°4' | 20°50' | n.a. |
| S 17 | 8 37 55 | 11°58'36" | 15°32' | 19°27' | 16°9' | 16°18' | 8°1' | 19°30' | 17°34' | 23°26' | 16°40' | 18°23' | 17°0' | 20°57' | n.a. |
| M 18 | 8 41 51 | 12°57'28" | 0♏18 | 21°0' | 17°24' | 16°56' | 8°5' | 19°29' | 17°33' | 23°25' | 16°39' | 18°17' | 16°57' | 21°4' | n.a. |
| T 19 | 8 45 48 | 13°56'18" | 14°58' | 22°34' | 18°38' | 17°34' | 8°9' | 19°29' | 17°32' | 23°24' | 16°37' | 18°10' | 16°54' | 21°10' | n.a. |
| W 20 | 8 49 44 | 14°55'05" | 29°24' | 24°9' | 19°52' | 18°11' | 8°13' | 19°28' | 17°31' | 23°23' | 16°36' | 18°1' | 16°51' | 21°17' | n.a. |
| T 21 | 8 53 41 | 15°53'50" | 13♏31 | 25°46' | 21°6' | 18°49' | 8°17' | 19°28' | 17°30' | 23°22' | 16°35' | 17°52' | 16°48' | 21°24' | n.a. |
| F 22 | 8 57 37 | 16°52'34" | 27°13' | 27°25' | 22°20' | 19°27' | 8°21' | 19°27' | 17°29' | 23°21' | 16°33' | 17°43' | 16°44' | 21°30' | n.a. |
| S 23 | 9 1 34 | 17°51'15" | 10♌29 | 29°5' | 23°34' | 20°4' | 8°24' | 19°26' | 17°28' | 23°19' | 16°32' | 17°36' | 16°41' | 21°37' | n.a. |
| S 24 | 9 5 30 | 18°49'54" | 23°19' | 0♌47 | 24°49' | 20°42' | 8°27' | 19°25' | 17°27' | 23°18' | 16°31' | 17°30' | 16°38' | 21°43' | n.a. |
| M 25 | 9 9 27 | 19°48'32" | 5♏48 | 2°30' | 26°3' | 21°19' | 8°31' | 19°24' | 17°26' | 23°17' | 16°30' | 17°27' | 16°35' | 21°50' | n.a. |
| T 26 | 9 13 24 | 20°47'07" | 17°58' | 4°15' | 27°17' | 21°57' | 8°34' | 19°23' | 17°25' | 23°16' | 16°28' | 17°D26 | 16°32' | 21°57' | n.a. |
| W 27 | 9 17 20 | 21°45'41" | 29°55' | 6°1' | 28°31' | 22°34' | 8°36' | 19°21' | 17°25' | 23°14' | 16°27' | 17°26' | 16°29' | 22°3' | n.a. |
| T 28 | 9 21 17 | 22♌44'13" | 11♌44 | 7♌49 | 29♌45 | 23♏12 | 8♏39 | 19♌20 | 17II 24 | 23♏13 | 16♌26 | 17°R27 | 16♌25 | 22♌10 | n.a. |

Delta T = 13h22m49s Julian Calendar created from Swiss Ephemeris, Copyright Astrodiens AG [6.2.2007]

SWISS EPHEMERIS for the year 1991 BCE

MARCH 1991 BCE (-1990) JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ♁ | ♂ | ♆ | ♅ | | |
|------|----------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|---------------------|-----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------|
| F 1 | 9 25 13 | 23 ⁴² 44 | 23 ³¹ 31 | 9 ³⁸ 38 | 0 ⁵⁹ 59 | 23 ⁴⁹ 49 | 8 ⁴¹ 41 | 19 ¹⁸ 18 | 17 ²³ 23 | 23 ¹² 12 | 16 ²⁵ 25 | 17 ²⁷ 27 | 16 ²² 22 | 22 ¹⁷ 17 | n.a. | |
| S 2 | 9 29 10 | 24 ⁴¹ 12 | 5 ²⁰ 20 | 11 ²⁹ 29 | 2 ¹³ 13 | 24 ²⁶ 26 | 8 ⁴³ 43 | 19 ¹⁷ 17 | 17 ²³ 23 | 23 ¹⁰ 10 | 16 ²⁴ 24 | 17 ²⁵ 25 | 16 ¹⁹ 19 | 22 ²³ 23 | n.a. | |
| S 3 | 9 33 6 | 25 ³⁹ 39 | 17 ¹⁷ 17 | 13 ²² 22 | 3 ²⁷ 27 | 25 ³ 3 | 8 ⁴⁵ 45 | 19 ¹⁵ 15 | 17 ²² 22 | 23 ⁹ 9 | 16 ²² 22 | 17 ²¹ 21 | 16 ¹⁶ 16 | 22 ³⁰ 30 | n.a. | |
| M 4 | 9 37 3 | 26 ³⁸ 03 | 29 ²⁴ 24 | 15 ¹⁶ 16 | 4 ⁴¹ 41 | 25 ⁴⁰ 40 | 8 ⁴⁷ 47 | 19 ¹³ 13 | 17 ²² 22 | 23 ⁷ 7 | 16 ²¹ 21 | 17 ¹⁵ 15 | 16 ¹³ 13 | 22 ³⁷ 37 | n.a. | |
| T 5 | 9 40 59 | 27 ³⁶ 26 | 11 ⁴⁴ 44 | 17 ¹² 12 | 5 ⁵⁵ 55 | 26 ¹⁷ 17 | 8 ⁴⁹ 49 | 19 ¹² 12 | 17 ²² 22 | 23 ⁶ 6 | 16 ²⁰ 20 | 17 ⁶ 6 | 16 ⁹ 9 | 22 ⁴³ 43 | n.a. | |
| W 6 | 9 44 56 | 28 ³⁴ 47 | 24 ¹⁹ 19 | 19 ⁹ 9 | 7 ⁹ 9 | 26 ⁵⁴ 54 | 8 ⁵⁰ 50 | 19 ¹⁰ 10 | 17 ²¹ 21 | 23 ⁵ 5 | 16 ¹⁹ 19 | 16 ⁵⁵ 55 | 16 ⁶ 6 | 22 ⁵⁰ 50 | n.a. | |
| T 7 | 9 48 53 | 29 ³³ 06 | 7 ³¹ 31 | 7 ³¹ 31 | 21 ⁷ 7 | 8 ²³ 23 | 27 ³¹ 31 | 8 ⁵² 52 | 19 ⁸ 8 | 17 ²¹ 21 | 23 ³ 3 | 16 ¹⁸ 18 | 16 ⁴² 42 | 16 ³ 3 | 22 ⁵⁷ 57 | n.a. |
| F 8 | 9 52 49 | 0 ³¹ 22 | 20 ¹³ 13 | 23 ⁸ 8 | 9 ³⁷ 37 | 28 ⁷ 7 | 8 ⁵³ 53 | 19 ⁶ 6 | 17 ²¹ 21 | 23 ² 2 | 16 ¹⁷ 17 | 16 ³⁰ 30 | 16 ⁰ 0 | 23 ³ 3 | n.a. | |
| S 9 | 9 56 46 | 1 ²⁹ 37 | 3 ³⁰ 30 | 25 ⁹ 9 | 10 ⁵¹ 51 | 28 ⁴⁴ 44 | 8 ⁵⁴ 54 | 19 ³ 3 | 17 ²⁰ 20 | 23 ⁰ 0 | 16 ¹⁶ 16 | 16 ¹⁹ 19 | 15 ⁵⁷ 57 | 23 ¹⁰ 10 | n.a. | |
| S 10 | 10 0 42 | 2 ²⁷ 50 | 16 ⁵⁸ 58 | 27 ¹² 12 | 12 ⁴ 4 | 29 ²⁰ 20 | 8 ⁵⁴ 54 | 19 ¹ 1 | 17 ²⁰ 20 | 22 ⁵⁹ 59 | 16 ¹⁵ 15 | 16 ¹¹ 11 | 15 ⁵⁴ 54 | 23 ¹⁷ 17 | n.a. | |
| M 11 | 10 4 39 | 3 ²⁶ 00 | 0 ³⁷ 37 | 29 ¹⁶ 16 | 13 ¹⁸ 18 | 29 ⁵⁷ 57 | 8 ⁵⁵ 55 | 18 ⁵⁹ 59 | 17 ²⁰ 20 | 22 ⁵⁷ 57 | 16 ¹⁴ 14 | 16 ⁴ 4 | 15 ⁵⁰ 50 | 23 ²³ 23 | n.a. | |
| T 12 | 10 8 35 | 4 ²⁴ 08 | 14 ²⁴ 24 | 1 ³² 32 | 14 ³² 32 | 0 ³³ 33 | 8 ⁵⁵ 55 | 18 ⁵⁶ 56 | 17 ^{D20} D20 | 22 ⁵⁶ 56 | 16 ¹³ 13 | 16 ¹ 1 | 15 ⁴⁷ 47 | 23 ³⁰ 30 | n.a. | |
| W 13 | 10 12 32 | 5 ²² 15 | 28 ¹⁹ 19 | 3 ²⁸ 28 | 15 ⁴⁶ 46 | 1 ⁹ 9 | 8 ^{R55} R55 | 18 ⁵⁴ 54 | 17 ²⁰ 20 | 22 ⁵⁴ 54 | 16 ¹² 12 | 16 ⁰ 0 | 15 ⁴⁴ 44 | 23 ³⁶ 36 | n.a. | |
| T 14 | 10 16 28 | 6 ²⁰ 19 | 12 ²³ 23 | 5 ³⁶ 36 | 17 ⁰ 0 | 1 ⁴⁵ 45 | 8 ⁵⁵ 55 | 18 ⁵¹ 51 | 17 ²⁰ 20 | 22 ⁵³ 53 | 16 ¹¹ 11 | 16 ⁰ 0 | 15 ⁴¹ 41 | 23 ⁴³ 43 | n.a. | |
| F 15 | 10 20 25 | 7 ¹⁸ 21 | 26 ³³ 33 | 7 ⁴⁴ 44 | 18 ¹⁴ 14 | 2 ²¹ 21 | 8 ⁵⁵ 55 | 18 ⁴⁹ 49 | 17 ²⁰ 20 | 22 ⁵¹ 51 | 16 ¹⁰ 10 | 16 ⁰ 0 | 15 ³⁸ 38 | 23 ⁵⁰ 50 | n.a. | |
| S 16 | 10 24 22 | 8 ¹⁶ 21 | 10 ⁵⁰ 50 | 9 ⁵³ 53 | 19 ²⁷ 27 | 2 ⁵⁷ 57 | 8 ⁵⁵ 55 | 18 ⁴⁶ 46 | 17 ²¹ 21 | 22 ⁵⁰ 50 | 16 ¹⁰ 10 | 15 ⁵⁸ 58 | 15 ³⁵ 35 | 23 ⁵⁶ 56 | n.a. | |
| S 17 | 10 28 18 | 9 ¹⁴ 18 | 25 ¹¹ 11 | 12 ² 2 | 20 ⁴¹ 41 | 3 ³³ 33 | 8 ⁵⁴ 54 | 18 ⁴³ 43 | 17 ²¹ 21 | 22 ⁴⁸ 48 | 16 ⁹ 9 | 15 ⁵⁴ 54 | 15 ³¹ 31 | 24 ³ 3 | n.a. | |
| M 18 | 10 32 15 | 10 ¹² 14 | 9 ³² 32 | 14 ¹¹ 11 | 21 ⁵⁵ 55 | 4 ⁸ 8 | 8 ⁵³ 53 | 18 ⁴⁰ 40 | 17 ²¹ 21 | 22 ⁴⁶ 46 | 16 ⁸ 8 | 15 ⁴⁷ 47 | 15 ²⁸ 28 | 24 ¹⁰ 10 | n.a. | |
| T 19 | 10 36 11 | 11 ¹⁰ 08 | 23 ⁴⁸ 48 | 16 ²⁰ 20 | 23 ⁹ 9 | 4 ⁴⁴ 44 | 8 ⁵² 52 | 18 ³⁷ 37 | 17 ²¹ 21 | 22 ⁴⁵ 45 | 16 ⁷ 7 | 15 ³⁸ 38 | 15 ²⁵ 25 | 24 ¹⁶ 16 | n.a. | |
| W 20 | 10 40 8 | 12 ⁸ 00 | 7 ⁵⁴ 54 | 18 ²⁸ 28 | 24 ²² 22 | 5 ¹⁹ 19 | 8 ⁵¹ 51 | 18 ³⁴ 34 | 17 ²² 22 | 22 ⁴³ 43 | 16 ⁶ 6 | 15 ²⁷ 27 | 15 ²² 22 | 24 ²³ 23 | n.a. | |
| T 21 | 10 44 4 | 13 ⁵ 50 | 21 ⁴⁴ 44 | 20 ³⁶ 36 | 25 ³⁶ 36 | 5 ⁵⁵ 55 | 8 ⁵⁰ 50 | 18 ³¹ 31 | 17 ²² 22 | 22 ⁴² 42 | 16 ⁶ 6 | 15 ¹⁴ 14 | 15 ¹⁹ 19 | 24 ³⁰ 30 | n.a. | |
| F 22 | 10 48 1 | 14 ³ 38 | 5 ¹⁶ 16 | 22 ⁴² 42 | 26 ⁴⁹ 49 | 6 ³⁰ 30 | 8 ⁴⁸ 48 | 18 ²⁸ 28 | 17 ²³ 23 | 22 ⁴⁰ 40 | 16 ⁵ 5 | 15 ³ 3 | 15 ¹⁵ 15 | 24 ³⁶ 36 | n.a. | |
| S 23 | 10 51 57 | 15 ¹ 25 | 18 ²⁶ 26 | 24 ⁴⁷ 47 | 28 ³ 3 | 7 ⁵ 5 | 8 ⁴⁷ 47 | 18 ²⁵ 25 | 17 ²³ 23 | 22 ³⁸ 38 | 16 ⁴ 4 | 14 ⁵³ 53 | 15 ¹² 12 | 24 ⁴³ 43 | n.a. | |
| S 24 | 10 55 54 | 15 ⁵⁹ 11 | 1 ¹⁴ 14 | 26 ⁵¹ 51 | 29 ¹⁷ 17 | 7 ⁴⁰ 40 | 8 ⁴⁵ 45 | 18 ²² 22 | 17 ²⁴ 24 | 22 ³⁷ 37 | 16 ⁴ 4 | 14 ⁴⁵ 45 | 15 ⁹ 9 | 24 ⁵⁰ 50 | n.a. | |
| M 25 | 10 59 50 | 16 ⁵⁶ 55 | 13 ⁴¹ 41 | 28 ⁵² 52 | 0 ³⁰ 30 | 8 ¹⁵ 15 | 8 ⁴³ 43 | 18 ¹⁸ 18 | 17 ²⁵ 25 | 22 ³⁵ 35 | 16 ³ 3 | 14 ⁴⁰ 40 | 15 ⁶ 6 | 24 ⁵⁶ 56 | n.a. | |
| T 26 | 11 3 47 | 17 ⁵⁴ 38 | 25 ⁵² 52 | 0 ⁵² 52 | 1 ⁴⁴ 44 | 8 ⁴⁹ 49 | 8 ⁴⁰ 40 | 18 ¹⁵ 15 | 17 ²⁵ 25 | 22 ³⁴ 34 | 16 ³ 3 | 14 ³⁷ 37 | 15 ³ 3 | 25 ³ 3 | n.a. | |
| W 27 | 11 7 44 | 18 ⁵² 19 | 7 ⁵⁰ 50 | 2 ⁴⁹ 49 | 2 ⁵⁷ 57 | 9 ²⁴ 24 | 8 ³⁸ 38 | 18 ¹¹ 11 | 17 ²⁶ 26 | 22 ³² 32 | 16 ² 2 | 14 ³⁶ 36 | 15 ⁰ 0 | 25 ¹⁰ 10 | n.a. | |
| T 28 | 11 11 40 | 19 ⁴⁹ 59 | 19 ⁴⁰ 40 | 4 ⁴³ 43 | 4 ¹¹ 11 | 9 ⁵⁸ 58 | 8 ³⁵ 35 | 18 ⁸ 8 | 17 ²⁷ 27 | 22 ³⁰ 30 | 16 ² 2 | 14 ³⁶ 36 | 14 ⁵⁶ 56 | 25 ¹⁶ 16 | n.a. | |
| F 29 | 11 15 37 | 20 ⁴⁷ 38 | 1 ³² 32 | 6 ³⁵ 35 | 5 ²⁴ 24 | 10 ³² 32 | 8 ³² 32 | 18 ⁴ 4 | 17 ²⁸ 28 | 22 ²⁹ 29 | 16 ¹ 1 | 14 ³⁶ 36 | 14 ⁵³ 53 | 25 ²³ 23 | n.a. | |
| S 30 | 11 19 33 | 21 ⁴⁵ 16 | 13 ²¹ 21 | 8 ²³ 23 | 6 ³⁸ 38 | 11 ⁶ 6 | 8 ³⁰ 30 | 18 ¹ 1 | 17 ²⁹ 29 | 22 ²⁷ 27 | 16 ¹ 1 | 14 ³⁴ 34 | 14 ⁵⁰ 50 | 25 ²⁹ 29 | n.a. | |
| S 31 | 11 23 30 | 22 ⁴² 52 | 25 ²¹ 21 | 10 ⁹ 9 | 7 ⁵¹ 51 | 11 ⁴⁰ 40 | 8 ²⁶ 26 | 17 ⁵⁷ 57 | 17 ³⁰ 30 | 22 ²⁶ 26 | 16 ⁰ 0 | 14 ³¹ 31 | 14 ⁴⁷ 47 | 25 ³⁶ 36 | n.a. | |

Delta T = 13h22m47s Julian Calendar 1 March 1991 BCE == Greg. Calendar 12 Feb. 1991 BCE
 The year -1990 astronomical counting style corresponds to year 1991 B.C.E historical counting style.

APRIL 1991 BCE (-1990) JC

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ♁ | ♂ | ♆ | ♅ | |
|------|----------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|-----------------------|---------------------|-----------------------|-----------------------|-----------------------|---------------------|---------------------|------|
| M 1 | 11 27 26 | 23 ⁴⁰ 28 | 7 ³⁴ 34 | 11 ⁵² 52 | 9 ⁵ 5 | 12 ¹⁴ 14 | 8 ^{R23} R23 | 17 ^{R53} R53 | 17 ³¹ 31 | 22 ^{R24} R24 | 16 ^{R0} R0 | 14 ^{R25} R25 | 14 ⁴⁴ 44 | 25 ⁴³ 43 | n.a. |
| T 2 | 11 31 23 | 24 ³⁸ 02 | 20 ³ 3 | 13 ³¹ 31 | 10 ¹⁸ 18 | 12 ⁴⁷ 47 | 8 ²⁰ 20 | 17 ⁴⁹ 49 | 17 ³² 32 | 22 ²² 22 | 15 ⁵⁹ 59 | 14 ¹⁶ 16 | 14 ⁴⁰ 40 | 25 ⁴⁹ 49 | n.a. |
| W 3 | 11 35 19 | 25 ³⁵ 34 | 2 ⁵¹ 51 | 15 ⁷ 7 | 11 ³² 32 | 13 ²¹ 21 | 8 ¹⁶ 16 | 17 ⁴⁵ 45 | 17 ³³ 33 | 22 ²¹ 21 | 15 ⁵⁹ 59 | 14 ⁵ 5 | 14 ³⁷ 37 | 25 ⁵⁶ 56 | n.a. |
| T 4 | 11 39 16 | 26 ³³ 06 | 15 ⁵⁸ 58 | 16 ⁴⁰ 40 | 12 ⁴⁵ 45 | 13 ⁵⁴ 54 | 8 ¹² 12 | 17 ⁴² 42 | 17 ³⁴ 34 | 22 ¹⁹ 19 | 15 ⁵⁹ 59 | 13 ⁵³ 53 | 14 ³⁴ 34 | 26 ³ 3 | n.a. |
| F 5 | 11 43 13 | 27 ³⁰ 36 | 29 ²³ 23 | 18 ⁹ 9 | 13 ⁵⁸ 58 | 14 ²⁷ 27 | 8 ⁸ 8 | 17 ³⁸ 38 | 17 ³⁵ 35 | 22 ¹⁷ 17 | 15 ⁵⁸ 58 | 13 ⁴¹ 41 | 14 ³¹ 31 | 26 ⁹ 9 | n.a. |
| S 6 | 11 47 9 | 28 ²⁸ 05 | 13 ³⁰ 30 | 19 ³⁵ 35 | 15 ¹² 12 | 15 ⁰ 0 | 8 ⁴ 4 | 17 ³⁴ 34 | 17 ³⁷ 37 | 22 ¹⁶ 16 | 15 ⁵⁸ 58 | 13 ³⁰ 30 | 14 ²⁸ 28 | 26 ¹⁶ 16 | n.a. |
| S 7 | 11 51 6 | 29 ²⁵ 33 | 26 ⁵⁷ 57 | 20 ⁵⁸ 58 | 16 ²⁵ 25 | 15 ³² 32 | 7 ⁵⁹ 59 | 17 ³⁰ 30 | 17 ³⁸ 38 | 22 ¹⁴ 14 | 15 ⁵⁸ 58 | 13 ²² 22 | 14 ²⁵ 25 | 26 ²³ 23 | n.a. |
| M 8 | 11 55 2 | 0 ²² 59 | 10 ⁵⁸ 58 | 22 ¹⁷ 17 | 17 ³⁹ 39 | 16 ⁵ 5 | 7 ⁵⁵ 55 | 17 ²⁶ 26 | 17 ³⁹ 39 | 22 ¹³ 13 | 15 ⁵⁸ 58 | 13 ¹⁶ 16 | 14 ²¹ 21 | 26 ²⁹ 29 | n.a. |
| T 9 | 11 58 59 | 1 ²⁰ 24 | 25 ⁴ 4 | 23 ³² 32 | 18 ⁵² 52 | 16 ³⁷ 37 | 7 ⁵⁰ 50 | 17 ²¹ 21 | 17 ⁴¹ 41 | 22 ¹¹ 11 | 15 ⁵⁸ 58 | 13 ¹² 12 | 14 ¹⁸ 18 | 26 ³⁶ 36 | n.a. |
| W 10 | 12 2 55 | 2 ¹⁷ 47 | 9 ¹³ 13 | 24 ⁴⁴ 44 | 20 ⁵ 5 | 17 ⁹ 9 | 7 ⁴⁵ 45 | 17 ¹⁷ 17 | 17 ⁴² 42 | 22 ⁹ 9 | 15 ⁵⁷ 57 | 13 ^{D11} D11 | 14 ¹⁵ 15 | 26 ⁴³ 43 | n.a. |
| T 11 | 12 6 52 | 3 ¹⁵ 10 | 23 ²² 22 | 25 ⁵² 52 | 21 ¹⁸ 18 | 17 ⁴⁰ 40 | 7 ⁴⁰ 40 | 17 ¹³ 13 | 17 ⁴⁴ 44 | 22 ⁸ 8 | 15 ⁵⁷ 57 | 13 ¹¹ 11 | 14 ¹² 12 | 26 ⁴⁹ 49 | n.a. |
| F 12 | 12 10 48 | 4 ¹² 30 | 7 ³⁰ 30 | 26 ⁵⁶ 56 | 22 ³² 32 | 18 ¹² 12 | 7 ³⁵ 35 | 17 ⁹ 9 | 17 ⁴⁵ 45 | 22 ⁶ 6 | 15 ⁵⁷ 57 | 13 ^{R11} R11 | 14 ⁹ 9 | 26 ⁵⁶ 56 | n.a. |
| S 13 | 12 14 45 | 5 ⁹ 50 | 21 ³⁶ 36 | 27 ⁵⁷ 57 | 23 ⁴⁵ 45 | 18 ⁴³ 43 | 7 ³⁰ 30 | 17 ⁵ 5 | 17 ⁴⁷ 47 | 22 ⁵ 5 | 15 ⁵⁷ 57 | 13 ¹⁰ 10 | 14 ⁶ 6 | 27 ³ 3 | n.a. |
| S 14 | 12 18 42 | 6 ⁷ 08 | 5 ³⁹ 39 | 28 ⁵⁴ 54 | 24 ⁵⁸ 58 | 19 ¹⁴ 14 | 7 ²⁵ 25 | 17 ⁰ 0 | 17 ⁴⁹ 49 | 22 ³ 3 | 15 ^{D57} D57 | 13 ⁷ 7 | 14 ² 2 | 27 ⁹ 9 | n.a. |
| M 15 | 12 22 38 | 7 ⁴ 24 | 19 ³⁷ 37 | 29 ⁴⁶ 46 | 26 ¹¹ 11 | 19 ⁴⁵ 45 | 7 ¹⁹ 19 | 16 ⁵⁶ 56 | 17 ⁵¹ 51 | 22 ² 2 | 15 ⁵⁷ 57 | 13 ² 2 | 13 ⁵⁹ 59 | 27 ¹⁶ 16 | n.a. |
| T 16 | 12 26 35 | 8 ¹ 39 | 3 ²⁷ 27 | 0 ³⁵ 35 | 27 ²⁴ 24 | 20 ¹⁵ 15 | 7 ¹³ 13 | 16 ⁵² 52 | 17 ⁵² 52 | 22 ⁰ 0 | 15 ⁵⁷ 57 | 12 ⁵⁴ 54 | 13 ⁵⁶ 56 | 27 ²³ 23 | n.a. |
| W 17 | 12 30 31 | 8 ⁵⁸ 54 | 17 ⁸ 8 | 1 ²⁰ 20 | 28 ³⁷ 37 | 20 ⁴⁶ 46 | 7 ⁸ 8 | 16 ⁴⁸ 48 | 17 ⁵⁴ 5 | | | | | | |

SWISS EPHEMERIS for the year 1991 BCE

MAY 1991 BCE (-1990) JC

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| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ♁ | ♂ | ♆ | ♅ | |
|------|----------|----------|--------|--------|---------|-------|-------|--------|---------|--------|-------|--------|-------|-------|------|
| W 1 | 13 25 43 | 22°19'00 | 11♋ 1 | 4°R 2 | 15♌39 | 27♍19 | 5°R35 | 15°R47 | 18♎24 | 21°R38 | 16♏ 2 | 11°R48 | 13♐ 8 | 29♑ 2 | n.a. |
| T 2 | 13 29 39 | 23°16'06 | 24°19 | 3♌42 | 16°52 | 27°44 | 5♎28 | 15♏42 | 18°27 | 21♐37 | 16° 2 | 11♑41 | 13° 5 | 29° 9 | n.a. |
| F 3 | 13 33 36 | 24°13'12 | 7°Y59 | 3°18 | 18° 4 | 28° 9 | 5°20 | 15°38 | 18°29 | 21°36 | 16° 3 | 11°33 | 13° 2 | 29°16 | n.a. |
| S 4 | 13 37 33 | 25°10'18 | 21°59 | 2°51 | 19°17 | 28°34 | 5°13 | 15°34 | 18°32 | 21°34 | 16° 3 | 11°26 | 12°59 | 29°22 | n.a. |
| S 5 | 13 41 29 | 26° 7'23 | 6♌15 | 2°22 | 20°30 | 28°58 | 5° 5 | 15°29 | 18°34 | 21°33 | 16° 4 | 11°20 | 12°56 | 29°29 | n.a. |
| M 6 | 13 45 26 | 27° 4'28 | 20°41 | 1°50 | 21°43 | 29°22 | 4°58 | 15°25 | 18°37 | 21°32 | 16° 5 | 11°16 | 12°52 | 29°36 | n.a. |
| T 7 | 13 49 22 | 28° 1'32 | 5♎12 | 1°17 | 22°55 | 29°46 | 4°50 | 15°21 | 18°40 | 21°31 | 16° 5 | 11°D15 | 12°49 | 29°42 | n.a. |
| W 8 | 13 53 19 | 28°58'36 | 19°42 | 0°43 | 24° 8 | 0♏ 9 | 4°43 | 15°17 | 18°42 | 21°29 | 16° 6 | 11°15 | 12°46 | 29°49 | n.a. |
| T 9 | 13 57 15 | 29°55'40 | 4♏ 7 | 0° 8 | 25°21 | 0°31 | 4°35 | 15°12 | 18°45 | 21°28 | 16° 7 | 11°16 | 12°43 | 29°55 | n.a. |
| F 10 | 14 1 12 | 0♌52'43 | 18°24 | 29°Y34 | 26°33 | 0°53 | 4°28 | 15° 8 | 18°48 | 21°27 | 16° 8 | 11°17 | 12°40 | 0♏ 2 | n.a. |
| S 11 | 14 5 8 | 1°49'46 | 2♎31 | 29° 0 | 27°46 | 1°15 | 4°20 | 15° 4 | 18°51 | 21°26 | 16° 8 | 11°R18 | 12°37 | 0° 9 | n.a. |
| S 12 | 14 9 5 | 2°46'48 | 16°26 | 28°27 | 28°58 | 1°36 | 4°12 | 15° 0 | 18°53 | 21°25 | 16° 9 | 11°17 | 12°33 | 0°15 | n.a. |
| M13 | 14 13 2 | 3°43'50 | 0♎ 9 | 27°56 | 0♎11 | 1°56 | 4° 5 | 14°56 | 18°56 | 21°24 | 16°10 | 11°14 | 12°30 | 0°22 | n.a. |
| T 14 | 14 16 58 | 4°40'51 | 13°39 | 27°28 | 1°23 | 2°16 | 3°57 | 14°52 | 18°59 | 21°22 | 16°11 | 11°10 | 12°27 | 0°29 | n.a. |
| W15 | 14 20 55 | 5°37'52 | 26°56 | 27° 2 | 2°36 | 2°36 | 3°49 | 14°48 | 19° 2 | 21°21 | 16°12 | 11° 5 | 12°24 | 0°35 | n.a. |
| T 16 | 14 24 51 | 6°34'53 | 9♏59 | 26°40 | 3°48 | 2°55 | 3°42 | 14°44 | 19° 5 | 21°20 | 16°13 | 11° 0 | 12°21 | 0°42 | n.a. |
| F 17 | 14 28 48 | 7°31'54 | 22°49 | 26°22 | 5° 1 | 3°14 | 3°34 | 14°40 | 19° 8 | 21°19 | 16°14 | 10°54 | 12°17 | 0°49 | n.a. |
| S 18 | 14 32 44 | 8°28'55 | 5♎25 | 26° 7 | 6°13 | 3°32 | 3°26 | 14°36 | 19°11 | 21°18 | 16°15 | 10°50 | 12°14 | 0°55 | n.a. |
| S 19 | 14 36 41 | 9°25'56 | 17°48 | 25°57 | 7°25 | 3°49 | 3°19 | 14°33 | 19°14 | 21°17 | 16°16 | 10°46 | 12°11 | 1° 2 | n.a. |
| M20 | 14 40 37 | 10°22'58 | 29°59 | 25°52 | 8°38 | 4° 6 | 3°11 | 14°29 | 19°17 | 21°17 | 16°17 | 10°44 | 12° 8 | 1° 9 | n.a. |
| T 21 | 14 44 34 | 11°20'00 | 12♌ 0 | 25°D51 | 9°50 | 4°22 | 3° 4 | 14°25 | 19°20 | 21°16 | 16°18 | 10°D44 | 12° 5 | 1°15 | n.a. |
| W22 | 14 48 31 | 12°17'02 | 23°53 | 25°56 | 11° 2 | 4°38 | 2°56 | 14°22 | 19°23 | 21°15 | 16°19 | 10°45 | 12° 2 | 1°22 | n.a. |
| T 23 | 14 52 27 | 13°14'04 | 5♏42 | 26° 5 | 12°14 | 4°53 | 2°49 | 14°18 | 19°27 | 21°14 | 16°20 | 10°46 | 11°58 | 1°29 | n.a. |
| F 24 | 14 56 24 | 14°11'07 | 17°30 | 26°20 | 13°27 | 5° 7 | 2°41 | 14°15 | 19°30 | 21°13 | 16°21 | 10°48 | 11°55 | 1°35 | n.a. |
| S 25 | 15 0 20 | 15° 8'11 | 29°23 | 26°39 | 14°39 | 5°21 | 2°34 | 14°11 | 19°33 | 21°12 | 16°22 | 10°49 | 11°52 | 1°42 | n.a. |
| S 26 | 15 4 17 | 16° 5'15 | 11♏24 | 27° 4 | 15°51 | 5°34 | 2°27 | 14° 8 | 19°36 | 21°11 | 16°24 | 10°R50 | 11°49 | 1°49 | n.a. |
| M27 | 15 8 13 | 17° 2'20 | 23°39 | 27°34 | 17° 3 | 5°46 | 2°19 | 14° 4 | 19°39 | 21°11 | 16°25 | 10°50 | 11°46 | 1°55 | n.a. |
| T 28 | 15 12 10 | 17°59'25 | 6♋12 | 28° 9 | 18°15 | 5°58 | 2°12 | 14° 1 | 19°43 | 21°10 | 16°26 | 10°49 | 11°43 | 2° 2 | n.a. |
| W29 | 15 16 6 | 18°56'31 | 19° 7 | 28°49 | 19°27 | 6° 9 | 2° 5 | 13°58 | 19°46 | 21° 9 | 16°27 | 10°47 | 11°39 | 2° 9 | n.a. |
| T 30 | 15 20 3 | 19°53'38 | 2°Y27 | 29°35 | 20°39 | 6°19 | 1°58 | 13°55 | 19°49 | 21° 9 | 16°29 | 10°44 | 11°36 | 2°15 | n.a. |
| F 31 | 15 24 0 | 20♌50'46 | 16°Y12 | 0♌25 | 21°II51 | 6♏29 | 1♎51 | 13♏52 | 19°II53 | 21♎ 8 | 16♏30 | 10♑42 | 11♒33 | 2♏22 | n.a. |

Delta T = 13h22m43s Julian Calendar 1 May 1991 BCE == Greg. Calendar 14 Apr. 1991 BCE
 The year -1990 astronomical counting style corresponds to year 1991 B.C.E historical counting style.

JUNE 1991 BCE (-1990) JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ♁ | ♂ | ♆ | ♅ | |
|------|----------|------------|--------|---------|-------|-------|-------|--------|---------|--------|-------|--------|-------|------|------|
| S 1 | 15 27 56 | 21♌47'54 | 0♌21 | 1♌20 | 23♎ 3 | 6♏37 | 1°R44 | 13°R49 | 19♎56 | 21°R 7 | 16♏31 | 10°R39 | 11♑30 | 2♏29 | n.a. |
| S 2 | 15 31 53 | 22°45'04 | 14°51 | 2°20 | 24°15 | 6°45 | 1♎38 | 13♏46 | 20° 0 | 21♐ 7 | 16°33 | 10♑37 | 11°27 | 2°35 | n.a. |
| M 3 | 15 35 49 | 23°42'14 | 29°37 | 3°25 | 25°27 | 6°53 | 1°31 | 13°43 | 20° 3 | 21° 6 | 16°34 | 10°36 | 11°23 | 2°42 | n.a. |
| T 4 | 15 39 46 | 24°39'24 | 14♎30 | 4°35 | 26°39 | 6°59 | 1°25 | 13°40 | 20° 6 | 21° 6 | 16°36 | 10°D36 | 11°20 | 2°48 | n.a. |
| W 5 | 15 43 42 | 25°36'36 | 29°24 | 5°49 | 27°51 | 7° 5 | 1°18 | 13°37 | 20°10 | 21° 5 | 16°37 | 10°36 | 11°17 | 2°55 | n.a. |
| T 6 | 15 47 39 | 26°33'48 | 14♏11 | 7° 8 | 29° 2 | 7°10 | 1°12 | 13°35 | 20°13 | 21° 5 | 16°39 | 10°37 | 11°14 | 3° 2 | n.a. |
| F 7 | 15 51 35 | 27°31'00 | 28°44 | 8°31 | 0♏14 | 7°14 | 1° 6 | 13°32 | 20°17 | 21° 4 | 16°40 | 10°38 | 11°11 | 3° 8 | n.a. |
| S 8 | 15 55 32 | 28°28'13 | 13♎ 1 | 9°59 | 1°26 | 7°17 | 1° 0 | 13°30 | 20°20 | 21° 4 | 16°42 | 10°39 | 11° 8 | 3°15 | n.a. |
| S 9 | 15 59 29 | 29°25'26 | 26°58 | 11°31 | 2°38 | 7°20 | 0°54 | 13°27 | 20°24 | 21° 4 | 16°43 | 10°R39 | 11° 4 | 3°22 | n.a. |
| M10 | 16 3 25 | 0♎22'40 | 10♎36 | 13° 7 | 3°49 | 7°22 | 0°48 | 13°25 | 20°28 | 21° 3 | 16°45 | 10°39 | 11° 1 | 3°28 | n.a. |
| T 11 | 16 7 22 | 1°19'55 | 23°55 | 14°47 | 5° 1 | 7°23 | 0°42 | 13°23 | 20°31 | 21° 3 | 16°46 | 10°39 | 10°58 | 3°35 | n.a. |
| W12 | 16 11 18 | 2°17'10 | 6♏55 | 16°30 | 6°12 | 7°R23 | 0°37 | 13°21 | 20°35 | 21° 3 | 16°48 | 10°38 | 10°55 | 3°42 | n.a. |
| T 13 | 16 15 15 | 3°14'26 | 19°40 | 18°17 | 7°24 | 7°22 | 0°31 | 13°19 | 20°38 | 21° 3 | 16°49 | 10°37 | 10°52 | 3°48 | n.a. |
| F 14 | 16 19 11 | 4°11'42 | 2♎11 | 20° 7 | 8°35 | 7°21 | 0°26 | 13°17 | 20°42 | 21° 2 | 16°51 | 10°36 | 10°49 | 3°55 | n.a. |
| S 15 | 16 23 8 | 5° 9'00 | 14°30 | 22° 0 | 9°47 | 7°19 | 0°21 | 13°15 | 20°46 | 21° 2 | 16°53 | 10°35 | 10°45 | 4° 2 | n.a. |
| S 16 | 16 27 4 | 6° 6'19 | 26°39 | 23°56 | 10°58 | 7°16 | 0°16 | 13°13 | 20°49 | 21° 2 | 16°54 | 10°35 | 10°42 | 4° 8 | n.a. |
| M17 | 16 31 1 | 7° 3'38 | 8♌39 | 25°54 | 12° 9 | 7°12 | 0°11 | 13°11 | 20°53 | 21° 2 | 16°56 | 10°D35 | 10°39 | 4°15 | n.a. |
| T 18 | 16 34 58 | 8° 0'59 | 20°33 | 27°53 | 13°20 | 7° 7 | 0° 6 | 13°10 | 20°57 | 21° 2 | 16°58 | 10°35 | 10°36 | 4°22 | n.a. |
| W19 | 16 38 54 | 8°58'21 | 2♏23 | 29°55 | 14°32 | 7° 2 | 0° 2 | 13° 8 | 21° 0 | 21° 2 | 17° 0 | 10°35 | 10°33 | 4°28 | n.a. |
| T 20 | 16 42 51 | 9°55'45 | 14°11 | 1♎57 | 15°43 | 6°56 | 29♏58 | 13° 7 | 21° 4 | 21°D 2 | 17° 1 | 10°35 | 10°29 | 4°35 | n.a. |
| F 21 | 16 46 47 | 10°53'09 | 26° 0 | 4° 1 | 16°54 | 6°49 | 29°53 | 13° 5 | 21° 8 | 21° 2 | 17° 3 | 10°R35 | 10°26 | 4°42 | n.a. |
| S 22 | 16 50 44 | 11°50'35 | 7♏54 | 6° 5 | 18° 5 | 6°42 | 29°49 | 13° 4 | 21°11 | 21° 2 | 17° 5 | 10°35 | 10°23 | 4°48 | n.a. |
| S 23 | 16 54 40 | 12°48'03 | 19°57 | 8° 9 | 19°16 | 6°33 | 29°46 | 13° 3 | 21°15 | 21° 2 | 17° 7 | 10°35 | 10°20 | 4°55 | n.a. |
| M24 | 16 58 37 | 13°45'32 | 2♋11 | 10°13 | 20°27 | 6°24 | 29°42 | 13° 2 | 21°19 | 21° 2 | 17° 8 | 10°35 | 10°17 | 5° 2 | n.a. |
| T 25 | 17 2 33 | 14°43'03 | 14°41 | 12°18 | 21°38 | 6°14 | 29°38 | 13° 1 | 21°22 | 21° 2 | 17°10 | 10°D35 | 10°14 | 5° 8 | n.a. |
| W26 | 17 6 30 | 15°40'35 | 27°32 | 14°21 | 22°49 | 6° 4 | 29°35 | 13° 0 | 21°26 | 21° 2 | 17°12 | 10°35 | 10°10 | 5°15 | n.a. |
| T 27 | 17 10 27 | 16°38'09 | 10°Y47 | 16°24 | 24° 0 | 5°53 | 29°32 | 12°59 | 21°30 | 21° 3 | 17°14 | 10°35 | 10° 7 | 5°22 | n.a. |
| F 28 | 17 14 23 | 17°35'44 | 24°27 | 18°26 | 25°10 | 5°41 | 29°29 | 12°58 | 21°34 | 21° 3 | 17°16 | 10°36 | 10° 4 | 5°28 | n.a. |
| S 29 | 17 18 20 | 18°33'22 | 8♌34 | 20°27 | 26°21 | 5°29 | 29°26 | 12°58 | 21°37 | 21° 3 | 17°18 | 10°36 | 10° 1 | 5°35 | n.a. |
| S 30 | 17 22 16 | 19°II31'01 | 23♌ 6 | 22°II27 | 27♏32 | 5♏16 | 29♏23 | 12♏57 | 21°II41 | 21♎ 3 | 17♏20 | 10♑37 | 9♒58 | 5♏42 | n.a. |

Delta T = 13h22m41s Julian Calendar created from Swiss Ephemeris, Copyright Astrodienst AG [6.2.2007]

SWISS EPHEMERIS for the year 1991 BCE

JULY 1991 BCE (-1990) JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ♁ | ♂ | ♆ | ♅ | |
|------|----------|-----------|--------|--------|-------|-------|--------|--------|--------|--------|-------|--------|-------|------|------|
| M 1 | 17 26 13 | 20II28'42 | 7II58 | 24II26 | 28♁42 | 5°R 3 | 29°R21 | 12°R57 | 21II45 | 21II 4 | 17♁22 | 10°R37 | 9°R54 | 5♁48 | n.a. |
| T 2 | 17 30 9 | 21°26'24 | 23° 3 | 26°24 | 29°53 | 4♁49 | 29♁19 | 12♁56 | 21°49 | 21° 4 | 17°24 | 10°R37 | 9°51 | 5°55 | n.a. |
| W 3 | 17 34 6 | 22°24'08 | 8♁14 | 28°21 | 1♁ 3 | 4°34 | 29°17 | 12°56 | 21°52 | 21° 4 | 17°25 | 10°36 | 9°48 | 6° 2 | n.a. |
| T 4 | 17 38 2 | 23°21'54 | 23°19 | 0♁16 | 2°14 | 4°19 | 29°15 | 12°56 | 21°56 | 21° 5 | 17°27 | 10°35 | 9°45 | 6° 8 | n.a. |
| F 5 | 17 41 59 | 24°19'40 | 8♁11 | 2° 9 | 3°24 | 4° 4 | 29°13 | 12°D56 | 22° 0 | 21° 5 | 17°29 | 10°33 | 9°42 | 6°15 | n.a. |
| S 6 | 17 45 56 | 25°17'29 | 22°43 | 4° 2 | 4°34 | 3°49 | 29°11 | 12°56 | 22° 4 | 21° 6 | 17°31 | 10°32 | 9°39 | 6°22 | n.a. |
| S 7 | 17 49 52 | 26°15'18 | 6II50 | 5°53 | 5°44 | 3°33 | 29°10 | 12°56 | 22° 7 | 21° 6 | 17°33 | 10°30 | 9°35 | 6°28 | n.a. |
| M 8 | 17 53 49 | 27°13'09 | 20°31 | 7°43 | 6°55 | 3°17 | 29° 9 | 12°56 | 22°11 | 21° 7 | 17°35 | 10°30 | 9°32 | 6°35 | n.a. |
| T 9 | 17 57 45 | 28°11'01 | 3♁48 | 9°31 | 8° 5 | 3° 1 | 29° 8 | 12°57 | 22°15 | 21° 8 | 17°37 | 10°D30 | 9°29 | 6°42 | n.a. |
| W10 | 18 1 42 | 29° 8'55 | 16°41 | 11°18 | 9°15 | 2°45 | 29° 7 | 12°57 | 22°18 | 21° 8 | 17°39 | 10°30 | 9°26 | 6°48 | n.a. |
| T 11 | 18 5 38 | 0♁ 6'50 | 29°16 | 13° 4 | 10°24 | 2°28 | 29° 7 | 12°58 | 22°22 | 21° 9 | 17°41 | 10°32 | 9°23 | 6°55 | n.a. |
| F 12 | 18 9 35 | 1° 4'47 | 11II34 | 14°48 | 11°34 | 2°12 | 29° 6 | 12°58 | 22°26 | 21°10 | 17°43 | 10°33 | 9°20 | 7° 2 | n.a. |
| S 13 | 18 13 31 | 2° 2'45 | 23°41 | 16°31 | 12°44 | 1°56 | 29° 6 | 12°59 | 22°30 | 21°10 | 17°46 | 10°35 | 9°16 | 7° 8 | n.a. |
| S 14 | 18 17 28 | 3° 0'45 | 5♁39 | 18°12 | 13°54 | 1°39 | 29°D 6 | 13° 0 | 22°33 | 21°11 | 17°48 | 10°R35 | 9°13 | 7°15 | n.a. |
| M15 | 18 21 25 | 3°58'47 | 17°31 | 19°53 | 15° 3 | 1°23 | 29° 6 | 13° 1 | 22°37 | 21°12 | 17°50 | 10°35 | 9°10 | 7°22 | n.a. |
| T 16 | 18 25 21 | 4°56'50 | 29°21 | 21°32 | 16°13 | 1° 7 | 29° 7 | 13° 2 | 22°41 | 21°13 | 17°52 | 10°34 | 9° 7 | 7°28 | n.a. |
| W17 | 18 29 18 | 5°54'56 | 11♁ 9 | 23°10 | 17°22 | 0°51 | 29° 7 | 13° 3 | 22°44 | 21°14 | 17°54 | 10°32 | 9° 4 | 7°35 | n.a. |
| T 18 | 18 33 14 | 6°53'03 | 22°59 | 24°46 | 18°31 | 0°36 | 29° 8 | 13° 4 | 22°48 | 21°14 | 17°56 | 10°28 | 9° 0 | 7°42 | n.a. |
| F 19 | 18 37 11 | 7°51'12 | 4♁53 | 26°21 | 19°41 | 0°20 | 29° 9 | 13° 5 | 22°52 | 21°15 | 17°58 | 10°23 | 8°57 | 7°48 | n.a. |
| S 20 | 18 41 7 | 8°49'24 | 16°52 | 27°55 | 20°50 | 0° 5 | 29°10 | 13° 7 | 22°55 | 21°16 | 18° 0 | 10°19 | 8°54 | 7°55 | n.a. |
| S 21 | 18 45 4 | 9°47'37 | 28°59 | 29°28 | 21°59 | 29♁50 | 29°11 | 13° 8 | 22°59 | 21°17 | 18° 2 | 10°14 | 8°51 | 8° 2 | n.a. |
| M22 | 18 49 0 | 10°45'52 | 11♁16 | 1♁ 0 | 23° 8 | 29°36 | 29°13 | 13°10 | 23° 3 | 21°18 | 18° 4 | 10°10 | 8°48 | 8° 8 | n.a. |
| T 23 | 18 52 57 | 11°44'10 | 23°47 | 2°30 | 24°16 | 29°22 | 29°15 | 13°11 | 23° 6 | 21°19 | 18° 6 | 10° 7 | 8°45 | 8°15 | n.a. |
| W24 | 18 56 54 | 12°42'30 | 6♁35 | 3°59 | 25°25 | 29° 9 | 29°16 | 13°13 | 23°10 | 21°20 | 18° 8 | 10° 6 | 8°41 | 8°22 | n.a. |
| T 25 | 19 0 50 | 13°40'52 | 19°43 | 5°27 | 26°34 | 28°56 | 29°18 | 13°15 | 23°13 | 21°21 | 18°11 | 10°D 6 | 8°38 | 8°28 | n.a. |
| F 26 | 19 4 47 | 14°39'17 | 3♁15 | 6°53 | 27°42 | 28°43 | 29°21 | 13°17 | 23°17 | 21°22 | 18°13 | 10° 7 | 8°35 | 8°35 | n.a. |
| S 27 | 19 8 43 | 15°37'43 | 17°11 | 8°19 | 28°51 | 28°31 | 29°23 | 13°19 | 23°20 | 21°24 | 18°15 | 10° 8 | 8°32 | 8°42 | n.a. |
| S 28 | 19 12 40 | 16°36'13 | 1II32 | 9°42 | 29°59 | 28°20 | 29°26 | 13°21 | 23°24 | 21°25 | 18°17 | 10° 9 | 8°29 | 8°48 | n.a. |
| M29 | 19 16 36 | 17°34'44 | 16°16 | 11° 5 | 1II 7 | 28° 9 | 29°28 | 13°23 | 23°27 | 21°26 | 18°19 | 10°R 9 | 8°26 | 8°55 | n.a. |
| T 30 | 19 20 33 | 18°33'18 | 1♁18 | 12°26 | 2°15 | 27°59 | 29°31 | 13°25 | 23°31 | 21°27 | 18°21 | 10° 8 | 8°22 | 9° 2 | n.a. |
| W31 | 19 24 30 | 19♁31'55 | 16♁31 | 13♁46 | 3II23 | 27♁50 | 29♁35 | 13♁28 | 23II34 | 21II29 | 18♁23 | 10♁ 4 | 8♁19 | 9♁ 8 | n.a. |

Delta T = 13h22m39s Julian Calendar 1 July 1991 BCE == Greg. Calendar 14 June 1991 BCE
 The year -1990 astronomical counting style corresponds to year 1991 B.C.E historical counting style.

AUGUST 1991 BCE (-1990) JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ♁ | ♂ | ♆ | ♅ | |
|------|----------|----------|--------|-------|-------|--------|-------|-------|--------|--------|-------|-------|-------|-------|------|
| T 1 | 19 28 26 | 20♁30'33 | 1♁43 | 15♁ 4 | 4II31 | 27°R42 | 29♁38 | 13♁30 | 23II38 | 21II30 | 18♁25 | 9°R59 | 8°R16 | 9♁15 | n.a. |
| F 2 | 19 32 23 | 21°29'13 | 16°46 | 16°21 | 5°39 | 27♁34 | 29°41 | 13°33 | 23°41 | 21°31 | 18°27 | 9°R53 | 8°13 | 9°22 | n.a. |
| S 3 | 19 36 19 | 22°27'55 | 1II30 | 17°36 | 6°46 | 27°27 | 29°45 | 13°36 | 23°45 | 21°32 | 18°30 | 9°47 | 8°10 | 9°28 | n.a. |
| S 4 | 19 40 16 | 23°26'39 | 15°48 | 18°50 | 7°54 | 27°20 | 29°49 | 13°38 | 23°48 | 21°34 | 18°32 | 9°41 | 8° 6 | 9°35 | n.a. |
| M 5 | 19 44 12 | 24°25'25 | 29°38 | 20° 1 | 9° 1 | 27°15 | 29°53 | 13°41 | 23°52 | 21°35 | 18°34 | 9°37 | 8° 3 | 9°42 | n.a. |
| T 6 | 19 48 9 | 25°24'13 | 12♁58 | 21°11 | 10° 8 | 27°10 | 29°57 | 13°44 | 23°55 | 21°37 | 18°36 | 9°34 | 8° 0 | 9°48 | n.a. |
| W 7 | 19 52 5 | 26°23'03 | 25°53 | 22°19 | 11°16 | 27° 6 | 0II 2 | 13°47 | 23°58 | 21°38 | 18°38 | 9°D33 | 7°57 | 9°55 | n.a. |
| T 8 | 19 56 2 | 27°21'54 | 8II24 | 23°25 | 12°22 | 27° 3 | 0° 6 | 13°50 | 24° 1 | 21°40 | 18°40 | 9°34 | 7°54 | 10° 2 | n.a. |
| F 9 | 19 59 58 | 28°20'48 | 20°38 | 24°29 | 13°29 | 27° 0 | 0°11 | 13°53 | 24° 5 | 21°41 | 18°42 | 9°35 | 7°51 | 10° 8 | n.a. |
| S 10 | 20 3 55 | 29°19'44 | 2♁39 | 25°30 | 14°36 | 26°58 | 0°16 | 13°57 | 24° 8 | 21°43 | 18°44 | 9°36 | 7°47 | 10°15 | n.a. |
| S 11 | 20 7 52 | 0♁18'41 | 14°31 | 26°29 | 15°42 | 26°58 | 0°21 | 14° 0 | 24°11 | 21°44 | 18°46 | 9°R36 | 7°44 | 10°22 | n.a. |
| M12 | 20 11 48 | 1°17'41 | 26°20 | 27°25 | 16°48 | 26°D58 | 0°26 | 14° 4 | 24°14 | 21°46 | 18°49 | 9°35 | 7°41 | 10°28 | n.a. |
| T 13 | 20 15 45 | 2°16'42 | 8♁ 8 | 28°18 | 17°54 | 26°58 | 0°32 | 14° 7 | 24°17 | 21°47 | 18°51 | 9°31 | 7°38 | 10°35 | n.a. |
| W14 | 20 19 41 | 3°15'46 | 19°58 | 29° 8 | 19° 0 | 27° 0 | 0°37 | 14°11 | 24°21 | 21°49 | 18°53 | 9°24 | 7°35 | 10°42 | n.a. |
| T 15 | 20 23 38 | 4°14'52 | 1♁53 | 29°55 | 20° 6 | 27° 2 | 0°43 | 14°14 | 24°24 | 21°51 | 18°55 | 9°16 | 7°32 | 10°48 | n.a. |
| F 16 | 20 27 34 | 5°14'00 | 13°55 | 0II38 | 21°11 | 27° 5 | 0°49 | 14°18 | 24°27 | 21°52 | 18°57 | 9° 6 | 7°28 | 10°55 | n.a. |
| S 17 | 20 31 31 | 6°13'10 | 26° 4 | 1°16 | 22°17 | 27° 9 | 0°55 | 14°22 | 24°30 | 21°54 | 18°59 | 8°55 | 7°25 | 11° 2 | n.a. |
| S 18 | 20 35 28 | 7°12'23 | 8♁21 | 1°51 | 23°22 | 27°14 | 1° 1 | 14°26 | 24°33 | 21°56 | 19° 1 | 8°44 | 7°22 | 11° 8 | n.a. |
| M19 | 20 39 24 | 8°11'38 | 20°49 | 2°20 | 24°27 | 27°19 | 1° 8 | 14°30 | 24°36 | 21°57 | 19° 3 | 8°35 | 7°19 | 11°15 | n.a. |
| T 20 | 20 43 21 | 9°10'55 | 3♁28 | 2°44 | 25°31 | 27°25 | 1°14 | 14°34 | 24°39 | 21°59 | 19° 5 | 8°27 | 7°16 | 11°22 | n.a. |
| W21 | 20 47 17 | 10°10'15 | 16°20 | 3° 3 | 26°36 | 27°32 | 1°21 | 14°38 | 24°42 | 22° 1 | 19° 7 | 8°22 | 7°12 | 11°28 | n.a. |
| T 22 | 20 51 14 | 11° 9'37 | 29°27 | 3°16 | 27°40 | 27°40 | 1°28 | 14°42 | 24°44 | 22° 3 | 19° 9 | 8°19 | 7° 9 | 11°35 | n.a. |
| F 23 | 20 55 10 | 12° 9'02 | 12♁52 | 3°R22 | 28°44 | 27°48 | 1°34 | 14°47 | 24°47 | 22° 5 | 19°11 | 8°D19 | 7° 6 | 11°42 | n.a. |
| S 24 | 20 59 7 | 13° 8'29 | 26°38 | 3°21 | 29°48 | 27°57 | 1°42 | 14°51 | 24°50 | 22° 6 | 19°13 | 8°19 | 7° 3 | 11°48 | n.a. |
| S 25 | 21 3 3 | 14° 7'59 | 10II44 | 3°12 | 0♁51 | 28° 7 | 1°49 | 14°55 | 24°53 | 22° 8 | 19°15 | 8°R19 | 7° 0 | 11°55 | n.a. |
| M26 | 21 7 0 | 15° 7'32 | 25°11 | 2°56 | 1°55 | 28°17 | 1°56 | 15° 0 | 24°56 | 22°10 | 19°17 | 8°18 | 6°57 | 12° 2 | n.a. |
| T 27 | 21 10 57 | 16° 7'07 | 9♁56 | 2°31 | 2°58 | 28°29 | 2° 4 | 15° 5 | 24°58 | 22°12 | 19°19 | 8°15 | 6°53 | 12° 8 | n.a. |
| W28 | 21 14 53 | 17° 6'44 | 24°54 | 1°59 | 4° 1 | 28°40 | 2°12 | 15° 9 | 25° 1 | 22°14 | 19°21 | 8° 9 | 6°50 | 12°15 | n.a. |
| T 29 | 21 18 50 | 18° 6'24 | 9♁57 | 1°18 | 5° 3 | 28°53 | 2°19 | 15°14 | 25° 4 | 22°16 | 19°23 | 8° 0 | 6°47 | 12°22 | n.a. |
| F 30 | 21 22 46 | 19° 6'06 | 24°55 | 0°29 | 6° 5 | 29° 6 | 2°27 | 15°19 | 25° 6 | 22°18 | 19°25 | 7°50 | 6°44 | 12°28 | n.a. |
| S 31 | 21 26 43 | 20♁ 5'50 | 9II39 | 29♁33 | 7♁ 7 | 29♁20 | 2II36 | 15♁24 | 25II 9 | 22II20 | 19♁26 | 7♁39 | 6♁41 | 12♁35 | n.a. |

Delta T = 13h22m37s Julian Calendar created from Swiss Ephemeris, Copyright Astrodiens AG [6.2.2007]

SWISS EPHEMERIS for the year 1991 BCE

SEPTEMBER 1991 BCE (-1990) JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ♁ | ♂ | ♆ | ♅ | |
|------|----------|----------|-------|--------|-------|-------|------|-------|-------|-------|-------|-------|------|--------|------|
| S 1 | 21 30 39 | 21Ω 5'35 | 24♐ 1 | 28°R30 | 8♌ 9 | 29♌34 | 2♐44 | 15Ω29 | 25♐11 | 22♐22 | 19Ω28 | 7°R28 | 6♌38 | 12♌42 | n.a. |
| M 2 | 21 34 36 | 22° 5'23 | 7♌56 | 27Ω21 | 9°10 | 29°40 | 2°52 | 15°34 | 25°14 | 22°24 | 19°30 | 7♌19 | 6°34 | 12°48 | n.a. |
| T 3 | 21 38 32 | 23° 5'13 | 21°22 | 26° 9 | 10°11 | 0♌ 5 | 3° 1 | 15°39 | 25°16 | 22°26 | 19°32 | 7°13 | 6°31 | 12°55 | n.a. |
| W 4 | 21 42 29 | 24° 5'05 | 4♐20 | 24°55 | 11°12 | 0°21 | 3° 9 | 15°44 | 25°18 | 22°28 | 19°34 | 7°10 | 6°28 | 13° 2 | n.a. |
| T 5 | 21 46 25 | 25° 4'59 | 16°54 | 23°41 | 12°12 | 0°38 | 3°18 | 15°49 | 25°21 | 22°30 | 19°36 | 7° 8 | 6°25 | 13° 8 | n.a. |
| F 6 | 21 50 22 | 26° 4'54 | 29° 9 | 22°29 | 13°12 | 0°55 | 3°27 | 15°54 | 25°23 | 22°32 | 19°37 | 7°D 8 | 6°22 | 13° 15 | n.a. |
| S 7 | 21 54 19 | 27° 4'52 | 11♌ 9 | 21°22 | 14°11 | 1°13 | 3°36 | 15°59 | 25°25 | 22°34 | 19°39 | 7°R 8 | 6°18 | 13°22 | n.a. |
| S 8 | 21 58 15 | 28° 4'51 | 23° 0 | 20°21 | 15°10 | 1°32 | 3°45 | 16° 5 | 25°27 | 22°36 | 19°41 | 7° 7 | 6°15 | 13°28 | n.a. |
| M 9 | 22 2 12 | 29° 4'52 | 4♌48 | 19°28 | 16° 9 | 1°51 | 3°55 | 16°10 | 25°30 | 22°38 | 19°43 | 7° 4 | 6°12 | 13°35 | n.a. |
| T 10 | 22 6 8 | 0♐ 4'55 | 16°37 | 18°45 | 17° 7 | 2°10 | 4° 4 | 16°16 | 25°32 | 22°40 | 19°44 | 6°59 | 6° 9 | 13°42 | n.a. |
| W11 | 22 10 5 | 1° 5'00 | 28°31 | 18°13 | 18° 5 | 2°30 | 4°13 | 16°21 | 25°34 | 22°42 | 19°46 | 6°50 | 6° 6 | 13°48 | n.a. |
| T 12 | 22 14 1 | 2° 5'07 | 10♌33 | 17°52 | 19° 2 | 2°51 | 4°23 | 16°27 | 25°36 | 22°45 | 19°48 | 6°39 | 6° 3 | 13°55 | n.a. |
| F 13 | 22 17 58 | 3° 5'16 | 22°45 | 17°D43 | 19°59 | 3°12 | 4°33 | 16°33 | 25°38 | 22°47 | 19°49 | 6°26 | 5°59 | 14° 2 | n.a. |
| S 14 | 22 21 54 | 4° 5'26 | 5♌ 7 | 17°45 | 20°56 | 3°33 | 4°43 | 16°38 | 25°40 | 22°49 | 19°51 | 6°12 | 5°56 | 14° 8 | n.a. |
| S 15 | 22 25 51 | 5° 5'39 | 17°41 | 17°57 | 21°51 | 3°55 | 4°53 | 16°44 | 25°41 | 22°51 | 19°53 | 5°58 | 5°53 | 14°15 | n.a. |
| M16 | 22 29 48 | 6° 5'53 | 0♐26 | 18°21 | 22°47 | 4°17 | 5° 3 | 16°50 | 25°43 | 22°53 | 19°54 | 5°45 | 5°50 | 14°22 | n.a. |
| T 17 | 22 33 44 | 7° 6'10 | 13°22 | 18°53 | 23°41 | 4°40 | 5°13 | 16°56 | 25°45 | 22°55 | 19°56 | 5°35 | 5°47 | 14°28 | n.a. |
| W18 | 22 37 41 | 8° 6'29 | 26°28 | 19°35 | 24°35 | 5° 3 | 5°23 | 17° 2 | 25°47 | 22°58 | 19°57 | 5°28 | 5°43 | 14°35 | n.a. |
| T 19 | 22 41 37 | 9° 6'50 | 9♌46 | 20°25 | 25°29 | 5°27 | 5°34 | 17° 7 | 25°48 | 23° 0 | 19°59 | 5°23 | 5°40 | 14°42 | n.a. |
| F 20 | 22 45 34 | 10° 7'13 | 23°16 | 21°21 | 26°22 | 5°51 | 5°44 | 17°13 | 25°50 | 23° 2 | 20° 1 | 5°22 | 5°37 | 14°48 | n.a. |
| S 21 | 22 49 30 | 11° 7'38 | 6♐58 | 22°24 | 27°14 | 6°15 | 5°55 | 17°20 | 25°52 | 23° 4 | 20° 2 | 5°21 | 5°34 | 14°55 | n.a. |
| S 22 | 22 53 27 | 12° 8'06 | 20°55 | 23°32 | 28° 6 | 6°40 | 6° 6 | 17°26 | 25°53 | 23° 6 | 20° 3 | 5°21 | 5°31 | 15° 2 | n.a. |
| M23 | 22 57 23 | 13° 8'36 | 5♌ 6 | 24°45 | 28°57 | 7° 5 | 6°16 | 17°32 | 25°55 | 23° 9 | 20° 5 | 5°20 | 5°28 | 15° 9 | n.a. |
| T 24 | 23 1 20 | 14° 9'08 | 19°30 | 26° 2 | 29°47 | 7°30 | 6°27 | 17°38 | 25°56 | 23°11 | 20° 6 | 5°16 | 5°24 | 15°15 | n.a. |
| W25 | 23 5 17 | 15° 9'41 | 4♌ 4 | 27°23 | 0♐36 | 7°56 | 6°38 | 17°44 | 25°57 | 23°13 | 20° 8 | 5°10 | 5°21 | 15°22 | n.a. |
| T 26 | 23 9 13 | 16°10'17 | 18°44 | 28°46 | 1°25 | 8°22 | 6°49 | 17°50 | 25°59 | 23°15 | 20° 9 | 5° 1 | 5°18 | 15°29 | n.a. |
| F 27 | 23 13 10 | 17°10'55 | 3♐21 | 0♐11 | 2°13 | 8°49 | 7° 1 | 17°57 | 26° 0 | 23°18 | 20°10 | 4°50 | 5°15 | 15°35 | n.a. |
| S 28 | 23 17 6 | 18°11'34 | 17°49 | 1°39 | 3° 0 | 9°16 | 7°12 | 18° 3 | 26° 1 | 23°20 | 20°12 | 4°37 | 5°12 | 15°42 | n.a. |
| S 29 | 23 21 3 | 19°12'15 | 2♌ 0 | 3° 8 | 3°46 | 9°43 | 7°23 | 18° 9 | 26° 2 | 23°22 | 20°13 | 4°26 | 5° 9 | 15°49 | n.a. |
| M30 | 23 24 59 | 20♐12'58 | 15Ω50 | 4♐39 | 4♐31 | 10♌10 | 7♐35 | 18Ω16 | 26♐ 3 | 23♐24 | 20Ω14 | 4♌16 | 5♌ 5 | 15♌55 | n.a. |

Delta T = 13h22m34s Julian Calendar 1 Sept. 1991 BCE == Greg. Calendar 15 Aug. 1991 BCE
 The year -1990 astronomical counting style corresponds to year 1991 B.C.E historical counting style.

OCTOBER 1991 BCE (-1990) JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♃ | ♄ | ♅ | ♆ | ♇ | ♁ | ♂ | ♆ | ♅ | |
|------|----------|----------|-------|-------|--------|-------|-------|-------|--------|-------|-------|-------|------|-------|------|
| T 1 | 23 28 56 | 21♐13'42 | 29Ω14 | 6♐11 | 5♐15 | 10♌38 | 7♐46 | 18Ω22 | 26♐ 4 | 23♐27 | 20Ω16 | 4°R 9 | 5♌ 2 | 16♌ 2 | n.a. |
| W 2 | 23 32 52 | 22°14'28 | 12♐14 | 7°43 | 5°58 | 11° 6 | 7°58 | 18°29 | 26° 5 | 23°29 | 20°17 | 4♌ 4 | 4°59 | 16° 9 | n.a. |
| T 3 | 23 36 49 | 23°15'15 | 24°50 | 9°17 | 6°40 | 11°35 | 8°10 | 18°35 | 26° 6 | 23°31 | 20°18 | 4° 2 | 4°56 | 16°15 | n.a. |
| F 4 | 23 40 46 | 24°16'03 | 7♌ 7 | 10°51 | 7°21 | 12° 4 | 8°22 | 18°42 | 26° 7 | 23°33 | 20°19 | 4°D 2 | 4°53 | 16°22 | n.a. |
| S 5 | 23 44 42 | 25°16'53 | 19°10 | 12°25 | 8° 1 | 12°33 | 8°33 | 18°48 | 26° 8 | 23°36 | 20°20 | 4° 2 | 4°49 | 16°29 | n.a. |
| S 6 | 23 48 39 | 26°17'43 | 1♌ 2 | 13°59 | 8°40 | 13° 2 | 8°45 | 18°55 | 26° 9 | 23°38 | 20°21 | 4°R 2 | 4°46 | 16°35 | n.a. |
| M 7 | 23 52 35 | 27°18'35 | 12°51 | 15°34 | 9°17 | 13°31 | 8°57 | 19° 2 | 26° 9 | 23°40 | 20°22 | 4° 1 | 4°43 | 16°42 | n.a. |
| T 8 | 23 56 32 | 28°19'28 | 24°42 | 17° 9 | 9°53 | 14° 1 | 9°10 | 19° 8 | 26°10 | 23°42 | 20°23 | 3°57 | 4°40 | 16°49 | n.a. |
| W 9 | 0 0 28 | 29°20'23 | 6♌39 | 18°44 | 10°28 | 14°31 | 9°22 | 19°15 | 26°11 | 23°45 | 20°24 | 3°51 | 4°37 | 16°55 | n.a. |
| T 10 | 0 4 25 | 0♌21'18 | 18°46 | 20°19 | 11° 2 | 15° 1 | 9°34 | 19°22 | 26°11 | 23°47 | 20°25 | 3°42 | 4°34 | 17° 2 | n.a. |
| F 11 | 0 8 21 | 1°22'15 | 1♌ 6 | 21°54 | 11°33 | 15°32 | 9°46 | 19°29 | 26°12 | 23°49 | 20°26 | 3°32 | 4°30 | 17° 9 | n.a. |
| S 12 | 0 12 18 | 2°23'12 | 13°41 | 23°29 | 12° 4 | 16° 2 | 9°59 | 19°35 | 26°12 | 23°51 | 20°27 | 3°21 | 4°27 | 17°15 | n.a. |
| S 13 | 0 16 14 | 3°24'11 | 26°31 | 25° 4 | 12°33 | 16°33 | 10°11 | 19°42 | 26°12 | 23°54 | 20°28 | 3° 9 | 4°24 | 17°22 | n.a. |
| M14 | 0 20 11 | 4°25'11 | 9♐36 | 26°39 | 13° 0 | 17° 5 | 10°24 | 19°49 | 26°13 | 23°56 | 20°29 | 2°59 | 4°21 | 17°29 | n.a. |
| T 15 | 0 24 8 | 5°26'12 | 22°55 | 28°14 | 13°25 | 17°36 | 10°36 | 19°56 | 26°13 | 23°58 | 20°30 | 2°50 | 4°18 | 17°35 | n.a. |
| W16 | 0 28 4 | 6°27'14 | 6♌25 | 29°49 | 13°49 | 18° 7 | 10°49 | 20° 3 | 26°13 | 24° 0 | 20°31 | 2°45 | 4°14 | 17°42 | n.a. |
| T 17 | 0 32 1 | 7°28'18 | 20° 5 | 1Ω24 | 14°10 | 18°39 | 11° 2 | 20° 9 | 26°13 | 24° 3 | 20°31 | 2°42 | 4°11 | 17°49 | n.a. |
| F 18 | 0 35 57 | 8°29'23 | 3♐53 | 2°58 | 14°30 | 19°11 | 11°15 | 20°16 | 26°13 | 24° 5 | 20°32 | 2°D41 | 4° 8 | 17°56 | n.a. |
| S 19 | 0 39 54 | 9°30'30 | 17°47 | 4°33 | 14°48 | 19°43 | 11°27 | 20°23 | 26°R13 | 24° 7 | 20°33 | 2°42 | 4° 5 | 18° 2 | n.a. |
| S 20 | 0 43 50 | 10°31'38 | 1Ω48 | 6° 8 | 15° 4 | 20°15 | 11°40 | 20°30 | 26°13 | 24° 9 | 20°34 | 2°43 | 4° 2 | 18° 9 | n.a. |
| M21 | 0 47 47 | 11°32'47 | 15°53 | 7°42 | 15°18 | 20°48 | 11°53 | 20°37 | 26°13 | 24°11 | 20°34 | 2°R43 | 3°59 | 18°16 | n.a. |
| T 22 | 0 51 43 | 12°33'57 | 0♌ 3 | 9°17 | 15°29 | 21°21 | 12° 6 | 20°44 | 26°13 | 24°13 | 20°35 | 2°41 | 3°55 | 18°22 | n.a. |
| W23 | 0 55 40 | 13°35'08 | 14°16 | 10°51 | 15°39 | 21°53 | 12°19 | 20°51 | 26°13 | 24°16 | 20°35 | 2°38 | 3°52 | 18°29 | n.a. |
| T 24 | 0 59 37 | 14°36'21 | 28°28 | 12°25 | 15°46 | 22°26 | 12°33 | 20°58 | 26°13 | 24°18 | 20°36 | 2°32 | 3°49 | 18°36 | n.a. |
| F 25 | 1 3 33 | 15°37'34 | 12♐37 | 14° 0 | 15°51 | 23° 0 | 12°46 | 21° 5 | 26°12 | 24°20 | 20°36 | 2°25 | 3°46 | 18°42 | n.a. |
| S 26 | 1 7 30 | 16°38'49 | 26°37 | 15°34 | 15°53 | 23°33 | 12°59 | 21°12 | 26°12 | 24°22 | 20°37 | 2°17 | 3°43 | 18°49 | n.a. |
| S 27 | 1 11 26 | 17°40'04 | 10Ω24 | 17° 9 | 15°R53 | 24° 6 | 13°12 | 21°19 | 26°12 | 24°24 | 20°37 | 2° 9 | 3°40 | 18°56 | n.a. |
| M28 | 1 15 23 | 18°41'20 | 23°55 | 18°43 | 15°51 | 24°40 | 13°26 | 21°26 | 26°11 | 24°26 | 20°38 | 2° 2 | 3°36 | 19° 2 | n.a. |
| T 29 | 1 19 19 | 19°42'37 | 7♐ 8 | 20°18 | 15°46 | 25°14 | 13°39 | 21°33 | 26°11 | 24°28 | 20°38 | 1°57 | 3°33 | 19° 9 | n.a. |
| W30 | 1 23 16 | 20°43'54 | 20° 0 | 21°52 | 15°39 | 25°48 | 13°52 | 21°40 | 26°10 | 24°30 | 20°39 | 1°54 | 3°30 | 19°16 | n.a. |
| T 31 | 1 27 12 | 21Ω45'12 | 2♌34 | 23Ω27 | 15♐29 | 26♌22 | 14♐ 6 | 21Ω47 | 26♐ 9 | 24♐33 | 20Ω39 | 1°D54 | 3♌27 | 19♌22 | n.a. |

Delta T = 13h22m32s Julian Calendar created from Swiss Ephemeris, Copyright AstroDienst AG [6.2.2007]

SWISS EPHEMERIS for the year 1991 BCE

NOVEMBER 1991 BCE (-1990) JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♄ | ♁ | ♁ | ♁ | ♁ | ♁ |
|------|---------|------------------------|----------------------|--------------------|---------------------|--------------------|---------------------|--------------------|----------------------|--------------------|---------------------|--------------------|-------------------|---------------------|------|
| F 1 | 1 31 9 | 22 ^h 46'30 | 14 ^h 51 | 25 ^h 2 | 15 ^h R17 | 26 ^h 56 | 14 ^h 19 | 21 ^h 54 | 26 ^h R 9 | 24 ^h 35 | 20 ^h 39 | 1 ^h 54 | 3 ^h 24 | 19 ^h 29 | n.a. |
| S 2 | 1 35 6 | 23 ^h 47'48 | 26 ^h 54 | 26 ^h 37 | 15 ^h M 2 | 27 ^h 30 | 14 ^h 33 | 22 ^h 1 | 26 ^h II 8 | 24 ^h 37 | 20 ^h 39 | 1 ^h 56 | 3 ^h 20 | 19 ^h 36 | n.a. |
| S 3 | 1 39 2 | 24 ^h 49'07 | 8 ^h 48 | 28 ^h 12 | 14 ^h 44 | 28 ^h 5 | 14 ^h 47 | 22 ^h 8 | 26 ^h 7 | 24 ^h 39 | 20 ^h 40 | 1 ^h 58 | 3 ^h 17 | 19 ^h 42 | n.a. |
| M 4 | 1 42 59 | 25 ^h 50'26 | 20 ^h 38 | 29 ^h 47 | 14 ^h 25 | 28 ^h 39 | 15 ^h 0 | 22 ^h 15 | 26 ^h 6 | 24 ^h 41 | 20 ^h 40 | 1 ^h R59 | 3 ^h 14 | 19 ^h 49 | n.a. |
| T 5 | 1 46 55 | 26 ^h 51'44 | 2 ^h 29 | 1 ^h M23 | 14 ^h 3 | 29 ^h 14 | 15 ^h 14 | 22 ^h 22 | 26 ^h 5 | 24 ^h 43 | 20 ^h 40 | 1 ^h 59 | 3 ^h 11 | 19 ^h 56 | n.a. |
| W 6 | 1 50 52 | 27 ^h 53'03 | 14 ^h 26 | 2 ^h 58 | 13 ^h 39 | 29 ^h 49 | 15 ^h 27 | 22 ^h 29 | 26 ^h 4 | 24 ^h 45 | 20 ^h 40 | 1 ^h 57 | 3 ^h 8 | 20 ^h 3 | n.a. |
| T 7 | 1 54 48 | 28 ^h 54'22 | 26 ^h 34 | 4 ^h 34 | 13 ^h 12 | 0 ^h 23 | 15 ^h 41 | 22 ^h 36 | 26 ^h 3 | 24 ^h 47 | 20 ^h 40 | 1 ^h 54 | 3 ^h 5 | 20 ^h 9 | n.a. |
| F 8 | 1 58 45 | 29 ^h 55'41 | 8 ^h 57 | 6 ^h 10 | 12 ^h 44 | 0 ^h 58 | 15 ^h 55 | 22 ^h 43 | 26 ^h 2 | 24 ^h 49 | 20 ^h 40 | 1 ^h 50 | 3 ^h 1 | 20 ^h 16 | n.a. |
| S 9 | 2 2 41 | 0 ^h M57'00 | 21 ^h 38 | 7 ^h 46 | 12 ^h 14 | 1 ^h 34 | 16 ^h 9 | 22 ^h 50 | 26 ^h 1 | 24 ^h 50 | 20 ^h R40 | 1 ^h 45 | 2 ^h 58 | 20 ^h 23 | n.a. |
| S 10 | 2 6 38 | 1 ^h 58'19 | 4 ^h Y39 | 9 ^h 22 | 11 ^h 42 | 2 ^h 9 | 16 ^h 22 | 22 ^h 57 | 26 ^h 0 | 24 ^h 52 | 20 ^h 40 | 1 ^h 39 | 2 ^h 55 | 20 ^h 29 | n.a. |
| M11 | 2 10 35 | 2 ^h 59'38 | 18 ^h 0 | 10 ^h 59 | 11 ^h 9 | 2 ^h 44 | 16 ^h 36 | 23 ^h 4 | 25 ^h 59 | 24 ^h 54 | 20 ^h 40 | 1 ^h 35 | 2 ^h 52 | 20 ^h 36 | n.a. |
| T 12 | 2 14 31 | 4 ^h 0'57 | 1 ^h B39 | 12 ^h 35 | 10 ^h 35 | 3 ^h 20 | 16 ^h 50 | 23 ^h 10 | 25 ^h 57 | 24 ^h 56 | 20 ^h 40 | 1 ^h 31 | 2 ^h 49 | 20 ^h 43 | n.a. |
| W13 | 2 18 28 | 5 ^h 2'16 | 15 ^h 35 | 14 ^h 12 | 10 ^h 0 | 3 ^h 55 | 17 ^h 4 | 23 ^h 17 | 25 ^h 56 | 24 ^h 58 | 20 ^h 40 | 1 ^h 29 | 2 ^h 46 | 20 ^h 49 | n.a. |
| T 14 | 2 22 24 | 6 ^h 3'35 | 29 ^h 43 | 15 ^h 49 | 9 ^h 23 | 4 ^h 31 | 17 ^h 18 | 23 ^h 24 | 25 ^h 55 | 25 ^h 0 | 20 ^h 40 | 1 ^h D28 | 2 ^h 42 | 20 ^h 56 | n.a. |
| F 15 | 2 26 21 | 7 ^h 4'54 | 13 ^h II59 | 17 ^h 26 | 8 ^h 47 | 5 ^h 6 | 17 ^h 32 | 23 ^h 31 | 25 ^h 53 | 25 ^h 2 | 20 ^h 40 | 1 ^h 28 | 2 ^h 39 | 21 ^h 3 | n.a. |
| S 16 | 2 30 17 | 8 ^h 6'13 | 28 ^h 18 | 19 ^h 3 | 8 ^h 10 | 5 ^h 42 | 17 ^h 46 | 23 ^h 38 | 25 ^h 52 | 25 ^h 3 | 20 ^h 40 | 1 ^h 29 | 2 ^h 36 | 21 ^h 9 | n.a. |
| S 17 | 2 34 14 | 9 ^h 7'33 | 12 ^h 38 | 20 ^h 40 | 7 ^h 33 | 6 ^h 18 | 18 ^h 0 | 23 ^h 45 | 25 ^h 50 | 25 ^h 5 | 20 ^h 39 | 1 ^h 31 | 2 ^h 33 | 21 ^h 16 | n.a. |
| M18 | 2 38 10 | 10 ^h 8'52 | 26 ^h 54 | 22 ^h 17 | 6 ^h 57 | 6 ^h 54 | 18 ^h 14 | 23 ^h 52 | 25 ^h 49 | 25 ^h 7 | 20 ^h 39 | 1 ^h 32 | 2 ^h 30 | 21 ^h 23 | n.a. |
| T 19 | 2 42 7 | 11 ^h 10'12 | 11 ^h 0 | 23 ^h 53 | 6 ^h 21 | 7 ^h 30 | 18 ^h 28 | 23 ^h 58 | 25 ^h 47 | 25 ^h 9 | 20 ^h 39 | 1 ^h R33 | 2 ^h 26 | 21 ^h 29 | n.a. |
| W20 | 2 46 4 | 12 ^h 11'32 | 25 ^h 6 | 25 ^h 30 | 5 ^h 46 | 8 ^h 6 | 18 ^h 42 | 24 ^h 5 | 25 ^h 46 | 25 ^h 10 | 20 ^h 38 | 1 ^h 32 | 2 ^h 23 | 21 ^h 36 | n.a. |
| T 21 | 2 50 0 | 13 ^h 12'51 | 9 ^h 30 | 27 ^h 6 | 5 ^h 12 | 8 ^h 42 | 18 ^h 56 | 24 ^h 12 | 25 ^h 44 | 25 ^h 12 | 20 ^h 38 | 1 ^h 31 | 2 ^h 20 | 21 ^h 43 | n.a. |
| F 22 | 2 53 57 | 14 ^h 14'11 | 22 ^h 43 | 28 ^h 41 | 4 ^h 39 | 9 ^h 18 | 19 ^h 10 | 24 ^h 19 | 25 ^h 42 | 25 ^h 14 | 20 ^h 38 | 1 ^h 29 | 2 ^h 17 | 21 ^h 50 | n.a. |
| S 23 | 2 57 53 | 15 ^h 15'30 | 6 ^h 15 | 0 ^h 16 | 4 ^h 8 | 9 ^h 54 | 19 ^h 24 | 24 ^h 25 | 25 ^h 40 | 25 ^h 15 | 20 ^h 37 | 1 ^h 26 | 2 ^h 14 | 21 ^h 56 | n.a. |
| S 24 | 3 1 50 | 16 ^h 16'50 | 19 ^h 34 | 1 ^h 50 | 3 ^h 38 | 10 ^h 31 | 19 ^h 38 | 24 ^h 32 | 25 ^h 39 | 25 ^h 17 | 20 ^h 37 | 1 ^h 24 | 2 ^h 11 | 22 ^h 3 | n.a. |
| M25 | 3 5 46 | 17 ^h 18'08 | 2 ^h 40 | 3 ^h 22 | 3 ^h 10 | 11 ^h 7 | 19 ^h 52 | 24 ^h 39 | 25 ^h 37 | 25 ^h 18 | 20 ^h 36 | 1 ^h 22 | 2 ^h 7 | 22 ^h 10 | n.a. |
| T 26 | 3 9 43 | 18 ^h 19'27 | 15 ^h 32 | 4 ^h 53 | 2 ^h 45 | 11 ^h 44 | 20 ^h 6 | 24 ^h 45 | 25 ^h 35 | 25 ^h 20 | 20 ^h 36 | 1 ^h 21 | 2 ^h 4 | 22 ^h 16 | n.a. |
| W27 | 3 13 39 | 19 ^h 20'45 | 28 ^h 9 | 6 ^h 23 | 2 ^h 21 | 12 ^h 20 | 20 ^h 20 | 24 ^h 52 | 25 ^h 33 | 25 ^h 21 | 20 ^h 35 | 1 ^h D20 | 2 ^h 1 | 22 ^h 23 | n.a. |
| T 28 | 3 17 36 | 20 ^h 22'03 | 10 ^h 33 | 7 ^h 50 | 1 ^h 59 | 12 ^h 57 | 20 ^h 34 | 24 ^h 59 | 25 ^h 31 | 25 ^h 23 | 20 ^h 35 | 1 ^h 20 | 1 ^h 58 | 22 ^h 30 | n.a. |
| F 29 | 3 21 33 | 21 ^h 23'19 | 22 ^h 44 | 9 ^h 14 | 1 ^h 40 | 13 ^h 34 | 20 ^h 48 | 25 ^h 5 | 25 ^h 29 | 25 ^h 24 | 20 ^h 34 | 1 ^h 21 | 1 ^h 55 | 22 ^h 36 | n.a. |
| S 30 | 3 25 29 | 22 ^h M24'35 | 4 ^h Z46 | 10 ^h 36 | 1 ^h M23 | 14 ^h 10 | 21 ^h M 2 | 25 ^h 12 | 25 ^h II27 | 25 ^h 26 | 20 ^h 33 | 1 ^h 22 | 1 ^h 51 | 22 ^h Z43 | n.a. |

Delta T = 13h22m30s Julian Calendar 1 Nov. 1991 BCE == Greg. Calendar 15 Oct. 1991 BCE
 The year -1990 astronomical counting style corresponds to year 1991 B.C.E historical counting style.

DECEMBER 1991 BCE (-1990) JC

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♁ | ♂ | ♃ | ♅ | ♁ | ♄ | ♁ | ♁ | ♁ | ♁ | ♁ |
|------|---------|------------------------|---------------------|---------------------|--------------------|--------------------|---------------------|--------------------|----------------------|--------------------|---------------------|--------------------|-------------------|---------------------|------|
| S 1 | 3 29 26 | 23 ^h M25'50 | 16 ^h Z40 | 11 ^h 53 | 1 ^h R 9 | 14 ^h 47 | 21 ^h M16 | 25 ^h 18 | 25 ^h R25 | 25 ^h 27 | 20 ^h R33 | 1 ^h 23 | 1 ^h 48 | 22 ^h Z50 | n.a. |
| M 2 | 3 33 22 | 24 ^h 27'05 | 28 ^h 30 | 13 ^h 6 | 0 ^h M57 | 15 ^h 24 | 21 ^h 30 | 25 ^h 24 | 25 ^h II23 | 25 ^h 29 | 20 ^h 32 | 1 ^h 24 | 1 ^h 45 | 22 ^h Z56 | n.a. |
| T 3 | 3 37 19 | 25 ^h 28'18 | 10 ^h 21 | 14 ^h 14 | 0 ^h 48 | 16 ^h 1 | 21 ^h 44 | 25 ^h 31 | 25 ^h 21 | 25 ^h 30 | 20 ^h 31 | 1 ^h 24 | 1 ^h 42 | 23 ^h 3 | n.a. |
| W 4 | 3 41 15 | 26 ^h 29'30 | 22 ^h 16 | 15 ^h 16 | 0 ^h 41 | 16 ^h 38 | 21 ^h 58 | 25 ^h 37 | 25 ^h 18 | 25 ^h 31 | 20 ^h 31 | 1 ^h R25 | 1 ^h 39 | 23 ^h 10 | n.a. |
| T 5 | 3 45 12 | 27 ^h 30'40 | 4 ^h X22 | 16 ^h 12 | 0 ^h 36 | 17 ^h 15 | 22 ^h 12 | 25 ^h 44 | 25 ^h 16 | 25 ^h 33 | 20 ^h 30 | 1 ^h 24 | 1 ^h 36 | 23 ^h 17 | n.a. |
| F 6 | 3 49 8 | 28 ^h 31'50 | 16 ^h 42 | 17 ^h 0 | 0 ^h D34 | 17 ^h 52 | 22 ^h 26 | 25 ^h 50 | 25 ^h 14 | 25 ^h 34 | 20 ^h 29 | 1 ^h 24 | 1 ^h 32 | 23 ^h 23 | n.a. |
| S 7 | 3 53 5 | 29 ^h 32'59 | 29 ^h 21 | 17 ^h 39 | 0 ^h 35 | 18 ^h 29 | 22 ^h 40 | 25 ^h 56 | 25 ^h 12 | 25 ^h 35 | 20 ^h 28 | 1 ^h 24 | 1 ^h 29 | 23 ^h 30 | n.a. |
| S 8 | 3 57 2 | 0 ^h 34'06 | 12 ^h Y22 | 18 ^h 9 | 0 ^h 37 | 19 ^h 6 | 22 ^h 54 | 26 ^h 2 | 25 ^h 9 | 25 ^h 36 | 20 ^h 27 | 1 ^h 24 | 1 ^h 26 | 23 ^h 37 | n.a. |
| M 9 | 4 0 58 | 1 ^h 35'12 | 25 ^h 47 | 18 ^h 29 | 0 ^h 43 | 19 ^h 43 | 23 ^h 8 | 26 ^h 8 | 25 ^h 7 | 25 ^h 38 | 20 ^h 26 | 1 ^h D24 | 1 ^h 23 | 23 ^h 43 | n.a. |
| T 10 | 4 4 55 | 2 ^h 36'17 | 9 ^h B37 | 18 ^h R39 | 0 ^h 50 | 20 ^h 21 | 23 ^h 22 | 26 ^h 14 | 25 ^h 5 | 25 ^h 39 | 20 ^h 25 | 1 ^h 24 | 1 ^h 20 | 23 ^h 50 | n.a. |
| W11 | 4 8 51 | 3 ^h 37'21 | 23 ^h 49 | 18 ^h 37 | 1 ^h 0 | 20 ^h 58 | 23 ^h 36 | 26 ^h 21 | 25 ^h 2 | 25 ^h 40 | 20 ^h 25 | 1 ^h 24 | 1 ^h 17 | 23 ^h 57 | n.a. |
| T 12 | 4 12 48 | 4 ^h 38'23 | 8 ^h II20 | 18 ^h 23 | 1 ^h 12 | 21 ^h 35 | 23 ^h 50 | 26 ^h 27 | 25 ^h 0 | 25 ^h 41 | 20 ^h 24 | 1 ^h R24 | 1 ^h 13 | 24 ^h 3 | n.a. |
| F 13 | 4 16 44 | 5 ^h 39'25 | 23 ^h 4 | 17 ^h 59 | 1 ^h 26 | 22 ^h 13 | 24 ^h 4 | 26 ^h 33 | 24 ^h 58 | 25 ^h 42 | 20 ^h 23 | 1 ^h 24 | 1 ^h 10 | 24 ^h 10 | n.a. |
| S 14 | 4 20 41 | 6 ^h 40'25 | 7 ^h Z53 | 17 ^h 23 | 1 ^h 43 | 22 ^h 50 | 24 ^h 18 | 26 ^h 38 | 24 ^h 55 | 25 ^h 43 | 20 ^h 22 | 1 ^h 23 | 1 ^h 7 | 24 ^h 17 | n.a. |
| S 15 | 4 24 37 | 7 ^h 41'25 | 22 ^h 40 | 16 ^h 37 | 2 ^h 1 | 23 ^h 27 | 24 ^h 32 | 26 ^h 44 | 24 ^h 53 | 25 ^h 44 | 20 ^h 21 | 1 ^h 23 | 1 ^h 4 | 24 ^h 24 | n.a. |
| M16 | 4 28 34 | 8 ^h 42'23 | 7 ^h II19 | 15 ^h 42 | 2 ^h 22 | 24 ^h 5 | 24 ^h 46 | 26 ^h 50 | 24 ^h 50 | 25 ^h 45 | 20 ^h 19 | 1 ^h 22 | 1 ^h 1 | 24 ^h 30 | n.a. |
| T 17 | 4 32 31 | 9 ^h 43'20 | 21 ^h 43 | 14 ^h 39 | 2 ^h 44 | 24 ^h 42 | 25 ^h 0 | 26 ^h 56 | 24 ^h 48 | 25 ^h 46 | 20 ^h 18 | 1 ^h 21 | 0 ^h 57 | 24 ^h 37 | n.a. |
| W18 | 4 36 27 | 10 ^h 44'16 | 5 ^h 30 | 13 ^h 31 | 3 ^h 8 | 25 ^h 20 | 25 ^h 13 | 27 ^h 2 | 24 ^h 45 | 25 ^h 47 | 20 ^h 17 | 1 ^h D21 | 0 ^h 54 | 24 ^h 44 | n.a. |
| T 19 | 4 40 24 | 11 ^h 45'11 | 19 ^h 40 | 12 ^h 19 | 3 ^h 34 | 25 ^h 57 | 25 ^h 27 | 27 ^h 7 | 24 ^h 43 | 25 ^h 48 | 20 ^h 16 | 1 ^h 21 | 0 ^h 51 | 24 ^h 50 | n.a. |
| F 20 | 4 44 20 | 12 ^h 46'06 | 3 | | | | | | | | | | | | |