

SWISS EPHEMERIS for the year 1813  
heliocentric

JANUARY 1813

00:00 UT

| Day  | Sid.t   | Terra                  | ☾                   | ♃                    | ♄                   | ♅                    | ♆                  | ♁                    | ♂                    | ♆                    | ♁                    | ♂                  |
|------|---------|------------------------|---------------------|----------------------|---------------------|----------------------|--------------------|----------------------|----------------------|----------------------|----------------------|--------------------|
| F 1  | 6 41 0  | 10 <sup>5</sup> 16'03  | 10 <sup>5</sup> 19  | 24 <sup>5</sup> 5    | 13 <sup>13</sup> 48 | 13 <sup>13</sup> 43  | 2 <sup>2</sup> 10  | 10 <sup>3</sup> 21   | 24 <sup>11</sup> 16  | 13 <sup>13</sup> 16  | 18 <sup>18</sup> 46  | 0 <sup>0</sup> 17  |
| S 2  | 6 44 57 | 11°17'14               | 11°19               | 29°54                | 15°25               | 14°10                | 2°15               | 10°23                | 24°17                | 13°16                | 18°46                | 0°18               |
| S 3  | 6 48 53 | 12°18'26               | 12°18               | 5 <sup>5</sup> Ω35   | 17° 1               | 14°38                | 2°20               | 10°25                | 24°18                | 13°17                | 18°46                | 0°19               |
| M 4  | 6 52 50 | 13°19'37               | 13°17               | 11° 7                | 18°38               | 15° 5                | 2°25               | 10°27                | 24°19                | 13°17                | 18°46                | 0°19               |
| T 5  | 6 56 47 | 14°20'48               | 14°17               | 16°29                | 20°15               | 15°33                | 2°30               | 10°28                | 24°19                | 13°17                | 18°47                | 0°20               |
| W 6  | 7 0 43  | 15°21'59               | 15°16               | 21°42                | 21°51               | 16° 1                | 2°35               | 10°30                | 24°20                | 13°18                | 18°47                | 0°21               |
| T 7  | 7 4 40  | 16°23'09               | 16°16               | 26°45                | 23°28               | 16°28                | 2°39               | 10°32                | 24°21                | 13°18                | 18°47                | 0°22               |
| F 8  | 7 8 36  | 17°24'19               | 17°16               | 1 <sup>1</sup> η38   | 25° 4               | 16°56                | 2°44               | 10°34                | 24°22                | 13°19                | 18°47                | 0°22               |
| S 9  | 7 12 33 | 18°25'29               | 18°17               | 6°22                 | 26°41               | 17°24                | 2°49               | 10°36                | 24°22                | 13°19                | 18°47                | 0°23               |
| S 10 | 7 16 29 | 19°26'37               | 19°18               | 10°57                | 28°17               | 17°52                | 2°54               | 10°37                | 24°23                | 13°19                | 18°48                | 0°24               |
| M 11 | 7 20 26 | 20°27'45               | 20°19               | 15°23                | 29°54               | 18°19                | 2°59               | 10°39                | 24°24                | 13°20                | 18°48                | 0°24               |
| T 12 | 7 24 22 | 21°28'52               | 21°21               | 19°40                | 1 <sup>1</sup> μ30  | 18°47                | 3° 4               | 10°41                | 24°24                | 13°20                | 18°48                | 0°25               |
| W 13 | 7 28 19 | 22°29'59               | 22°23               | 23°50                | 3° 6                | 19°15                | 3° 8               | 10°43                | 24°25                | 13°20                | 18°48                | 0°26               |
| T 14 | 7 32 16 | 23°31'05               | 23°26               | 27°52                | 4°42                | 19°43                | 3°13               | 10°45                | 24°26                | 13°21                | 18°48                | 0°27               |
| F 15 | 7 36 12 | 24°32'10               | 24°29               | 1 <sup>1</sup> α47   | 6°19                | 20°11                | 3°18               | 10°46                | 24°27                | 13°21                | 18°49                | 0°27               |
| S 16 | 7 40 9  | 25°33'15               | 25°32               | 5°35                 | 7°55                | 20°39                | 3°23               | 10°48                | 24°27                | 13°21                | 18°49                | 0°28               |
| S 17 | 7 44 5  | 26°34'19               | 26°35               | 9°17                 | 9°31                | 21° 7                | 3°28               | 10°50                | 24°28                | 13°22                | 18°49                | 0°29               |
| M 18 | 7 48 2  | 27°35'22               | 27°38               | 12°52                | 11° 7               | 21°35                | 3°33               | 10°52                | 24°29                | 13°22                | 18°49                | 0°30               |
| T 19 | 7 51 58 | 28°36'25               | 28°41               | 16°23                | 12°43               | 22° 3                | 3°37               | 10°54                | 24°30                | 13°22                | 18°49                | 0°30               |
| W 20 | 7 55 55 | 29°37'27               | 29°43               | 19°48                | 14°19               | 22°31                | 3°42               | 10°55                | 24°30                | 13°23                | 18°50                | 0°31               |
| T 21 | 7 59 52 | 0 <sup>0</sup> Ω38'28  | 0 <sup>0</sup> Ω46  | 23° 8                | 15°55               | 22°59                | 3°47               | 10°57                | 24°31                | 13°23                | 18°50                | 0°32               |
| F 22 | 8 3 48  | 1°39'29                | 1°48                | 26°25                | 17°31               | 23°28                | 3°52               | 10°59                | 24°32                | 13°24                | 18°50                | 0°33               |
| S 23 | 8 7 45  | 2°40'29                | 2°49                | 29°37                | 19° 6               | 23°56                | 3°57               | 11° 1                | 24°33                | 13°24                | 18°50                | 0°33               |
| S 24 | 8 11 41 | 3°41'29                | 3°51                | 2 <sup>2</sup> μ45   | 20°42               | 24°24                | 4° 2               | 11° 3                | 24°33                | 13°24                | 18°50                | 0°34               |
| M 25 | 8 15 38 | 4°42'28                | 4°52                | 5°50                 | 22°18               | 24°52                | 4° 6               | 11° 4                | 24°34                | 13°25                | 18°51                | 0°35               |
| T 26 | 8 19 34 | 5°43'27                | 5°52                | 8°52                 | 23°54               | 25°21                | 4°11               | 11° 6                | 24°35                | 13°25                | 18°51                | 0°35               |
| W 27 | 8 23 31 | 6°44'25                | 6°53                | 11°51                | 25°29               | 25°49                | 4°16               | 11° 8                | 24°35                | 13°25                | 18°51                | 0°36               |
| T 28 | 8 27 27 | 7°45'22                | 7°53                | 14°48                | 27° 5               | 26°18                | 4°21               | 11°10                | 24°36                | 13°26                | 18°51                | 0°37               |
| F 29 | 8 31 24 | 8°46'18                | 8°52                | 17°42                | 28°41               | 26°46                | 4°26               | 11°12                | 24°37                | 13°26                | 18°51                | 0°38               |
| S 30 | 8 35 21 | 9°47'14                | 9°52                | 20°35                | 0 <sup>0</sup> α16  | 27°14                | 4°31               | 11°13                | 24°38                | 13°26                | 18°52                | 0°38               |
| S 31 | 8 39 17 | 10 <sup>0</sup> Ω48'09 | 10 <sup>0</sup> Ω51 | 23 <sup>23</sup> μ25 | 1 <sup>1</sup> α52  | 27 <sup>27</sup> α43 | 4 <sup>4</sup> Ω35 | 11 <sup>11</sup> α15 | 24 <sup>24</sup> μ38 | 13 <sup>13</sup> α27 | 18 <sup>18</sup> α52 | 0 <sup>0</sup> α39 |

Delta T = 12.13 sec.

FEBRUARY 1813

00:00 UT

| Day  | Sid.t    | Terra                   | ☾                    | ♃                    | ♄                    | ♅                    | ♆                  | ♁                    | ♂                    | ♆                    | ♁                    | ♂                  |
|------|----------|-------------------------|----------------------|----------------------|----------------------|----------------------|--------------------|----------------------|----------------------|----------------------|----------------------|--------------------|
| M 1  | 8 43 14  | 11 <sup>11</sup> Ω49'02 | 11 <sup>11</sup> Ω50 | 26 <sup>26</sup> μ14 | 3 <sup>3</sup> α27   | 28 <sup>28</sup> α12 | 4 <sup>4</sup> Ω40 | 11 <sup>11</sup> α17 | 24 <sup>24</sup> μ39 | 13 <sup>13</sup> α27 | 18 <sup>18</sup> α52 | 0 <sup>0</sup> α40 |
| T 2  | 8 47 10  | 12°49'55                | 12°49                | 29° 2                | 5° 2                 | 28°40                | 4°45               | 11°19                | 24°40                | 13°27                | 18°52                | 0°41               |
| W 3  | 8 51 7   | 13°50'46                | 13°48                | 1 <sup>1</sup> α49   | 6°38                 | 29° 9                | 4°50               | 11°21                | 24°41                | 13°28                | 18°52                | 0°41               |
| T 4  | 8 55 3   | 14°51'36                | 14°47                | 4°35                 | 8°13                 | 29°37                | 4°55               | 11°22                | 24°41                | 13°28                | 18°52                | 0°42               |
| F 5  | 8 59 0   | 15°52'24                | 15°46                | 7°20                 | 9°49                 | 0 <sup>0</sup> μ 6   | 4°59               | 11°24                | 24°42                | 13°29                | 18°53                | 0°43               |
| S 6  | 9 2 56   | 16°53'11                | 16°46                | 10° 5                | 11°24                | 0°35                 | 5° 4               | 11°26                | 24°43                | 13°29                | 18°53                | 0°43               |
| S 7  | 9 6 53   | 17°53'56                | 17°46                | 12°50                | 12°59                | 1° 4                 | 5° 9               | 11°28                | 24°44                | 13°29                | 18°53                | 0°44               |
| M 8  | 9 10 50  | 18°54'40                | 18°46                | 15°35                | 14°34                | 1°33                 | 5°14               | 11°30                | 24°44                | 13°30                | 18°53                | 0°45               |
| T 9  | 9 14 46  | 19°55'22                | 19°47                | 18°19                | 16° 9                | 2° 1                 | 5°19               | 11°31                | 24°45                | 13°30                | 18°53                | 0°46               |
| W 10 | 9 18 43  | 20°56'03                | 20°48                | 21° 5                | 17°45                | 2°30                 | 5°24               | 11°33                | 24°46                | 13°30                | 18°54                | 0°46               |
| T 11 | 9 22 39  | 21°56'42                | 21°50                | 23°51                | 19°20                | 2°59                 | 5°28               | 11°35                | 24°46                | 13°31                | 18°54                | 0°47               |
| F 12 | 9 26 36  | 22°57'19                | 22°52                | 26°37                | 20°55                | 3°28                 | 5°33               | 11°37                | 24°47                | 13°31                | 18°54                | 0°48               |
| S 13 | 9 30 32  | 23°57'54                | 23°54                | 29°25                | 22°30                | 3°57                 | 5°38               | 11°39                | 24°48                | 13°31                | 18°54                | 0°49               |
| S 14 | 9 34 29  | 24°58'28                | 24°56                | 2 <sup>2</sup> α14   | 24° 5                | 4°26                 | 5°43               | 11°41                | 24°49                | 13°32                | 18°54                | 0°49               |
| M 15 | 9 38 25  | 25°59'00                | 25°58                | 5° 4                 | 25°40                | 4°56                 | 5°48               | 11°42                | 24°49                | 13°32                | 18°55                | 0°50               |
| T 16 | 9 42 22  | 26°59'31                | 27° 1                | 7°56                 | 27°15                | 5°25                 | 5°52               | 11°44                | 24°50                | 13°32                | 18°55                | 0°51               |
| W 17 | 9 46 19  | 28° 0'00                | 28° 3                | 10°50                | 28°50                | 5°54                 | 5°57               | 11°46                | 24°51                | 13°33                | 18°55                | 0°51               |
| T 18 | 9 50 15  | 29° 0'27                | 29° 5                | 13°46                | 0 <sup>0</sup> α25   | 6°23                 | 6° 2               | 11°48                | 24°52                | 13°33                | 18°55                | 0°52               |
| F 19 | 9 54 12  | 0 <sup>0</sup> η 0'53   | 0 <sup>0</sup> η 7   | 16°44                | 2° 0                 | 6°52                 | 6° 7               | 11°50                | 24°52                | 13°33                | 18°55                | 0°53               |
| S 20 | 9 58 8   | 1° 1'18                 | 1° 9                 | 19°45                | 3°35                 | 7°22                 | 6°12               | 11°51                | 24°53                | 13°34                | 18°56                | 0°54               |
| S 21 | 10 2 5   | 2° 1'41                 | 2°10                 | 22°49                | 5°10                 | 7°51                 | 6°16               | 11°53                | 24°54                | 13°34                | 18°56                | 0°54               |
| M 22 | 10 6 1   | 3° 2'02                 | 3°11                 | 25°56                | 6°45                 | 8°21                 | 6°21               | 11°55                | 24°55                | 13°35                | 18°56                | 0°55               |
| T 23 | 10 9 58  | 4° 2'23                 | 4°12                 | 29° 6                | 8°20                 | 8°50                 | 6°26               | 11°57                | 24°55                | 13°35                | 18°56                | 0°56               |
| W 24 | 10 13 54 | 5° 2'42                 | 5°12                 | 2 <sup>2</sup> α20   | 9°55                 | 9°20                 | 6°31               | 11°59                | 24°56                | 13°35                | 18°56                | 0°56               |
| T 25 | 10 17 51 | 6° 2'59                 | 6°12                 | 5°38                 | 11°29                | 9°49                 | 6°36               | 12° 0                | 24°57                | 13°36                | 18°57                | 0°57               |
| F 26 | 10 21 47 | 7° 3'15                 | 7°11                 | 9° 1                 | 13° 4                | 10°19                | 6°41               | 12° 2                | 24°57                | 13°36                | 18°57                | 0°58               |
| S 27 | 10 25 44 | 8° 3'29                 | 8°10                 | 12°28                | 14°39                | 10°48                | 6°45               | 12° 4                | 24°58                | 13°36                | 18°57                | 0°59               |
| S 28 | 10 29 41 | 9 <sup>9</sup> η 3'42   | 9 <sup>9</sup> η 9   | 16 <sup>16</sup> α 0 | 16 <sup>16</sup> α14 | 11 <sup>11</sup> μ18 | 6 <sup>6</sup> Ω50 | 12 <sup>12</sup> α 6 | 24 <sup>24</sup> μ59 | 13 <sup>13</sup> α37 | 18 <sup>18</sup> α57 | 0 <sup>0</sup> α59 |

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SWISS EPHEMERIS for the year 1813  
heliocentric

MARCH 1813

00:00 UT

| Day  | Sid.t    | Terra                | ☾                 | ♃                  | ♄                  | ♅                  | ♆                 | ♁                 | ♂                  | ♆                  | ♁                  | ♂                 |
|------|----------|----------------------|-------------------|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|-------------------|
| M 1  | 10 33 37 | 10 <sup>m</sup> 3'53 | 10 <sup>m</sup> 8 | 19 <sup>z</sup> 37 | 17 <sup>z</sup> 49 | 11 <sup>m</sup> 48 | 6 <sup>z</sup> 55 | 12 <sup>z</sup> 8 | 25 <sup>m</sup> 0  | 13 <sup>z</sup> 37 | 18 <sup>z</sup> 57 | 1 <sup>z</sup> 0  |
| T 2  | 10 37 34 | 11° 4'03             | 11° 6             | 23°20              | 19°24              | 12°18              | 7° 0              | 12° 9             | 25° 0              | 13°37              | 18°58              | 1° 1              |
| W 3  | 10 41 30 | 12° 4'10             | 12° 4             | 27° 9              | 20°59              | 12°47              | 7° 5              | 12°11             | 25° 1              | 13°38              | 18°58              | 1° 2              |
| T 4  | 10 45 27 | 13° 4'16             | 13° 2             | 1 <sup>z</sup> 5   | 22°33              | 13°17              | 7° 9              | 12°13             | 25° 2              | 13°38              | 18°58              | 1° 2              |
| F 5  | 10 49 23 | 14° 4'20             | 14° 0             | 5° 7               | 24° 8              | 13°47              | 7°14              | 12°15             | 25° 3              | 13°38              | 18°58              | 1° 3              |
| S 6  | 10 53 20 | 15° 4'22             | 14°59             | 9°17               | 25°43              | 14°17              | 7°19              | 12°17             | 25° 3              | 13°39              | 18°58              | 1° 4              |
| S 7  | 10 57 16 | 16° 4'21             | 15°57             | 13°34              | 27°18              | 14°47              | 7°24              | 12°18             | 25° 4              | 13°39              | 18°58              | 1° 4              |
| M 8  | 11 1 13  | 17° 4'19             | 16°56             | 17°58              | 28°53              | 15°17              | 7°29              | 12°20             | 25° 5              | 13°40              | 18°59              | 1° 5              |
| T 9  | 11 5 10  | 18° 4'14             | 17°56             | 22°32              | 0 <sup>z</sup> 28  | 15°47              | 7°33              | 12°22             | 25° 6              | 13°40              | 18°59              | 1° 6              |
| W10  | 11 9 6   | 19° 4'07             | 18°56             | 27°13              | 2° 2               | 16°18              | 7°38              | 12°24             | 25° 6              | 13°40              | 18°59              | 1° 7              |
| T 11 | 11 13 3  | 20° 3'58             | 19°56             | 2 <sup>z</sup> 4   | 3°37               | 16°48              | 7°43              | 12°26             | 25° 7              | 13°41              | 18°59              | 1° 7              |
| F 12 | 11 16 59 | 21° 3'46             | 20°56             | 7° 3               | 5°12               | 17°18              | 7°48              | 12°27             | 25° 8              | 13°41              | 18°59              | 1° 8              |
| S 13 | 11 20 56 | 22° 3'32             | 21°57             | 12°12              | 6°47               | 17°48              | 7°53              | 12°29             | 25° 8              | 13°41              | 19° 0              | 1° 9              |
| S 14 | 11 24 52 | 23° 3'16             | 22°58             | 17°29              | 8°22               | 18°19              | 7°57              | 12°31             | 25° 9              | 13°42              | 19° 0              | 1°10              |
| M15  | 11 28 49 | 24° 2'58             | 23°59             | 22°56              | 9°57               | 18°49              | 8° 2              | 12°33             | 25°10              | 13°42              | 19° 0              | 1°10              |
| T 16 | 11 32 45 | 25° 2'38             | 25° 1             | 28°32              | 11°32              | 19°20              | 8° 7              | 12°35             | 25°11              | 13°42              | 19° 0              | 1°11              |
| W17  | 11 36 42 | 26° 2'15             | 26° 2             | 4 <sup>z</sup> 16  | 13° 7              | 19°50              | 8°12              | 12°36             | 25°11              | 13°43              | 19° 0              | 1°12              |
| T 18 | 11 40 39 | 27° 1'51             | 27° 4             | 10° 8              | 14°41              | 20°21              | 8°17              | 12°38             | 25°12              | 13°43              | 19° 1              | 1°12              |
| F 19 | 11 44 35 | 28° 1'24             | 28° 5             | 16° 7              | 16°16              | 20°51              | 8°21              | 12°40             | 25°13              | 13°43              | 19° 1              | 1°13              |
| S 20 | 11 48 32 | 29° 0'56             | 29° 6             | 22°12              | 17°51              | 21°22              | 8°26              | 12°42             | 25°14              | 13°44              | 19° 1              | 1°14              |
| S 21 | 11 52 28 | 0 <sup>z</sup> 0'26  | 0 <sup>z</sup> 7  | 28°23              | 19°26              | 21°53              | 8°31              | 12°44             | 25°14              | 13°44              | 19° 1              | 1°15              |
| M22  | 11 56 25 | 0°59'54              | 1° 7              | 4 <sup>z</sup> 38  | 21° 1              | 22°24              | 8°36              | 12°45             | 25°15              | 13°44              | 19° 1              | 1°15              |
| T 23 | 12 0 21  | 1°59'20              | 2° 8              | 10°56              | 22°36              | 22°54              | 8°40              | 12°47             | 25°16              | 13°45              | 19° 2              | 1°16              |
| W24  | 12 4 18  | 2°58'44              | 3° 8              | 17°15              | 24°11              | 23°25              | 8°45              | 12°49             | 25°17              | 13°45              | 19° 2              | 1°17              |
| T 25 | 12 8 14  | 3°58'07              | 4° 7              | 23°34              | 25°46              | 23°56              | 8°50              | 12°51             | 25°17              | 13°46              | 19° 2              | 1°17              |
| F 26 | 12 12 11 | 4°57'28              | 5° 6              | 29°51              | 27°21              | 24°27              | 8°55              | 12°53             | 25°18              | 13°46              | 19° 2              | 1°18              |
| S 27 | 12 16 7  | 5°56'47              | 6° 5              | 6 <sup>z</sup> 5   | 28°56              | 24°58              | 9° 0              | 12°55             | 25°19              | 13°46              | 19° 2              | 1°19              |
| S 28 | 12 20 4  | 6°56'04              | 7° 3              | 12°15              | 0 <sup>z</sup> 31  | 25°29              | 9° 4              | 12°56             | 25°19              | 13°47              | 19° 3              | 1°20              |
| M29  | 12 24 1  | 7°55'19              | 8° 1              | 18°19              | 2° 6               | 26° 0              | 9° 9              | 12°58             | 25°20              | 13°47              | 19° 3              | 1°20              |
| T 30 | 12 27 57 | 8°54'33              | 8°59              | 24°16              | 3°41               | 26°32              | 9°14              | 13° 0             | 25°21              | 13°47              | 19° 3              | 1°21              |
| W31  | 12 31 54 | 9°53'44              | 9°56              | 0 <sup>z</sup> 5   | 5 <sup>z</sup> 17  | 27 <sup>m</sup> 3  | 9°19              | 13 <sup>z</sup> 2 | 25 <sup>m</sup> 22 | 13 <sup>z</sup> 48 | 19 <sup>z</sup> 3  | 1 <sup>z</sup> 22 |

Delta T = 12.13 sec.

APRIL 1813

00:00 UT

| Day  | Sid.t    | Terra                 | ☾                  | ♃                  | ♄                 | ♅                  | ♆                 | ♁                  | ♂                  | ♆                  | ♁                 | ♂                 |
|------|----------|-----------------------|--------------------|--------------------|-------------------|--------------------|-------------------|--------------------|--------------------|--------------------|-------------------|-------------------|
| T 1  | 12 35 50 | 10 <sup>z</sup> 52'54 | 10 <sup>z</sup> 54 | 5 <sup>z</sup> 45  | 6 <sup>z</sup> 52 | 27 <sup>m</sup> 34 | 9 <sup>z</sup> 24 | 13 <sup>z</sup> 4  | 25 <sup>m</sup> 22 | 13 <sup>z</sup> 48 | 19 <sup>z</sup> 3 | 1 <sup>z</sup> 22 |
| F 2  | 12 39 47 | 11°52'01              | 11°51              | 11°17              | 8°27              | 28° 0              | 9°28              | 13° 5              | 25°23              | 13°48              | 19° 4             | 1°23              |
| S 3  | 12 43 43 | 12°51'07              | 12°48              | 16°39              | 10° 2             | 28°37              | 9°33              | 13° 7              | 25°24              | 13°49              | 19° 4             | 1°24              |
| S 4  | 12 47 40 | 13°50'10              | 13°45              | 21°51              | 11°37             | 29° 8              | 9°38              | 13° 9              | 25°25              | 13°49              | 19° 4             | 1°25              |
| M 5  | 12 51 36 | 14°49'11              | 14°43              | 26°54              | 13°12             | 29°40              | 9°43              | 13°11              | 25°25              | 13°49              | 19° 4             | 1°25              |
| T 6  | 12 55 33 | 15°48'10              | 15°41              | 1 <sup>m</sup> 47  | 14°48             | 0 <sup>z</sup> 11  | 9°47              | 13°13              | 25°26              | 13°50              | 19° 4             | 1°26              |
| W 7  | 12 59 30 | 16°47'07              | 16°39              | 6°30               | 16°23             | 0°43               | 9°52              | 13°14              | 25°27              | 13°50              | 19° 4             | 1°27              |
| T 8  | 13 3 26  | 17°46'01              | 17°37              | 11° 5              | 17°58             | 1°15               | 9°57              | 13°16              | 25°28              | 13°51              | 19° 5             | 1°28              |
| F 9  | 13 7 23  | 18°44'53              | 18°36              | 15°31              | 19°33             | 1°47               | 10° 2             | 13°18              | 25°28              | 13°51              | 19° 5             | 1°28              |
| S 10 | 13 11 19 | 19°43'43              | 19°36              | 19°48              | 21° 9             | 2°18               | 10° 7             | 13°20              | 25°29              | 13°51              | 19° 5             | 1°29              |
| S 11 | 13 15 16 | 20°42'30              | 20°35              | 23°58              | 22°44             | 2°50               | 10°11             | 13°22              | 25°30              | 13°52              | 19° 5             | 1°30              |
| M12  | 13 19 12 | 21°41'15              | 21°35              | 27°59              | 24°19             | 3°22               | 10°16             | 13°23              | 25°30              | 13°52              | 19° 5             | 1°30              |
| T 13 | 13 23 9  | 22°39'58              | 22°35              | 1 <sup>z</sup> 54  | 25°55             | 3°54               | 10°21             | 13°25              | 25°31              | 13°52              | 19° 6             | 1°31              |
| W14  | 13 27 5  | 23°38'39              | 23°36              | 5°42               | 27°30             | 4°26               | 10°26             | 13°27              | 25°32              | 13°53              | 19° 6             | 1°32              |
| T 15 | 13 31 2  | 24°37'17              | 24°36              | 9°23               | 29° 6             | 4°58               | 10°30             | 13°29              | 25°33              | 13°53              | 19° 6             | 1°33              |
| F 16 | 13 34 59 | 25°35'54              | 25°36              | 12°59              | 0 <sup>z</sup> 41 | 5°30               | 10°35             | 13°31              | 25°33              | 13°53              | 19° 6             | 1°33              |
| S 17 | 13 38 55 | 26°34'29              | 26°37              | 16°29              | 2°17              | 6° 2               | 10°40             | 13°32              | 25°34              | 13°54              | 19° 6             | 1°34              |
| S 18 | 13 42 52 | 27°33'02              | 27°37              | 19°54              | 3°52              | 6°35               | 10°45             | 13°34              | 25°35              | 13°54              | 19° 7             | 1°35              |
| M19  | 13 46 48 | 28°31'33              | 28°37              | 23°15              | 5°28              | 7° 7               | 10°50             | 13°36              | 25°36              | 13°54              | 19° 7             | 1°35              |
| T 20 | 13 50 45 | 29°30'02              | 29°37              | 26°31              | 7° 3              | 7°39               | 10°54             | 13°38              | 25°36              | 13°55              | 19° 7             | 1°36              |
| W21  | 13 54 41 | 0 <sup>m</sup> 28'30  | 0 <sup>m</sup> 36  | 29°43              | 8°39              | 8°12               | 10°59             | 13°40              | 25°37              | 13°55              | 19° 7             | 1°37              |
| T 22 | 13 58 38 | 1°26'56               | 1°35               | 2 <sup>m</sup> 51  | 10°14             | 8°44               | 11° 4             | 13°41              | 25°38              | 13°55              | 19° 7             | 1°38              |
| F 23 | 14 2 34  | 2°25'21               | 2°34               | 5°56               | 11°50             | 9°17               | 11° 9             | 13°43              | 25°39              | 13°56              | 19° 8             | 1°38              |
| S 24 | 14 6 31  | 3°23'43               | 3°33               | 8°58               | 13°26             | 9°49               | 11°13             | 13°45              | 25°39              | 13°56              | 19° 8             | 1°39              |
| S 25 | 14 10 28 | 4°22'05               | 4°31               | 11°57              | 15° 1             | 10°22              | 11°18             | 13°47              | 25°40              | 13°57              | 19° 8             | 1°40              |
| M26  | 14 14 24 | 5°20'24               | 5°28               | 14°53              | 16°37             | 10°54              | 11°23             | 13°49              | 25°41              | 13°57              | 19° 8             | 1°40              |
| T 27 | 14 18 21 | 6°18'43               | 6°25               | 17°48              | 18°13             | 11°27              | 11°28             | 13°50              | 25°41              | 13°57              | 19° 8             | 1°41              |
| W28  | 14 22 17 | 7°16'59               | 7°22               | 20°40              | 19°48             | 12° 0              | 11°33             | 13°52              | 25°42              | 13°58              | 19° 9             | 1°42              |
| T 29 | 14 26 14 | 8°15'14               | 8°19               | 23°31              | 21°24             | 12°33              | 11°37             | 13°54              | 25°43              | 13°58              | 19° 9             | 1°43              |
| F 30 | 14 30 10 | 9 <sup>m</sup> 13'28  | 9 <sup>m</sup> 15  | 26 <sup>m</sup> 20 | 23 <sup>z</sup> 0 | 13 <sup>z</sup> 6  | 11°42             | 13 <sup>z</sup> 56 | 25 <sup>m</sup> 44 | 13 <sup>z</sup> 58 | 19 <sup>z</sup> 9 | 1 <sup>z</sup> 43 |

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SWISS EPHEMERIS for the year 1813  
heliocentric

MAY 1813

00:00 UT

| Day  | Sid.t    | Terra                 | ☾                  | ♃                 | ♄                  | ♅                  | ♆                  | ♁                  | ♂                  | ♆                  | ♁                  | ♃                 |
|------|----------|-----------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|
| S 1  | 14 34 7  | 10 <sup>m</sup> 11'39 | 10 <sup>m</sup> 11 | 29 <sup>m</sup> 8 | 24 <sup>Y</sup> 36 | 13 <sup>♁</sup> 39 | 11 <sup>♁</sup> 47 | 13 <sup>♁</sup> 58 | 25 <sup>m</sup> 44 | 13 <sup>♁</sup> 59 | 19 <sup>♁</sup> 9  | 1 <sup>♁</sup> 44 |
| S 2  | 14 38 3  | 11° 9'49              | 11° 7              | 1 <sup>♁</sup> 54 | 26°12              | 14°12              | 11°52              | 13°59              | 25°45              | 13°59              | 19° 9              | 1°45              |
| M 3  | 14 42 0  | 12° 7'58              | 12° 3              | 4°40              | 27°47              | 14°45              | 11°56              | 14° 1              | 25°46              | 13°59              | 19° 9              | 1°46              |
| T 4  | 14 45 56 | 13° 6'04              | 13° 0              | 7°26              | 29°23              | 15°18              | 12° 1              | 14° 3              | 25°47              | 14° 0              | 19°10              | 1°46              |
| W 5  | 14 49 53 | 14° 4'09              | 13°57              | 10°10             | 0 <sup>♁</sup> 59  | 15°51              | 12° 6              | 14° 5              | 25°47              | 14° 0              | 19°10              | 1°47              |
| T 6  | 14 53 50 | 15° 2'11              | 14°54              | 12°55             | 2°35               | 16°25              | 12°11              | 14° 7              | 25°48              | 14° 0              | 19°10              | 1°48              |
| F 7  | 14 57 46 | 16° 0'12              | 15°52              | 15°40             | 4°11               | 16°58              | 12°15              | 14° 9              | 25°49              | 14° 1              | 19°10              | 1°48              |
| S 8  | 15 1 43  | 16°58'11              | 16°49              | 18°25             | 5°47               | 17°31              | 12°20              | 14°10              | 25°50              | 14° 1              | 19°10              | 1°49              |
| S 9  | 15 5 39  | 17°56'07              | 17°48              | 21°10             | 7°23               | 18° 5              | 12°25              | 14°12              | 25°50              | 14° 2              | 19°11              | 1°50              |
| M10  | 15 9 36  | 18°54'02              | 18°46              | 23°56             | 8°59               | 18°38              | 12°30              | 14°14              | 25°51              | 14° 2              | 19°11              | 1°51              |
| T 11 | 15 13 32 | 19°51'56              | 19°45              | 26°42             | 10°35              | 19°12              | 12°35              | 14°16              | 25°52              | 14° 2              | 19°11              | 1°51              |
| W12  | 15 17 29 | 20°49'47              | 20°44              | 29°30             | 12°12              | 19°45              | 12°39              | 14°18              | 25°52              | 14° 3              | 19°11              | 1°52              |
| T 13 | 15 21 25 | 21°47'37              | 21°44              | 2 <sup>♁</sup> 19 | 13°48              | 20°19              | 12°44              | 14°19              | 25°53              | 14° 3              | 19°11              | 1°53              |
| F 14 | 15 25 22 | 22°45'25              | 22°43              | 5° 9              | 15°24              | 20°53              | 12°49              | 14°21              | 25°54              | 14° 3              | 19°12              | 1°53              |
| S 15 | 15 29 19 | 23°43'12              | 23°43              | 8° 1              | 17° 0              | 21°26              | 12°54              | 14°23              | 25°55              | 14° 4              | 19°12              | 1°54              |
| S 16 | 15 33 15 | 24°40'57              | 24°42              | 10°55             | 18°36              | 22° 0              | 12°58              | 14°25              | 25°55              | 14° 4              | 19°12              | 1°55              |
| M17  | 15 37 12 | 25°38'41              | 25°41              | 13°51             | 20°13              | 22°34              | 13° 3              | 14°27              | 25°56              | 14° 4              | 19°12              | 1°56              |
| T 18 | 15 41 8  | 26°36'24              | 26°41              | 16°50             | 21°49              | 23° 8              | 13° 8              | 14°28              | 25°57              | 14° 5              | 19°12              | 1°56              |
| W19  | 15 45 5  | 27°34'06              | 27°40              | 19°51             | 23°25              | 23°42              | 13°13              | 14°30              | 25°58              | 14° 5              | 19°13              | 1°57              |
| T 20 | 15 49 1  | 28°31'46              | 28°39              | 22°55             | 25° 2              | 24°16              | 13°17              | 14°32              | 25°58              | 14° 5              | 19°13              | 1°58              |
| F 21 | 15 52 58 | 29°29'25              | 29°37              | 26° 2             | 26°38              | 24°50              | 13°22              | 14°34              | 25°59              | 14° 6              | 19°13              | 1°58              |
| S 22 | 15 56 54 | 0 <sup>♁</sup> 27'03  | 0 <sup>♁</sup> 36  | 29°12             | 28°14              | 25°24              | 13°27              | 14°36              | 26° 0              | 14° 6              | 19°13              | 1°59              |
| S 23 | 16 0 51  | 1°24'41               | 1°33               | 2 <sup>♁</sup> 26 | 29°51              | 25°59              | 13°32              | 14°37              | 26° 1              | 14° 7              | 19°13              | 2° 0              |
| M24  | 16 4 48  | 2°22'17               | 2°31               | 5°45              | 1 <sup>♁</sup> 27  | 26°33              | 13°36              | 14°39              | 26° 1              | 14° 7              | 19°14              | 2° 1              |
| T 25 | 16 8 44  | 3°19'52               | 3°28               | 9° 7              | 3° 4               | 27° 7              | 13°41              | 14°41              | 26° 2              | 14° 7              | 19°14              | 2° 1              |
| W26  | 16 12 41 | 4°17'27               | 4°24               | 12°34             | 4°40               | 27°42              | 13°46              | 14°43              | 26° 3              | 14° 8              | 19°14              | 2° 2              |
| T 27 | 16 16 37 | 5°15'00               | 5°21               | 16° 6             | 6°17               | 28°16              | 13°51              | 14°45              | 26° 3              | 14° 8              | 19°14              | 2° 3              |
| F 28 | 16 20 34 | 6°12'33               | 6°16               | 19°44             | 7°53               | 28°51              | 13°55              | 14°46              | 26° 4              | 14° 8              | 19°14              | 2° 3              |
| S 29 | 16 24 30 | 7°10'05               | 7°12               | 23°27             | 9°30               | 29°25              | 14° 0              | 14°48              | 26° 5              | 14° 9              | 19°15              | 2° 4              |
| S 30 | 16 28 27 | 8° 7'36               | 8° 8               | 27°16             | 11° 7              | 29°59              | 14° 5              | 14°50              | 26° 6              | 14° 9              | 19°15              | 2° 5              |
| MB1  | 16 32 23 | 9 <sup>♁</sup> 5'06   | 9 <sup>♁</sup> 3   | 1 <sup>♁</sup> 12 | 12 <sup>♁</sup> 43 | 0 <sup>♁</sup> 35  | 14 <sup>♁</sup> 10 | 14 <sup>♁</sup> 52 | 26 <sup>m</sup> 6  | 14 <sup>♁</sup> 9  | 19 <sup>♁</sup> 15 | 2 <sup>♁</sup> 6  |

Delta T = 12.13 sec.

JUNE 1813

00:00 UT

| Day  | Sid.t    | Terra                | ☾                 | ♃                  | ♄                  | ♅                  | ♆                  | ♁                  | ♂                  | ♆                  | ♁                  | ♃                 |
|------|----------|----------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|
| T 1  | 16 36 20 | 10 <sup>♁</sup> 2'35 | 9 <sup>♁</sup> 59 | 5 <sup>♁</sup> 15  | 14 <sup>♁</sup> 20 | 1 <sup>♁</sup> 9   | 14 <sup>♁</sup> 14 | 14 <sup>♁</sup> 54 | 26 <sup>m</sup> 7  | 14 <sup>♁</sup> 10 | 19 <sup>♁</sup> 15 | 2 <sup>♁</sup> 6  |
| W 2  | 16 40 17 | 11° 0'02             | 10°54             | 9°24               | 15°57              | 1°44               | 14°19              | 14°56              | 26° 8              | 14°10              | 19°15              | 2° 7              |
| T 3  | 16 44 13 | 11°57'29             | 11°51             | 13°42              | 17°34              | 2°19               | 14°24              | 14°57              | 26° 9              | 14°10              | 19°16              | 2° 8              |
| F 4  | 16 48 10 | 12°54'54             | 12°47             | 18° 7              | 19°10              | 2°54               | 14°29              | 14°59              | 26° 9              | 14°11              | 19°16              | 2° 8              |
| S 5  | 16 52 6  | 13°52'19             | 13°44             | 22°40              | 20°47              | 3°29               | 14°33              | 15° 1              | 26°10              | 14°11              | 19°16              | 2° 9              |
| S 6  | 16 56 3  | 14°49'42             | 14°41             | 27°22              | 22°24              | 4° 4               | 14°38              | 15° 3              | 26°11              | 14°12              | 19°16              | 2°10              |
| M 7  | 16 59 59 | 15°47'03             | 15°38             | 2 <sup>Y</sup> 13  | 24° 1              | 4°39               | 14°43              | 15° 5              | 26°12              | 14°12              | 19°16              | 2°11              |
| T 8  | 17 3 56  | 16°44'24             | 16°36             | 7°13               | 25°38              | 5°14               | 14°48              | 15° 6              | 26°12              | 14°12              | 19°16              | 2°11              |
| W 9  | 17 7 53  | 17°41'44             | 17°34             | 12°22              | 27°15              | 5°49               | 14°52              | 15° 8              | 26°13              | 14°13              | 19°17              | 2°12              |
| T 10 | 17 11 49 | 18°39'03             | 18°33             | 17°39              | 28°52              | 6°24               | 14°57              | 15°10              | 26°14              | 14°13              | 19°17              | 2°13              |
| F 11 | 17 15 46 | 19°36'21             | 19°31             | 23° 6              | 0 <sup>♁</sup> 29  | 7° 0               | 15° 2              | 15°12              | 26°14              | 14°13              | 19°17              | 2°13              |
| S 12 | 17 19 42 | 20°33'38             | 20°30             | 28°42              | 2° 6               | 7°35               | 15° 7              | 15°14              | 26°15              | 14°14              | 19°17              | 2°14              |
| S 13 | 17 23 39 | 21°30'55             | 21°29             | 4 <sup>♁</sup> 26  | 3°43               | 8°11               | 15°11              | 15°15              | 26°16              | 14°14              | 19°17              | 2°15              |
| M14  | 17 27 35 | 22°28'11             | 22°28             | 10°19              | 5°20               | 8°46               | 15°16              | 15°17              | 26°17              | 14°14              | 19°18              | 2°16              |
| T 15 | 17 31 32 | 23°25'26             | 23°27             | 16°18              | 6°57               | 9°21               | 15°21              | 15°19              | 26°17              | 14°15              | 19°18              | 2°16              |
| W16  | 17 35 28 | 24°22'41             | 24°26             | 22°24              | 8°34               | 9°57               | 15°26              | 15°21              | 26°18              | 14°15              | 19°18              | 2°17              |
| T 17 | 17 39 25 | 25°19'55             | 25°25             | 28°35              | 10°12              | 10°33              | 15°30              | 15°23              | 26°19              | 14°15              | 19°18              | 2°18              |
| F 18 | 17 43 22 | 26°17'09             | 26°23             | 4 <sup>♁</sup> 50  | 11°49              | 11° 8              | 15°35              | 15°24              | 26°20              | 14°16              | 19°18              | 2°19              |
| S 19 | 17 47 18 | 27°14'23             | 27°22             | 11° 8              | 13°26              | 11°44              | 15°40              | 15°26              | 26°20              | 14°16              | 19°19              | 2°19              |
| S 20 | 17 51 15 | 28°11'37             | 28°20             | 17°27              | 15° 3              | 12°20              | 15°45              | 15°28              | 26°21              | 14°16              | 19°19              | 2°20              |
| M21  | 17 55 11 | 29° 8'50             | 29°17             | 23°46              | 16°40              | 12°56              | 15°49              | 15°30              | 26°22              | 14°17              | 19°19              | 2°21              |
| T 22 | 17 59 8  | 0 <sup>♁</sup> 6'04  | 0 <sup>♁</sup> 14 | 0 <sup>♁</sup> 3   | 18°18              | 13°31              | 15°54              | 15°32              | 26°23              | 14°17              | 19°19              | 2°21              |
| W23  | 18 3 4   | 1° 3'17              | 1°11              | 6°17               | 19°55              | 14° 7              | 15°59              | 15°33              | 26°23              | 14°18              | 19°19              | 2°22              |
| T 24 | 18 7 1   | 2° 0'30              | 2° 8              | 12°26              | 21°32              | 14°43              | 16° 4              | 15°35              | 26°24              | 14°18              | 19°20              | 2°23              |
| F 25 | 18 10 57 | 2°57'44              | 3° 4              | 18°30              | 23°10              | 15°19              | 16° 8              | 15°37              | 26°25              | 14°18              | 19°20              | 2°24              |
| S 26 | 18 14 54 | 3°54'57              | 3°59              | 24°27              | 24°47              | 15°55              | 16°13              | 15°39              | 26°25              | 14°19              | 19°20              | 2°24              |
| S 27 | 18 18 51 | 4°52'11              | 4°55              | 0 <sup>♁</sup> 15  | 26°25              | 16°31              | 16°18              | 15°41              | 26°26              | 14°19              | 19°20              | 2°25              |
| M28  | 18 22 47 | 5°49'24              | 5°50              | 5°56               | 28° 2              | 17° 8              | 16°23              | 15°43              | 26°27              | 14°19              | 19°20              | 2°26              |
| T 29 | 18 26 44 | 6°46'38              | 6°45              | 11°27              | 29°39              | 17°44              | 16°27              | 15°44              | 26°28              | 14°20              | 19°21              | 2°26              |
| W30  | 18 30 40 | 7 <sup>♁</sup> 43'51 | 7 <sup>♁</sup> 41 | 16 <sup>♁</sup> 49 | 1 <sup>♁</sup> 17  | 18 <sup>♁</sup> 20 | 16 <sup>♁</sup> 32 | 15 <sup>♁</sup> 46 | 26 <sup>m</sup> 28 | 14 <sup>♁</sup> 20 | 19 <sup>♁</sup> 21 | 2 <sup>♁</sup> 27 |

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SWISS EPHEMERIS for the year 1813  
heliocentric

JULY 1813

00:00 UT

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

Delta T = 12.14 sec.

AUGUST 1813

00:00 UT

| Day  | Sid.t    | Terra    | ☾     | ♃     | ♄     | ♅     | ♆     | ♁     | ♂     | ♆     | ♁     | ♁    |
|------|----------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| S 1  | 20 36 50 | 8♁16'30  | 8♁ 9  | 10♁16 | 23♂16 | 8♁ 2  | 19♂ 3 | 16♁44 | 26♂52 | 14♁31 | 19♁27 | 2♁50 |
| M 2  | 20 40 47 | 9°13'57  | 9° 6  | 13° 0 | 24°53 | 8°40  | 19° 8 | 16°46 | 26°53 | 14°32 | 19°27 | 2°51 |
| T 3  | 20 44 43 | 10°11'25 | 10° 3 | 15°45 | 26°30 | 9°17  | 19°13 | 16°48 | 26°53 | 14°32 | 19°27 | 2°51 |
| W 4  | 20 48 40 | 11° 8'54 | 11° 0 | 18°30 | 28° 8 | 9°55  | 19°17 | 16°49 | 26°54 | 14°33 | 19°28 | 2°52 |
| T 5  | 20 52 36 | 12° 6'23 | 11°57 | 21°15 | 29°45 | 10°33 | 19°22 | 16°51 | 26°55 | 14°33 | 19°28 | 2°53 |
| F 6  | 20 56 33 | 13° 3'53 | 12°55 | 24° 1 | 1♁22  | 11°10 | 19°27 | 16°53 | 26°55 | 14°33 | 19°28 | 2°53 |
| S 7  | 21 0 29  | 14° 1'24 | 13°54 | 26°48 | 2°59  | 11°48 | 19°32 | 16°55 | 26°56 | 14°34 | 19°28 | 2°54 |
| S 8  | 21 4 26  | 14°58'56 | 14°52 | 29°36 | 4°36  | 12°26 | 19°36 | 16°57 | 26°57 | 14°34 | 19°28 | 2°55 |
| M 9  | 21 8 22  | 15°56'29 | 15°51 | 2♁24  | 6°13  | 13° 3 | 19°41 | 16°59 | 26°58 | 14°34 | 19°29 | 2°56 |
| T 10 | 21 12 19 | 16°54'03 | 16°50 | 5°15  | 7°50  | 13°41 | 19°46 | 17° 0 | 26°58 | 14°35 | 19°29 | 2°56 |
| W 11 | 21 16 16 | 17°51'38 | 17°50 | 8° 7  | 9°27  | 14°19 | 19°50 | 17° 2 | 26°59 | 14°35 | 19°29 | 2°57 |
| T 12 | 21 20 12 | 18°49'14 | 18°49 | 11° 1 | 11° 4 | 14°57 | 19°55 | 17° 4 | 27° 0 | 14°35 | 19°29 | 2°58 |
| F 13 | 21 24 9  | 19°46'52 | 19°48 | 13°57 | 12°40 | 15°34 | 20° 0 | 17° 6 | 27° 1 | 14°36 | 19°29 | 2°58 |
| S 14 | 21 28 5  | 20°44'30 | 20°48 | 16°56 | 14°17 | 16°12 | 20° 5 | 17° 8 | 27° 1 | 14°36 | 19°29 | 2°59 |
| S 15 | 21 32 2  | 21°42'10 | 21°47 | 19°57 | 15°54 | 16°50 | 20° 9 | 17° 9 | 27° 2 | 14°36 | 19°30 | 3° 0 |
| M 16 | 21 35 58 | 22°39'51 | 22°46 | 23° 1 | 17°31 | 17°28 | 20°14 | 17°11 | 27° 3 | 14°37 | 19°30 | 3° 1 |
| T 17 | 21 39 55 | 23°37'34 | 23°45 | 26° 8 | 19° 7 | 18° 6 | 20°19 | 17°13 | 27° 4 | 14°37 | 19°30 | 3° 1 |
| W 18 | 21 43 51 | 24°35'19 | 24°43 | 29°18 | 20°44 | 18°44 | 20°23 | 17°15 | 27° 4 | 14°37 | 19°30 | 3° 2 |
| T 19 | 21 47 48 | 25°33'06 | 25°41 | 2♁33  | 22°21 | 19°22 | 20°28 | 17°17 | 27° 5 | 14°38 | 19°30 | 3° 3 |
| F 20 | 21 51 45 | 26°30'54 | 26°39 | 5°51  | 23°57 | 20° 0 | 20°33 | 17°18 | 27° 6 | 14°38 | 19°31 | 3° 3 |
| S 21 | 21 55 41 | 27°28'44 | 27°36 | 9°14  | 25°34 | 20°38 | 20°38 | 17°20 | 27° 6 | 14°39 | 19°31 | 3° 4 |
| S 22 | 21 59 38 | 28°26'36 | 28°33 | 12°41 | 27°10 | 21°16 | 20°42 | 17°22 | 27° 7 | 14°39 | 19°31 | 3° 5 |
| M 23 | 22 3 34  | 29°24'29 | 29°30 | 16°13 | 28°47 | 21°54 | 20°47 | 17°24 | 27° 8 | 14°39 | 19°31 | 3° 6 |
| T 24 | 22 7 31  | 0♁22'24  | 0♁26  | 19°51 | 0♂23  | 22°32 | 20°52 | 17°26 | 27° 9 | 14°40 | 19°31 | 3° 6 |
| W 25 | 22 11 27 | 1°20'21  | 1°22  | 23°34 | 1°59  | 23°10 | 20°56 | 17°27 | 27° 9 | 14°40 | 19°32 | 3° 7 |
| T 26 | 22 15 24 | 2°18'20  | 2°18  | 27°24 | 3°35  | 23°48 | 21° 1 | 17°29 | 27°10 | 14°40 | 19°32 | 3° 8 |
| F 27 | 22 19 20 | 3°16'19  | 3°15  | 1♁20  | 5°12  | 24°26 | 21° 6 | 17°31 | 27°11 | 14°41 | 19°32 | 3° 8 |
| S 28 | 22 23 17 | 4°14'21  | 4°11  | 5°23  | 6°48  | 25° 4 | 21°10 | 17°33 | 27°12 | 14°41 | 19°32 | 3° 9 |
| S 29 | 22 27 14 | 5°12'24  | 5° 7  | 9°32  | 8°24  | 25°42 | 21°15 | 17°35 | 27°12 | 14°41 | 19°32 | 3°10 |
| M 30 | 22 31 10 | 6°10'28  | 6° 4  | 13°50 | 10° 0 | 26°20 | 21°20 | 17°36 | 27°13 | 14°42 | 19°33 | 3°10 |
| T 31 | 22 35 7  | 7♁ 8'34  | 7♁ 1  | 18♁15 | 11♂36 | 26♁58 | 21♂25 | 17♁38 | 27♂14 | 14♁42 | 19♁33 | 3♁11 |

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SWISS EPHEMERIS for the year 1813  
heliocentric

SEPTEMBER 1813

00:00 UT

| Day  | Sid.t    | Terra    | ☾     | ♃     | ♄     | ♅     | ♆     | ♁     | ♂     | ♆     | ♁     | ♄    |
|------|----------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| W 1  | 22 39 3  | 8♁ 6'42  | 7♁58  | 22♁49 | 13♁12 | 27♁36 | 21♁29 | 17♁40 | 27♁14 | 14♁42 | 19♁33 | 3♁12 |
| T 2  | 22 43 0  | 9° 4'51  | 8°56  | 27°31 | 14°48 | 28°14 | 21°34 | 17°42 | 27°15 | 14°43 | 19°33 | 3°13 |
| F 3  | 22 46 56 | 10° 3'01 | 9°54  | 27°22 | 16°24 | 28°52 | 21°39 | 17°44 | 27°16 | 14°43 | 19°33 | 3°13 |
| S 4  | 22 50 53 | 11° 1'13 | 10°52 | 7°22  | 18° 0 | 29°30 | 21°43 | 17°46 | 27°17 | 14°44 | 19°34 | 3°14 |
| S 5  | 22 54 49 | 11°59'26 | 11°51 | 12°31 | 19°36 | 0♁ 8  | 21°48 | 17°47 | 27°17 | 14°44 | 19°34 | 3°15 |
| M 6  | 22 58 46 | 12°57'41 | 12°50 | 17°50 | 21°11 | 0°46  | 21°53 | 17°49 | 27°18 | 14°44 | 19°34 | 3°15 |
| T 7  | 23 2 43  | 13°55'58 | 13°50 | 23°17 | 22°47 | 1°25  | 21°57 | 17°51 | 27°19 | 14°45 | 19°34 | 3°16 |
| W 8  | 23 6 39  | 14°54'16 | 14°50 | 28°53 | 24°23 | 2° 3  | 22° 2 | 17°53 | 27°20 | 14°45 | 19°34 | 3°17 |
| T 9  | 23 10 36 | 15°52'35 | 15°50 | 4♁38  | 25°58 | 2°41  | 22° 7 | 17°55 | 27°20 | 14°45 | 19°34 | 3°18 |
| F 10 | 23 14 32 | 16°50'57 | 16°50 | 10°30 | 27°34 | 3°19  | 22°12 | 17°56 | 27°21 | 14°46 | 19°35 | 3°18 |
| S 11 | 23 18 29 | 17°49'20 | 17°50 | 16°30 | 29°10 | 3°57  | 22°16 | 17°58 | 27°22 | 14°46 | 19°35 | 3°19 |
| S 12 | 23 22 25 | 18°47'45 | 18°50 | 22°35 | 0♁45  | 4°35  | 22°21 | 18° 0 | 27°23 | 14°46 | 19°35 | 3°20 |
| M13  | 23 26 22 | 19°46'12 | 19°51 | 28°47 | 2°21  | 5°13  | 22°26 | 18° 2 | 27°23 | 14°47 | 19°35 | 3°20 |
| T 14 | 23 30 18 | 20°44'41 | 20°51 | 5♁ 2  | 3°56  | 5°51  | 22°30 | 18° 4 | 27°24 | 14°47 | 19°35 | 3°21 |
| W15  | 23 34 15 | 21°43'12 | 21°50 | 11°20 | 5°31  | 6°29  | 22°35 | 18° 5 | 27°25 | 14°47 | 19°36 | 3°22 |
| T 16 | 23 38 11 | 22°41'46 | 22°50 | 17°39 | 7° 7  | 7° 7  | 22°40 | 18° 7 | 27°25 | 14°48 | 19°36 | 3°22 |
| F 17 | 23 42 8  | 23°40'22 | 23°49 | 23°58 | 8°42  | 7°45  | 22°44 | 18° 9 | 27°26 | 14°48 | 19°36 | 3°23 |
| S 18 | 23 46 5  | 24°39'00 | 24°47 | 0♁15  | 10°18 | 8°24  | 22°49 | 18°11 | 27°27 | 14°49 | 19°36 | 3°24 |
| S 19 | 23 50 1  | 25°37'40 | 25°46 | 6°29  | 11°53 | 9° 2  | 22°54 | 18°13 | 27°28 | 14°49 | 19°36 | 3°25 |
| M20  | 23 53 58 | 26°36'23 | 26°44 | 12°38 | 13°28 | 9°40  | 22°59 | 18°14 | 27°28 | 14°49 | 19°37 | 3°25 |
| T 21 | 23 57 54 | 27°35'07 | 27°41 | 18°41 | 15° 3 | 10°18 | 23° 3 | 18°16 | 27°29 | 14°50 | 19°37 | 3°26 |
| W22  | 0 1 51   | 28°33'54 | 28°38 | 24°38 | 16°38 | 10°56 | 23° 8 | 18°18 | 27°30 | 14°50 | 19°37 | 3°27 |
| T 23 | 0 5 47   | 29°32'43 | 29°36 | 0♁26  | 18°14 | 11°34 | 23°13 | 18°20 | 27°31 | 14°50 | 19°37 | 3°27 |
| F 24 | 0 9 44   | 0♁31'34  | 0♁33  | 6° 6  | 19°49 | 12°12 | 23°17 | 18°22 | 27°31 | 14°51 | 19°37 | 3°28 |
| S 25 | 0 13 40  | 1°30'28  | 1°30  | 11°37 | 21°24 | 12°50 | 23°22 | 18°24 | 27°32 | 14°51 | 19°38 | 3°29 |
| S 26 | 0 17 37  | 2°29'23  | 2°27  | 16°58 | 22°59 | 13°28 | 23°27 | 18°25 | 27°33 | 14°51 | 19°38 | 3°30 |
| M27  | 0 21 34  | 3°28'20  | 3°24  | 22°10 | 24°34 | 14° 6 | 23°31 | 18°27 | 27°33 | 14°52 | 19°38 | 3°30 |
| T 28 | 0 25 30  | 4°27'19  | 4°22  | 27°12 | 26° 9 | 14°44 | 23°36 | 18°29 | 27°34 | 14°52 | 19°38 | 3°31 |
| W29  | 0 29 27  | 5°26'19  | 5°19  | 2♁ 5  | 27°44 | 15°22 | 23°41 | 18°31 | 27°35 | 14°52 | 19°38 | 3°32 |
| T 30 | 0 33 23  | 6°25'22  | 6°17  | 6♁48  | 29°19 | 16♁ 0 | 23°45 | 18♁33 | 27♁36 | 14♁53 | 19♁39 | 3♁32 |

Delta T = 12.14 sec.

OCTOBER 1813

00:00 UT

| Day  | Sid.t   | Terra    | ☾     | ♃     | ♄     | ♅     | ♆     | ♁     | ♂     | ♆     | ♁     | ♄    |
|------|---------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| F 1  | 0 37 20 | 7♁24'27  | 7♁16  | 11♁22 | 0♁54  | 16♁38 | 23♁50 | 18♁34 | 27♁36 | 14♁53 | 19♁39 | 3♁33 |
| S 2  | 0 41 16 | 8°23'33  | 8°14  | 15°47 | 2°29  | 17°15 | 23°55 | 18°36 | 27°37 | 14°53 | 19°39 | 3°34 |
| S 3  | 0 45 13 | 9°22'41  | 9°14  | 20° 4 | 4° 4  | 17°53 | 23°59 | 18°38 | 27°38 | 14°54 | 19°39 | 3°34 |
| M 4  | 0 49 9  | 10°21'51 | 10°13 | 24°13 | 5°39  | 18°31 | 24° 4 | 18°40 | 27°39 | 14°54 | 19°39 | 3°35 |
| T 5  | 0 53 6  | 11°21'03 | 11°13 | 28°14 | 7°14  | 19° 9 | 24° 9 | 18°42 | 27°39 | 14°55 | 19°39 | 3°36 |
| W 6  | 0 57 3  | 12°20'17 | 12°13 | 2♁ 8  | 8°49  | 19°47 | 24°14 | 18°43 | 27°40 | 14°55 | 19°40 | 3°37 |
| T 7  | 1 0 59  | 13°19'32 | 13°14 | 5°56  | 10°23 | 20°25 | 24°18 | 18°45 | 27°41 | 14°55 | 19°40 | 3°37 |
| F 8  | 1 4 56  | 14°18'49 | 14°15 | 9°37  | 11°58 | 21° 2 | 24°23 | 18°47 | 27°42 | 14°56 | 19°40 | 3°38 |
| S 9  | 1 8 52  | 15°18'08 | 15°16 | 13°12 | 13°33 | 21°40 | 24°28 | 18°49 | 27°42 | 14°56 | 19°40 | 3°39 |
| S 10 | 1 12 49 | 16°17'29 | 16°17 | 16°42 | 15° 8 | 22°18 | 24°32 | 18°51 | 27°43 | 14°56 | 19°40 | 3°39 |
| M11  | 1 16 45 | 17°16'52 | 17°19 | 20° 7 | 16°43 | 22°56 | 24°37 | 18°53 | 27°44 | 14°57 | 19°41 | 3°40 |
| T 12 | 1 20 42 | 18°16'17 | 18°20 | 23°27 | 18°18 | 23°33 | 24°42 | 18°54 | 27°44 | 14°57 | 19°41 | 3°41 |
| W13  | 1 24 38 | 19°15'44 | 19°21 | 26°43 | 19°53 | 24°11 | 24°46 | 18°56 | 27°45 | 14°57 | 19°41 | 3°42 |
| T 14 | 1 28 35 | 20°15'14 | 20°22 | 29°55 | 21°27 | 24°49 | 24°51 | 18°58 | 27°46 | 14°58 | 19°41 | 3°42 |
| F 15 | 1 32 31 | 21°14'46 | 21°23 | 3♁ 3  | 23° 2 | 25°26 | 24°56 | 19° 0 | 27°47 | 14°58 | 19°41 | 3°43 |
| S 16 | 1 36 28 | 22°14'20 | 22°23 | 6° 7  | 24°37 | 26° 4 | 25° 0 | 19° 2 | 27°47 | 14°58 | 19°42 | 3°44 |
| S 17 | 1 40 25 | 23°13'57 | 23°23 | 9° 9  | 26°12 | 26°41 | 25° 5 | 19° 3 | 27°48 | 14°59 | 19°42 | 3°44 |
| M18  | 1 44 21 | 24°13'36 | 24°22 | 12° 8 | 27°47 | 27°19 | 25°10 | 19° 5 | 27°49 | 14°59 | 19°42 | 3°45 |
| T 19 | 1 48 18 | 25°13'17 | 25°21 | 15° 5 | 29°22 | 27°56 | 25°14 | 19° 7 | 27°50 | 15° 0 | 19°42 | 3°46 |
| W20  | 1 52 14 | 26°13'01 | 26°20 | 17°59 | 0♁56  | 28°34 | 25°19 | 19° 9 | 27°50 | 15° 0 | 19°42 | 3°46 |
| T 21 | 1 56 11 | 27°12'46 | 27°18 | 20°51 | 2°31  | 29°11 | 25°24 | 19°11 | 27°51 | 15° 0 | 19°43 | 3°47 |
| F 22 | 2 0 7   | 28°12'34 | 28°16 | 23°41 | 4° 6  | 29°48 | 25°28 | 19°12 | 27°52 | 15° 1 | 19°43 | 3°48 |
| S 23 | 2 4 4   | 29°12'24 | 29°15 | 26°30 | 5°41  | 0♁26  | 25°33 | 19°14 | 27°52 | 15° 1 | 19°43 | 3°49 |
| S 24 | 2 8 0   | 0♁12'16  | 0♁13  | 29°18 | 7°16  | 1° 3  | 25°38 | 19°16 | 27°53 | 15° 1 | 19°43 | 3°49 |
| M25  | 2 11 57 | 1°12'10  | 1°11  | 2♁ 5  | 8°51  | 1°40  | 25°42 | 19°18 | 27°54 | 15° 2 | 19°43 | 3°50 |
| T 26 | 2 15 54 | 2°12'06  | 2° 9  | 4°51  | 10°26 | 2°18  | 25°47 | 19°20 | 27°55 | 15° 2 | 19°44 | 3°51 |
| W27  | 2 19 50 | 3°12'03  | 3° 7  | 7°36  | 12° 1 | 2°55  | 25°52 | 19°21 | 27°55 | 15° 2 | 19°44 | 3°51 |
| T 28 | 2 23 47 | 4°12'03  | 4° 6  | 10°21 | 13°35 | 3°32  | 25°56 | 19°23 | 27°56 | 15° 3 | 19°44 | 3°52 |
| F 29 | 2 27 43 | 5°12'04  | 5° 5  | 13° 6 | 15°10 | 4° 9  | 26° 1 | 19°25 | 27°57 | 15° 3 | 19°44 | 3°53 |
| S 30 | 2 31 40 | 6°12'07  | 6° 4  | 15°50 | 16°45 | 4°46  | 26° 6 | 19°27 | 27°58 | 15° 3 | 19°44 | 3°53 |
| S 31 | 2 35 36 | 7♁12'12  | 7♁ 3  | 18♁35 | 18♁20 | 5♁23  | 26♁10 | 19♁29 | 27♁58 | 15♁ 4 | 19♁44 | 3♁54 |

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SWISS EPHEMERIS for the year 1813  
heliocentric

NOVEMBER 1813

00:00 UT

| Day  | Sid.t   | Terra    | ☾     | ♃     | ♄     | ♅     | ♆     | ♁     | ♂     | ♆     | ♁     | ♃    |
|------|---------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| M 1  | 2 39 33 | 8♁12'18  | 8♁ 3  | 21♁20 | 19♁55 | 6♁ 0  | 26♁15 | 19♁31 | 27♁59 | 15♁ 4 | 19♁45 | 3♁55 |
| T 2  | 2 43 29 | 9°12'26  | 9° 3  | 24° 6 | 21°30 | 6°37  | 26°20 | 19°32 | 28° 0 | 15° 4 | 19°45 | 3°56 |
| W 3  | 2 47 26 | 10°12'35 | 10° 4 | 26°53 | 23° 5 | 7°14  | 26°25 | 19°34 | 28° 1 | 15° 5 | 19°45 | 3°56 |
| T 4  | 2 51 23 | 11°12'46 | 11° 5 | 29°41 | 24°40 | 7°51  | 26°29 | 19°36 | 28° 1 | 15° 5 | 19°45 | 3°57 |
| F 5  | 2 55 19 | 12°12'58 | 12° 7 | 2♁30  | 26°15 | 8°28  | 26°34 | 19°38 | 28° 2 | 15° 6 | 19°45 | 3°58 |
| S 6  | 2 59 16 | 13°13'12 | 13° 8 | 5°20  | 27°50 | 9° 5  | 26°39 | 19°40 | 28° 3 | 15° 6 | 19°46 | 3°58 |
| S 7  | 3 3 12  | 14°13'27 | 14°11 | 8°12  | 29°25 | 9°42  | 26°43 | 19°41 | 28° 3 | 15° 6 | 19°46 | 3°59 |
| M 8  | 3 7 9   | 15°13'44 | 15°13 | 11° 6 | 1♁ 0  | 10°19 | 26°48 | 19°43 | 28° 4 | 15° 7 | 19°46 | 4° 0 |
| T 9  | 3 11 5  | 16°14'03 | 16°15 | 14° 3 | 2°35  | 10°55 | 26°53 | 19°45 | 28° 5 | 15° 7 | 19°46 | 4° 0 |
| W10  | 3 15 2  | 17°14'23 | 17°18 | 17° 1 | 4°10  | 11°32 | 26°57 | 19°47 | 28° 6 | 15° 7 | 19°46 | 4° 1 |
| T 11 | 3 18 58 | 18°14'46 | 18°20 | 20° 2 | 5°46  | 12° 9 | 27° 2 | 19°49 | 28° 6 | 15° 8 | 19°47 | 4° 2 |
| F 12 | 3 22 55 | 19°15'10 | 19°22 | 23° 6 | 7°21  | 12°45 | 27° 7 | 19°50 | 28° 7 | 15° 8 | 19°47 | 4° 3 |
| S 13 | 3 26 52 | 20°15'36 | 20°23 | 26°14 | 8°56  | 13°22 | 27°11 | 19°52 | 28° 8 | 15° 8 | 19°47 | 4° 3 |
| S 14 | 3 30 48 | 21°16'04 | 21°25 | 29°24 | 10°31 | 13°58 | 27°16 | 19°54 | 28° 9 | 15° 9 | 19°47 | 4° 4 |
| M15  | 3 34 45 | 22°16'34 | 22°25 | 2♁39  | 12° 6 | 14°35 | 27°21 | 19°56 | 28° 9 | 15° 9 | 19°47 | 4° 5 |
| T 16 | 3 38 41 | 23°17'06 | 23°26 | 5°57  | 13°41 | 15°11 | 27°25 | 19°58 | 28°10 | 15° 9 | 19°48 | 4° 5 |
| W17  | 3 42 38 | 24°17'39 | 24°26 | 9°20  | 15°17 | 15°48 | 27°30 | 20° 0 | 28°11 | 15°10 | 19°48 | 4° 6 |
| T 18 | 3 46 34 | 25°18'15 | 25°26 | 12°48 | 16°52 | 16°24 | 27°35 | 20° 1 | 28°11 | 15°10 | 19°48 | 4° 7 |
| F 19 | 3 50 31 | 26°18'51 | 26°25 | 16°20 | 18°27 | 17° 0 | 27°39 | 20° 3 | 28°12 | 15°11 | 19°48 | 4° 8 |
| S 20 | 3 54 27 | 27°19'30 | 27°25 | 19°58 | 20° 2 | 17°36 | 27°44 | 20° 5 | 28°13 | 15°11 | 19°48 | 4° 8 |
| S 21 | 3 58 24 | 28°20'10 | 28°24 | 23°42 | 21°38 | 18°12 | 27°49 | 20° 7 | 28°14 | 15°11 | 19°49 | 4° 9 |
| M22  | 4 2 21  | 29°20'52 | 29°23 | 27°31 | 23°13 | 18°49 | 27°53 | 20° 9 | 28°14 | 15°12 | 19°49 | 4°10 |
| T 23 | 4 6 17  | 0♁21'35  | 0♁22  | 1♁27  | 24°49 | 19°25 | 27°58 | 20°10 | 28°15 | 15°12 | 19°49 | 4°10 |
| W24  | 4 10 14 | 1°22'20  | 1°21  | 5°30  | 26°24 | 20° 1 | 28° 3 | 20°12 | 28°16 | 15°12 | 19°49 | 4°11 |
| T 25 | 4 14 10 | 2°23'06  | 2°20  | 9°40  | 27°59 | 20°37 | 28° 7 | 20°14 | 28°17 | 15°13 | 19°49 | 4°12 |
| F 26 | 4 18 7  | 3°23'53  | 3°19  | 13°58 | 29°35 | 21°13 | 28°12 | 20°16 | 28°17 | 15°13 | 19°50 | 4°12 |
| S 27 | 4 22 3  | 4°24'41  | 4°18  | 18°24 | 1♁10  | 21°49 | 28°17 | 20°18 | 28°18 | 15°13 | 19°50 | 4°13 |
| S 28 | 4 26 0  | 5°25'30  | 5°18  | 22°58 | 2°46  | 22°24 | 28°21 | 20°19 | 28°19 | 15°14 | 19°50 | 4°14 |
| M29  | 4 29 56 | 6°26'20  | 6°18  | 27°40 | 4°21  | 23° 0 | 28°26 | 20°21 | 28°20 | 15°14 | 19°50 | 4°15 |
| T 30 | 4 33 53 | 7♁27'11  | 7♁18  | 2♁32  | 5♁57  | 23♁36 | 28♁31 | 20♁23 | 28♁20 | 15♁14 | 19♁50 | 4♁15 |

Delta T = 12.14 sec.

DECEMBER 1813

00:00 UT

| Day  | Sid.t   | Terra    | ☾     | ♃     | ♄     | ♅     | ♆     | ♁     | ♂     | ♆     | ♁     | ♃    |
|------|---------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| W 1  | 4 37 50 | 8♁28'03  | 8♁19  | 7♁32  | 7♁32  | 24♁12 | 28♁35 | 20♁25 | 28♁21 | 15♁15 | 19♁50 | 4♁16 |
| T 2  | 4 41 46 | 9°28'56  | 9°20  | 12°41 | 9° 8  | 24°47 | 28°40 | 20°27 | 28°22 | 15°15 | 19°51 | 4°17 |
| F 3  | 4 45 43 | 10°29'50 | 10°22 | 18° 0 | 10°43 | 25°23 | 28°44 | 20°29 | 28°22 | 15°16 | 19°51 | 4°17 |
| S 4  | 4 49 39 | 11°30'44 | 11°24 | 23°27 | 12°19 | 25°58 | 28°49 | 20°30 | 28°23 | 15°16 | 19°51 | 4°18 |
| S 5  | 4 53 36 | 12°31'39 | 12°26 | 29° 4 | 13°55 | 26°34 | 28°54 | 20°32 | 28°24 | 15°16 | 19°51 | 4°19 |
| M 6  | 4 57 32 | 13°32'35 | 13°29 | 4♁48  | 15°30 | 27° 9 | 28°58 | 20°34 | 28°25 | 15°17 | 19°51 | 4°19 |
| T 7  | 5 1 29  | 14°33'31 | 14°32 | 10°41 | 17° 6 | 27°44 | 29° 3 | 20°36 | 28°25 | 15°17 | 19°52 | 4°20 |
| W 8  | 5 5 25  | 15°34'29 | 15°35 | 16°41 | 18°42 | 28°20 | 29° 8 | 20°38 | 28°26 | 15°17 | 19°52 | 4°21 |
| T 9  | 5 9 22  | 16°35'27 | 16°38 | 22°47 | 20°18 | 28°55 | 29°12 | 20°39 | 28°27 | 15°18 | 19°52 | 4°22 |
| F 10 | 5 13 19 | 17°36'27 | 17°41 | 28°58 | 21°53 | 29°30 | 29°17 | 20°41 | 28°28 | 15°18 | 19°52 | 4°22 |
| S 11 | 5 17 15 | 18°37'27 | 18°43 | 5♁14  | 23°29 | 0♁ 5  | 29°22 | 20°43 | 28°28 | 15°18 | 19°52 | 4°23 |
| S 12 | 5 21 12 | 19°38'29 | 19°46 | 11°32 | 25° 5 | 0°41  | 29°26 | 20°45 | 28°29 | 15°19 | 19°53 | 4°24 |
| M13  | 5 25 8  | 20°39'31 | 20°48 | 17°51 | 26°41 | 1°16  | 29°31 | 20°47 | 28°30 | 15°19 | 19°53 | 4°24 |
| T 14 | 5 29 5  | 21°40'34 | 21°49 | 24°10 | 28°17 | 1°51  | 29°36 | 20°49 | 28°30 | 15°19 | 19°53 | 4°25 |
| W15  | 5 33 1  | 22°41'38 | 22°51 | 0♁27  | 29°53 | 2°25  | 29°40 | 20°50 | 28°31 | 15°20 | 19°53 | 4°26 |
| T 16 | 5 36 58 | 23°42'43 | 23°52 | 6°40  | 1♁29  | 3° 0  | 29°45 | 20°52 | 28°32 | 15°20 | 19°53 | 4°26 |
| F 17 | 5 40 54 | 24°43'49 | 24°52 | 12°49 | 3° 5  | 3°35  | 29°50 | 20°54 | 28°33 | 15°21 | 19°54 | 4°27 |
| S 18 | 5 44 51 | 25°44'56 | 25°52 | 18°53 | 4°41  | 4°10  | 29°54 | 20°56 | 28°33 | 15°21 | 19°54 | 4°28 |
| S 19 | 5 48 48 | 26°46'03 | 26°52 | 24°49 | 6°17  | 4°45  | 29°59 | 20°58 | 28°34 | 15°21 | 19°54 | 4°29 |
| M20  | 5 52 44 | 27°47'12 | 27°52 | 0♁37  | 7°53  | 5°19  | 0♁ 4  | 20°59 | 28°35 | 15°22 | 19°54 | 4°29 |
| T 21 | 5 56 41 | 28°48'21 | 28°52 | 6°17  | 9°29  | 5°54  | 0° 8  | 21° 1 | 28°36 | 15°22 | 19°54 | 4°30 |
| W22  | 6 0 37  | 29°49'30 | 29°51 | 11°47 | 11° 5 | 6°28  | 0°13  | 21° 3 | 28°36 | 15°22 | 19°55 | 4°31 |
| T 23 | 6 4 34  | 0♁50'40  | 0♁50  | 17° 8 | 12°41 | 7° 3  | 0°18  | 21° 5 | 28°37 | 15°23 | 19°55 | 4°31 |
| F 24 | 6 8 30  | 1°51'50  | 1°50  | 22°20 | 14°17 | 7°37  | 0°22  | 21° 7 | 28°38 | 15°23 | 19°55 | 4°32 |
| S 25 | 6 12 27 | 2°53'00  | 2°49  | 27°22 | 15°53 | 8°12  | 0°27  | 21° 8 | 28°39 | 15°23 | 19°55 | 4°33 |
| S 26 | 6 16 24 | 3°54'11  | 3°49  | 2♁14  | 17°30 | 8°46  | 0°32  | 21°10 | 28°39 | 15°24 | 19°55 | 4°33 |
| M27  | 6 20 20 | 4°55'21  | 4°49  | 6°57  | 19° 6 | 9°20  | 0°36  | 21°12 | 28°40 | 15°24 | 19°56 | 4°34 |
| T 28 | 6 24 17 | 5°56'31  | 5°49  | 11°30 | 20°42 | 9°55  | 0°41  | 21°14 | 28°41 | 15°24 | 19°56 | 4°35 |
| W29  | 6 28 13 | 6°57'42  | 6°49  | 15°55 | 22°18 | 10°29 | 0°45  | 21°16 | 28°41 | 15°25 | 19°56 | 4°36 |
| T 30 | 6 32 10 | 7°58'52  | 7°50  | 20°12 | 23°55 | 11° 3 | 0°50  | 21°18 | 28°42 | 15°25 | 19°56 | 4°36 |
| F 31 | 6 36 6  | 9♁ 0'02  | 8♁51  | 24♁21 | 25♁31 | 11♁37 | 0♁55  | 21♁19 | 28♁43 | 15♁26 | 19♁56 | 4♁37 |

Delta T = 12.14 sec.

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