



# Astrodienst Ephemeris Tables for the year 1783

tropical geocentric zodiac

contains Sun, Moon, Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto, True Node, Moon's Node, Lilith, Chiron

Programming  
Dieter Koch and Alois Treindl  
based on Swiss Ephemeris  
Code D5EPX

ASTRODIENST EPHEMERIS for the year 1783  
geocentric

JANUARY 1783

00:00 UT

| Day  | Sid.t   | ☉                     | ☽                   | ♊                   | ♋                   | ♌                   | ♍                   | ♎                  | ♏                  | ♐                   | ♑                  | ♒                   | ♓                  | ♈                   | ♉                   | Day  |
|------|---------|-----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|---------------------|------|
| W 1  | 6 42 4  | 10 <sup>33</sup> 36   | 7 <sup>4</sup> 42   | 3 <sup>3</sup> 27   | 9 <sup>3</sup> 39   | 25 <sup>11</sup> 29 | 10 <sup>3</sup> 33  | 4 <sup>3</sup> 24  | 5 <sup>5</sup> R 7 | 10 <sup>12</sup> 12 | 7 <sup>12</sup> 12 | 1 <sup>1</sup> R44  | 2 <sup>1</sup> Y 2 | 13 <sup>11</sup> 40 | 10 <sup>1</sup> R31 | W 1  |
| T 2  | 6 46 1  | 11 <sup>3</sup> 34'48 | 22 <sup>5</sup> 50  | 5° 2                | 10 <sup>5</sup> 55  | 26° 9               | 10 <sup>4</sup> 47  | 4 <sup>3</sup> 31  | 5 <sup>5</sup> 5 5 | 10 <sup>13</sup>    | 7 <sup>13</sup>    | 1 <sup>1</sup> Y34  | 1°59               | 13 <sup>4</sup> 47  | 10 <sup>1</sup> R30 | T 2  |
| F 3  | 6 49 57 | 12 <sup>3</sup> 36'00 | 8 <sup>3</sup> 2    | 6°37                | 12°10               | 26°50               | 11° 1               | 4°38               | 5° 2               | 10 <sup>13</sup>    | 7°15               | 1°22                | 1°56               | 13°54               | 10°29               | F 3  |
| S 4  | 6 53 54 | 13°37'11              | 23° 8               | 8°12                | 13°26               | 27°30               | 11°15               | 4°45               | 5° 0               | 10 <sup>13</sup>    | 7°17               | 1°11                | 1°53               | 14° 0               | 10°28               | S 4  |
| S 5  | 6 57 50 | 14°38'23              | 7 <sup>12</sup> 57  | 9°48                | 14°41               | 28°10               | 11°29               | 4°52               | 4°57               | 10°14               | 7°19               | 1° 1                | 1°50               | 14° 7               | 10°27               | S 5  |
| M 6  | 7 1 47  | 15°39'34              | 22°22               | 11°24               | 15°57               | 28°50               | 11°43               | 4°59               | 4°55               | 10°14               | 7°20               | 0°53                | 1°46               | 14°14               | 10°26               | M 6  |
| T 7  | 7 5 43  | 16°40'44              | 6 <sup>1</sup> 17   | 13° 0               | 17°12               | 29°30               | 11°56               | 5° 6               | 4°52               | 10°14               | 7°22               | 0°48                | 1°43               | 14°21               | 10°26               | T 7  |
| W 8  | 7 9 40  | 17°41'54              | 19°43               | 14°37               | 18°28               | 0 <sup>1</sup> 11   | 12°10               | 5°13               | 4°50               | 10°14               | 7°24               | 0°46                | 1°40               | 14°27               | 10°25               | W 8  |
| T 9  | 7 13 36 | 18°43'03              | 2 <sup>1</sup> Y41  | 16°14               | 19°43               | 0°51                | 12°24               | 5°20               | 4°47               | 10°14               | 7°26               | 0°D45               | 1°37               | 14°34               | 10°24               | T 9  |
| F 10 | 7 17 33 | 19°44'12              | 15°15               | 17°52               | 20°59               | 1°31                | 12°38               | 5°27               | 4°45               | 10°14               | 7°27               | 0°R46               | 1°34               | 14°41               | 10°23               | F 10 |
| S 11 | 7 21 30 | 20°45'20              | 27°31               | 19°30               | 22°14               | 2°11                | 12°52               | 5°34               | 4°42               | 10°R14              | 7°29               | 0°46                | 1°30               | 14°47               | 10°23               | S 11 |
| S 12 | 7 25 26 | 21°46'27              | 9 <sup>3</sup> 33   | 21° 9               | 23°30               | 2°52                | 13° 6               | 5°41               | 4°40               | 10°14               | 7°31               | 0°44                | 1°27               | 14°54               | 10°22               | S 12 |
| M13  | 7 29 23 | 22°47'34              | 21°27               | 22°49               | 24°45               | 3°32                | 13°20               | 5°47               | 4°37               | 10°14               | 7°33               | 0°40                | 1°24               | 15° 1               | 10°22               | M13  |
| T 14 | 7 33 19 | 23°48'40              | 3 <sup>11</sup> 18  | 24°28               | 26° 1               | 4°12                | 13°34               | 5°54               | 4°35               | 10°14               | 7°35               | 0°33                | 1°21               | 15° 8               | 10°22               | T 14 |
| W15  | 7 37 16 | 24°49'45              | 15° 8               | 26° 9               | 27°16               | 4°53                | 13°48               | 6° 1               | 4°32               | 10°14               | 7°36               | 0°24                | 1°18               | 15°14               | 10°21               | W15  |
| T 16 | 7 41 12 | 25°50'49              | 27° 2               | 27°50               | 28°31               | 5°33                | 14° 1               | 6° 8               | 4°30               | 10°14               | 7°38               | 0°13                | 1°15               | 15°21               | 10°21               | T 16 |
| F 17 | 7 45 9  | 26°51'53              | 9 <sup>3</sup> 2    | 29°31               | 29°47               | 6°13                | 14°15               | 6°15               | 4°28               | 10°14               | 7°40               | 0° 0                | 1°11               | 15°28               | 10°21               | F 17 |
| S 18 | 7 49 5  | 27°52'56              | 21°10               | 1 <sup>12</sup> 13  | 1 <sup>12</sup> 2   | 6°54                | 14°29               | 6°22               | 4°25               | 10°13               | 7°42               | 29 <sup>1</sup> 48  | 1° 8               | 15°34               | 10°21               | S 18 |
| S 19 | 7 53 2  | 28°53'58              | 3 <sup>12</sup> 25  | 2°55                | 2°18                | 7°34                | 14°43               | 6°28               | 4°23               | 10°13               | 7°44               | 29°36               | 1° 5               | 15°41               | 10°D21              | S 19 |
| M20  | 7 56 59 | 29°55'00              | 15°50               | 4°38                | 3°33                | 8°15                | 14°57               | 6°35               | 4°21               | 10°13               | 7°46               | 29°27               | 1° 2               | 15°48               | 10°21               | M20  |
| T 21 | 8 0 55  | 0 <sup>12</sup> 56'00 | 28°24               | 6°22                | 4°48                | 8°55                | 15°10               | 6°42               | 4°19               | 10°13               | 7°47               | 29°20               | 0°59               | 15°55               | 10°21               | T 21 |
| W22  | 8 4 52  | 1°57'00               | 11 <sup>12</sup> 8  | 8° 5                | 6° 4                | 9°35                | 15°24               | 6°48               | 4°16               | 10°12               | 7°49               | 29°15               | 0°56               | 16° 1               | 10°21               | W22  |
| T 23 | 8 8 48  | 2°58'00               | 24° 4               | 9°50                | 7°19                | 10°16               | 15°38               | 6°55               | 4°14               | 10°12               | 7°51               | 29°D14              | 0°52               | 16° 8               | 10°21               | T 23 |
| F 24 | 8 12 45 | 3°58'58               | 7 <sup>12</sup> 12  | 11°34               | 8°34                | 10°56               | 15°51               | 7° 2               | 4°12               | 10°11               | 7°53               | 29°14               | 0°49               | 16°15               | 10°21               | F 24 |
| S 25 | 8 16 41 | 4°59'56               | 20°36               | 13°19               | 9°50                | 11°37               | 16° 5               | 7° 8               | 4°10               | 10°11               | 7°55               | 29°15               | 0°46               | 16°22               | 10°22               | S 25 |
| S 26 | 8 20 38 | 6° 0'54               | 4 <sup>11</sup> 16  | 15° 4               | 11° 5               | 12°17               | 16°19               | 7°15               | 4° 8               | 10°11               | 7°57               | 29°R15              | 0°43               | 16°28               | 10°22               | S 26 |
| M27  | 8 24 34 | 7° 1'51               | 18°14               | 16°49               | 12°20               | 12°58               | 16°32               | 7°21               | 4° 6               | 10°10               | 7°59               | 29°15               | 0°40               | 16°35               | 10°23               | M27  |
| T 28 | 8 28 31 | 8° 2'47               | 2 <sup>1</sup> 130  | 18°34               | 13°36               | 13°39               | 16°46               | 7°28               | 4° 4               | 10° 9               | 8° 0               | 29°12               | 0°36               | 16°42               | 10°23               | T 28 |
| W29  | 8 32 28 | 9° 3'43               | 17° 2               | 20°19               | 14°51               | 14°19               | 16°59               | 7°34               | 4° 2               | 10° 9               | 8° 2               | 29° 7               | 0°33               | 16°48               | 10°24               | W29  |
| T 30 | 8 36 24 | 10° 4'37              | 1 <sup>13</sup> 45  | 22° 4               | 16° 6               | 15° 0               | 17°13               | 7°40               | 4° 0               | 10° 8               | 8° 4               | 29° 1               | 0°30               | 16°55               | 10°25               | T 30 |
| F 31 | 8 40 21 | 11 <sup>12</sup> 5'31 | 16 <sup>13</sup> 34 | 23 <sup>12</sup> 48 | 17 <sup>12</sup> 21 | 15 <sup>12</sup> 40 | 17 <sup>13</sup> 26 | 7 <sup>13</sup> 47 | 3 <sup>12</sup> 58 | 10 <sup>12</sup> 8  | 8 <sup>12</sup> 6  | 28 <sup>12</sup> 53 | 0 <sup>1</sup> Y27 | 17 <sup>11</sup> 2  | 10 <sup>1</sup> R25 | F 31 |

| Day  | ☉     | ☾     |      | ♊     |      | ♋     |      | ♌     |      | ♍     |      | ♎     |      | ♏     |      | ♐    |      | ♑     |      | ♒    | ♓    | ♈     | ♉     |      |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|------|------|-------|-------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl | decl | decl  | decl  | lat  |
| W 1  | 23s 3 | 26s 8 | 4s35 | 24s40 | 1s14 | 23s42 | 0s35 | 18s44 | 0n26 | 23s 6 | 0s 3 | 22s42 | 0n42 | 23n41 | 0n19 | 2s38 | 1n32 | 24s19 | 6s 2 | 0n42 | 0n49 | 27n19 | 13n 6 | 2s 0 |
| T 2  | 22 58 | 28 13 | 4 57 | 24 42 | 1 19 | 23 38 | 0 37 | 18 54 | 0 26 | 23 5  | 0 3  | 22 41 | 0 42 | 23 41 | 0 19 | 2 38 | 1 32 | 24 19 | 6 2  | 0 37 | 0 47 | 27 20 | 13 6  | 2 0  |
| F 3  | 22 52 | 28 11 | 4 58 | 24 43 | 1 24 | 23 34 | 0 39 | 19 4  | 0 25 | 23 4  | 0 3  | 22 41 | 0 42 | 23 41 | 0 19 | 2 38 | 1 32 | 24 18 | 6 2  | 0 33 | 0 46 | 27 21 | 13 5  | 2 0  |
| S 4  | 22 46 | 26 4  | 4 39 | 24 42 | 1 29 | 23 29 | 0 41 | 19 14 | 0 24 | 23 3  | 0 3  | 22 41 | 0 42 | 23 41 | 0 19 | 2 38 | 1 32 | 24 18 | 6 2  | 0 28 | 0 45 | 27 22 | 13 5  | 2 0  |
| S 5  | 22 40 | 22 11 | 4 1  | 24 40 | 1 34 | 23 23 | 0 43 | 19 23 | 0 24 | 23 1  | 0 3  | 22 41 | 0 42 | 23 41 | 0 19 | 2 38 | 1 32 | 24 18 | 6 2  | 0 24 | 0 44 | 27 23 | 13 5  | 2 0  |
| M 6  | 22 33 | 17 2  | 3 8  | 24 36 | 1 38 | 23 16 | 0 45 | 19 33 | 0 23 | 23 0  | 0 3  | 22 41 | 0 42 | 23 41 | 0 19 | 2 38 | 1 32 | 24 17 | 6 2  | 0 21 | 0 42 | 27 25 | 13 5  | 2 0  |
| T 7  | 22 26 | 11 10 | 2 6  | 24 31 | 1 42 | 23 9  | 0 47 | 19 42 | 0 23 | 22 59 | 0 3  | 22 40 | 0 42 | 23 42 | 0 19 | 2 38 | 1 32 | 24 17 | 6 2  | 0 19 | 0 41 | 27 26 | 13 4  | 2 0  |
| W 8  | 22 18 | 4 58  | 0 58 | 24 25 | 1 46 | 23 1  | 0 49 | 19 51 | 0 22 | 22 58 | 0 3  | 22 40 | 0 42 | 23 42 | 0 19 | 2 38 | 1 32 | 24 16 | 6 2  | 0 18 | 0 40 | 27 27 | 13 4  | 2 0  |
| T 9  | 22 10 | 1n13  | 0n10 | 24 17 | 1 49 | 22 52 | 0 51 | 20 0  | 0 21 | 22 57 | 0 3  | 22 40 | 0 42 | 23 42 | 0 19 | 2 38 | 1 33 | 24 16 | 6 2  | 0 18 | 0 39 | 27 28 | 13 4  | 1 59 |
| F 10 | 22 1  | 7 11  | 1 16 | 24 8  | 1 52 | 22 43 | 0 53 | 20 9  | 0 21 | 22 56 | 0 4  | 22 40 | 0 42 | 23 42 | 0 19 | 2 38 | 1 33 | 24 15 | 6 2  | 0 18 | 0 37 | 27 29 | 13 4  | 1 59 |
| S 11 | 21 52 | 12 44 | 2 17 | 23 57 | 1 55 | 22 32 | 0 55 | 20 18 | 0 20 | 22 54 | 0 4  | 22 40 | 0 42 | 23 42 | 0 19 | 2 38 | 1 33 | 24 15 | 6 2  | 0 18 | 0 36 | 27 30 | 13 4  | 1 59 |
| S 12 | 21 42 | 17 42 | 3 11 | 23 44 | 1 58 | 22 22 | 0 57 | 20 26 | 0 19 | 22 53 | 0 4  | 22 39 | 0 42 | 23 42 | 0 19 | 2 38 | 1 33 | 24 14 | 6 2  | 0 18 | 0 35 | 27 31 | 13 4  | 1 59 |
| M13  | 21 32 | 21 56 | 3 55 | 23 30 | 2 0  | 22 10 | 0 59 | 20 35 | 0 19 | 22 52 | 0 4  | 22 39 | 0 42 | 23 42 | 0 19 | 2 38 | 1 33 | 24 14 | 6 2  | 0 16 | 0 34 | 27 32 | 13 4  | 1 59 |
| T 14 | 21 22 | 25 15 | 4 29 | 23 15 | 2 2  | 21 58 | 1 1  | 20 43 | 0 18 | 22 51 | 0 4  | 22 39 | 0 42 | 23 42 | 0 19 | 2 38 | 1 33 | 24 13 | 6 2  | 0 13 | 0 32 | 27 33 | 13 3  | 1 59 |
| W15  | 21 11 | 27 28 | 4 52 | 22 58 | 2 3  | 21 45 | 1 2  | 20 51 | 0 17 | 22 49 | 0 4  | 22 39 | 0 41 | 23 42 | 0 19 | 2 38 | 1 33 | 24 13 | 6 2  | 0 10 | 0 31 | 27 34 | 13 3  | 1 59 |
| T 16 | 21 0  | 28 28 | 5 2  | 22 39 | 2 4  | 21 32 | 1 4  | 20 59 | 0 17 | 22 48 | 0 4  | 22 38 | 0 41 | 23 42 | 0 19 | 2 38 | 1 33 | 24 13 | 6 2  | 0 5  | 0 30 | 27 35 | 13 3  | 1 59 |
| F 17 | 20 49 | 28 7  | 4 59 | 22 19 | 2 5  | 21 17 | 1 5  | 21 7  | 0 16 | 22 47 | 0 4  | 22 38 | 0 41 | 23 42 | 0 19 | 2 38 | 1 33 | 24 12 | 6 2  | 0 0  | 0 28 | 27 36 | 13 3  | 1 59 |
| S 18 | 20 37 | 26 26 | 4 42 | 21 57 | 2 5  | 21 3  | 1 7  | 21 14 | 0 15 | 22 45 | 0 4  | 22 38 | 0 41 | 23 43 | 0 19 | 2 38 | 1 33 | 24 12 | 6 2  | 0s 5 | 0 27 | 27 37 | 13 3  | 1 59 |
| S 19 | 20 24 | 23 30 | 4 12 | 21 34 | 2 5  | 20 47 | 1 9  | 21 22 | 0 15 | 22 44 | 0 4  | 22 37 | 0 41 | 23 43 | 0 19 | 2 37 | 1 33 | 24 11 | 6 2  | 0 10 | 0 26 | 27 38 | 13 3  | 1 59 |
| M20  | 20 12 | 19 27 | 3 30 | 21 9  | 2 5  | 20 31 | 1 10 | 21 29 | 0 14 | 22 42 | 0 5  | 22 37 | 0 41 | 23 43 | 0 19 | 2 37 | 1 33 | 24 11 | 6 2  | 0 13 | 0 25 | 27 39 | 13 3  | 1 59 |
| T 21 | 19 59 | 14 30 | 2 37 | 20 42 | 2 3  | 20 15 | 1 11 | 21 36 | 0 13 | 22 41 | 0 5  | 22 37 | 0 41 | 23 43 | 0 19 | 2 37 | 1 33 | 24 10 | 6 2  | 0 16 | 0 23 | 27 40 | 13 3  | 1 59 |
| W22  | 19 45 | 8 52  | 1 35 | 20 14 | 2 2  | 19 57 | 1 13 | 21 43 | 0 13 | 22 40 | 0 5  | 22 37 | 0 41 | 23 43 | 0 19 | 2 37 | 1 33 | 24 10 | 6 2  | 0 18 | 0 22 | 27 41 | 13 3  | 1 59 |
| T 23 | 19 31 | 2 47  | 0 28 | 19 44 | 2 0  | 19 40 | 1 14 | 21 49 | 0 12 | 22 38 | 0 5  | 22 36 | 0 41 | 23 43 | 0 19 | 2 37 | 1 33 | 24 9  | 6 2  | 0 18 | 0 21 | 27 42 | 13 4  | 1 59 |
| F 24 | 19 17 | 3s31  | 0s43 | 19 13 | 1 57 | 19 21 | 1 15 | 21 56 | 0 11 | 22 37 | 0 5  | 22 36 | 0 41 | 23 43 | 0 19 | 2 37 | 1 33 | 24 9  | 6 2  | 0 18 | 0 20 | 27 43 | 13 4  | 1 59 |
| S 25 | 19 2  | 9 47  | 1 52 | 18 40 | 1 54 | 19 2  | 1 17 | 22 2  | 0 10 | 22 35 | 0 5  | 22 36 | 0 41 | 23 43 | 0 19 | 2 36 | 1 33 | 24 9  | 6 3  | 0 18 | 0 18 | 27 44 | 13 4  | 1 59 |
| S 26 | 18 48 | 15 44 | 2 57 | 18 5  | 1 50 | 18 43 | 1 18 | 22 8  | 0 10 | 22 33 | 0 5  | 22 35 | 0 41 | 23 43 | 0 19 | 2 36 | 1 34 | 24 8  | 6 3  | 0 18 | 0 17 | 27 45 | 13 4  | 1 59 |
| M27  | 18 32 | 21 0  | 3 52 | 17 30 | 1 46 | 18 23 | 1 19 | 22 14 | 0 9  | 22 32 | 0 5  | 22 35 | 0 41 | 23 43 | 0 19 | 2 36 | 1 34 | 24 8  | 6 3  | 0 18 | 0 16 | 27 45 | 13 4  | 1 59 |
| T 28 | 18 17 | 25 10 | 4 34 | 16 53 | 1 41 | 18 2  | 1 20 | 22 20 | 0 8  | 22 30 | 0 5  | 22 35 | 0 41 | 23 43 | 0 19 | 2 36 | 1 34 | 24 7  | 6 3  | 0 19 | 0 15 | 27 46 | 13 4  | 1 59 |
| W29  | 18 1  | 27 49 | 5 0  | 16 14 | 1 35 | 17 41 | 1 21 | 22 25 | 0 7  | 22 29 | 0 5  | 22 34 | 0 41 | 23 43 | 0 19 | 2 35 | 1 34 | 24 7  | 6 3  | 0 21 | 0 13 | 27 47 | 13 5  | 1 59 |
| T 30 | 17 45 | 28 34 | 5 6  | 15 34 | 1 29 | 17 20 | 1 22 | 22 31 | 0 7  | 22 27 | 0 6  | 22 34 | 0 41 | 23 43 | 0 19 | 2 35 | 1 34 | 24 6  | 6 3  | 0 24 | 0 12 | 27 48 | 13 5  | 1 59 |
| F 31 | 17s28 | 27s17 | 4s52 | 14s53 | 1s22 | 16s58 | 1s23 | 22s36 | 0n 6 | 22s26 | 0s 6 | 22s34 | 0n41 | 23n43 | 0n19 | 2s35 | 1n34 | 24s 6 | 6s 3 | 0s27 | 0n11 | 27n49 | 13n 5 | 1s59 |

ASTRODIENST EPHEMERIS for the year 1783  
geocentric

FEBRUARY 1783

00:00 UT

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

| Day  | ☉     | ☽        | ♀        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        |
|------|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|      | decl  | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat |
| S 1  | 17s11 | 24s 6    | 4s19     | 14s12    | 1s14     | 16s35    | 1s23     | 22s41    | 0n 5     | 22s24    | 0s 6     | 22s33    | 0n41     | 23n44    | 0n19     | 2s34     |
| S 2  | 16 54 | 19 25    | 3 29     | 13 29    | 1 5      | 16 12    | 1 24     | 22 46    | 0 4      | 22 22    | 0 6      | 22 33    | 0 41     | 23 44    | 0 19     | 2 34     |
| M 3  | 16 37 | 13 43    | 2 27     | 12 45    | 0 56     | 15 49    | 1 25     | 22 51    | 0 3      | 22 21    | 0 6      | 22 33    | 0 41     | 23 44    | 0 19     | 2 34     |
| T 4  | 16 19 | 7 28     | 1 17     | 12 1     | 0 46     | 15 25    | 1 25     | 22 55    | 0 3      | 22 19    | 0 6      | 22 32    | 0 41     | 23 44    | 0 19     | 2 33     |
| W 5  | 16 1  | 1 4      | 0 5      | 11 17    | 0 35     | 15 1     | 1 26     | 22 59    | 0 2      | 22 17    | 0 6      | 22 32    | 0 41     | 23 44    | 0 19     | 2 33     |
| T 6  | 15 42 | 5n11     | 1n 5     | 10 33    | 0 23     | 14 36    | 1 26     | 23 3     | 0 1      | 22 16    | 0 6      | 22 32    | 0 41     | 23 44    | 0 19     | 2 33     |
| F 7  | 15 24 | 11 3     | 2 10     | 9 48     | 0 11     | 14 11    | 1 27     | 23 7     | 0 0      | 22 14    | 0 6      | 22 31    | 0 41     | 23 44    | 0 19     | 2 32     |
| S 8  | 15 5  | 16 20    | 3 8      | 9 5      | 0n 2     | 13 45    | 1 27     | 23 11    | 0s 1     | 22 12    | 0 7      | 22 31    | 0 41     | 23 44    | 0 19     | 2 32     |
| S 9  | 14 46 | 20 53    | 3 55     | 8 22     | 0 16     | 13 20    | 1 27     | 23 14    | 0 1      | 22 10    | 0 7      | 22 31    | 0 41     | 23 44    | 0 19     | 2 31     |
| M10  | 14 27 | 24 31    | 4 32     | 7 41     | 0 30     | 12 53    | 1 28     | 23 18    | 0 2      | 22 9     | 0 7      | 22 30    | 0 40     | 23 44    | 0 19     | 2 31     |
| T 11 | 14 7  | 27 6     | 4 57     | 7 1      | 0 45     | 12 27    | 1 28     | 23 21    | 0 3      | 22 7     | 0 7      | 22 30    | 0 40     | 23 44    | 0 19     | 2 31     |
| W12  | 13 47 | 28 27    | 5 10     | 6 23     | 1 0      | 12 0     | 1 28     | 23 23    | 0 4      | 22 5     | 0 7      | 22 30    | 0 40     | 23 44    | 0 19     | 2 30     |
| T 13 | 13 27 | 28 30    | 5 9      | 5 48     | 1 16     | 11 33    | 1 28     | 23 26    | 0 5      | 22 3     | 0 7      | 22 29    | 0 40     | 23 44    | 0 19     | 2 30     |
| F 14 | 13 7  | 27 12    | 4 54     | 5 16     | 1 31     | 11 5     | 1 28     | 23 29    | 0 6      | 22 1     | 0 7      | 22 29    | 0 40     | 23 44    | 0 19     | 2 29     |
| S 15 | 12 47 | 24 36    | 4 26     | 4 47     | 1 47     | 10 38    | 1 28     | 23 31    | 0 7      | 22 0     | 0 7      | 22 28    | 0 40     | 23 44    | 0 19     | 2 29     |
| S 16 | 12 26 | 20 48    | 3 45     | 4 22     | 2 3      | 10 10    | 1 28     | 23 33    | 0 8      | 21 58    | 0 7      | 22 28    | 0 40     | 23 44    | 0 19     | 2 28     |
| M17  | 12 5  | 16 0     | 2 52     | 4 1      | 2 18     | 9 41     | 1 27     | 23 35    | 0 8      | 21 56    | 0 8      | 22 28    | 0 40     | 23 44    | 0 19     | 2 28     |
| T 18 | 11 44 | 10 25    | 1 49     | 3 44     | 2 33     | 9 13     | 1 27     | 23 37    | 0 9      | 21 54    | 0 8      | 22 27    | 0 40     | 23 44    | 0 19     | 2 27     |
| W19  | 11 23 | 4 18     | 0 40     | 3 32     | 2 47     | 8 44     | 1 27     | 23 38    | 0 10     | 21 52    | 0 8      | 22 27    | 0 40     | 23 44    | 0 19     | 2 27     |
| T 20 | 11 1  | 2s 6     | 0s33     | 3 24     | 3 0      | 8 15     | 1 26     | 23 39    | 0 11     | 21 51    | 0 8      | 22 27    | 0 40     | 23 44    | 0 19     | 2 26     |
| F 21 | 10 40 | 8 30     | 1 45     | 3 22     | 3 11     | 7 46     | 1 26     | 23 40    | 0 12     | 21 49    | 0 8      | 22 26    | 0 40     | 23 44    | 0 19     | 2 26     |
| S 22 | 10 18 | 14 36    | 2 53     | 3 24     | 3 21     | 7 16     | 1 25     | 23 41    | 0 13     | 21 47    | 0 8      | 22 26    | 0 40     | 23 44    | 0 19     | 2 25     |
| S 23 | 9 56  | 20 2     | 3 50     | 3 32     | 3 30     | 6 46     | 1 25     | 23 42    | 0 14     | 21 45    | 0 8      | 22 26    | 0 40     | 23 44    | 0 19     | 2 25     |
| M24  | 9 34  | 24 27    | 4 35     | 3 43     | 3 36     | 6 17     | 1 24     | 23 42    | 0 15     | 21 43    | 0 8      | 22 25    | 0 40     | 23 44    | 0 19     | 2 24     |
| T 25 | 9 12  | 27 27    | 5 4      | 3 59     | 3 41     | 5 47     | 1 23     | 23 43    | 0 16     | 21 41    | 0 8      | 22 25    | 0 40     | 23 44    | 0 19     | 2 24     |
| W26  | 8 50  | 28 41    | 5 15     | 4 18     | 3 43     | 5 16     | 1 22     | 23 43    | 0 17     | 21 39    | 0 9      | 22 25    | 0 40     | 23 44    | 0 19     | 2 23     |
| T 27 | 8 27  | 28 1     | 5 6      | 4 41     | 3 43     | 4 46     | 1 21     | 23 42    | 0 18     | 21 38    | 0 9      | 22 24    | 0 40     | 23 44    | 0 19     | 2 23     |
| F 28 | 8s 5  | 25s29    | 4s37     | 5s 6     | 3n41     | 4s16     | 1s20     | 23s42    | 0s19     | 21s36    | 0s 9     | 22s24    | 0n40     | 23n44    | 0n19     | 2s22     |

Julian Day Number = 2372318.5, Delta T = 22.30 sec  
Ecliptic obliquity = 23°28'12", Nutation = 0°00'02", out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 21°42'42", Lahiri = 20°49'43"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1783  
geocentric

MARCH 1783

00:00 UT

| Day  | Sid.t    | ☉                     | ☽                  | ♂                  | ♀                  | ♂                 | ♂                  | ♂                  | ♂                 | ♂                 | ♂                 | ♂                  | ♂                  | ♂                  | ♂                  | Day  |
|------|----------|-----------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|------|
| S 1  | 10 34 41 | 10 <sup>h</sup> 20'45 | 10 <sup>h</sup> 24 | 7°R 7              | 23 <sup>h</sup> 37 | 5 <sup>h</sup> 23 | 23 <sup>h</sup> 32 | 10 <sup>h</sup> 27 | 3°R21             | 9°R37             | 8 <sup>h</sup> 57 | 27°R53             | 28 <sup>h</sup> 55 | 20 <sup>h</sup> 17 | 11 <sup>h</sup> 13 | S 1  |
| S 2  | 10 38 37 | 11°20'53              | 24°31              | 6 <sup>h</sup> 6   | 24°52              | 6° 4              | 23°43              | 10°32              | 3 <sup>h</sup> 20 | 9 <sup>h</sup> 36 | 8°59              | 27 <sup>h</sup> 51 | 28°52              | 20°23              | 11°15              | S 2  |
| M 3  | 10 42 34 | 12°20'59              | 8 <sup>h</sup> 25  | 5° 7               | 26° 6              | 6°45              | 23°55              | 10°36              | 3°20              | 9°34              | 9° 1              | 27°49              | 28°48              | 20°30              | 11°18              | M 3  |
| T 4  | 10 46 31 | 13°21'03              | 22° 2              | 4°12               | 27°21              | 7°26              | 24° 6              | 10°41              | 3°19              | 9°33              | 9° 2              | 27°D48             | 28°45              | 20°37              | 11°20              | T 4  |
| W 5  | 10 50 27 | 14°21'05              | 5 <sup>h</sup> 20  | 3°21               | 28°36              | 8° 7              | 24°18              | 10°45              | 3°19              | 9°31              | 9° 4              | 27°48              | 28°42              | 20°44              | 11°23              | W 5  |
| T 6  | 10 54 24 | 15°21'06              | 18°18              | 2°36               | 29°50              | 8°48              | 24°29              | 10°49              | 3°18              | 9°30              | 9° 5              | 27°49              | 28°39              | 20°50              | 11°25              | T 6  |
| F 7  | 10 58 20 | 16°21'04              | 0 <sup>h</sup> 57  | 1°56               | 1 <sup>h</sup> 5   | 9°29              | 24°40              | 10°54              | 3°18              | 9°29              | 9° 7              | 27°50              | 28°36              | 20°57              | 11°28              | F 7  |
| S 8  | 11 2 17  | 17°21'00              | 13°20              | 1°23               | 2°20               | 10°10             | 24°51              | 10°58              | 3°18              | 9°27              | 9° 9              | 27°51              | 28°33              | 21° 4              | 11°31              | S 8  |
| S 9  | 11 6 13  | 18°20'54              | 25°28              | 0°56               | 3°34               | 10°51             | 25° 2              | 11° 2              | 3°18              | 9°26              | 9°10              | 27°52              | 28°29              | 21°11              | 11°34              | S 9  |
| M10  | 11 10 10 | 19°20'46              | 7 <sup>h</sup> 12  | 0°36               | 4°49               | 11°32             | 25°13              | 11° 6              | 3°18              | 9°24              | 9°12              | 27°53              | 28°26              | 21°17              | 11°37              | M10  |
| T 11 | 11 14 6  | 20°20'36              | 19°21              | 0°22               | 6° 3               | 12°13             | 25°24              | 11°10              | 3°18              | 9°22              | 9°13              | 27°R53             | 28°23              | 21°24              | 11°40              | T 11 |
| W12  | 11 18 3  | 21°20'23              | 1 <sup>h</sup> 14  | 0°15               | 7°18               | 12°54             | 25°35              | 11°14              | 3°D18             | 9°21              | 9°15              | 27°53              | 28°20              | 21°31              | 11°42              | W12  |
| T 13 | 11 21 59 | 22°20'09              | 13°11              | 0°D14              | 8°32               | 13°35             | 25°45              | 11°17              | 3°18              | 9°19              | 9°16              | 27°52              | 28°17              | 21°37              | 11°45              | T 13 |
| F 14 | 11 25 56 | 23°19'52              | 25°16              | 0°19               | 9°46               | 14°16             | 25°56              | 11°21              | 3°18              | 9°18              | 9°17              | 27°52              | 28°14              | 21°44              | 11°48              | F 14 |
| S 15 | 11 29 53 | 24°19'32              | 7 <sup>h</sup> 13  | 0°29               | 11° 1              | 14°57             | 26° 6              | 11°25              | 3°18              | 9°16              | 9°19              | 27°51              | 28°10              | 21°51              | 11°52              | S 15 |
| S 16 | 11 33 49 | 25°19'11              | 20° 8              | 0°46               | 12°15              | 15°38             | 26°16              | 11°28              | 3°18              | 9°15              | 9°20              | 27°51              | 28° 7              | 21°58              | 11°55              | S 16 |
| M17  | 11 37 46 | 26°18'47              | 2 <sup>h</sup> 19  | 1° 7               | 13°29              | 16°19             | 26°27              | 11°31              | 3°18              | 9°13              | 9°22              | 27°51              | 28° 4              | 22° 4              | 11°58              | M17  |
| T 18 | 11 41 42 | 27°18'21              | 16° 8              | 1°33               | 14°44              | 17° 0             | 26°37              | 11°35              | 3°19              | 9°11              | 9°23              | 27°51              | 28° 1              | 22°11              | 12° 1              | T 18 |
| W19  | 11 45 39 | 28°17'53              | 29°36              | 2° 4               | 15°58              | 17°41             | 26°47              | 11°38              | 3°19              | 9°10              | 9°24              | 27°51              | 27°58              | 22°18              | 12° 4              | W19  |
| T 20 | 11 49 35 | 29°17'23              | 13 <sup>h</sup> 10 | 2°39               | 17°12              | 18°22             | 26°56              | 11°41              | 3°20              | 9° 8              | 9°26              | 27°51              | 27°54              | 22°24              | 12° 7              | T 20 |
| F 21 | 11 53 32 | 0 <sup>h</sup> 16'51  | 27°19              | 3°18               | 18°26              | 19° 3             | 27° 6              | 11°44              | 3°20              | 9° 7              | 9°27              | 27°51              | 27°51              | 22°31              | 12°11              | F 21 |
| S 22 | 11 57 28 | 1°16'17               | 11 <sup>h</sup> 12 | 4° 1               | 19°40              | 19°44             | 27°16              | 11°47              | 3°21              | 9° 5              | 9°28              | 27°50              | 27°48              | 22°38              | 12°14              | S 22 |
| S 23 | 12 1 25  | 2°15'41               | 25°42              | 4°47               | 20°54              | 20°25             | 27°25              | 11°50              | 3°21              | 9° 3              | 9°29              | 27°50              | 27°45              | 22°45              | 12°18              | S 23 |
| M24  | 12 5 22  | 3°15'04               | 10 <sup>h</sup> 10 | 5°37               | 22° 8              | 21° 6             | 27°35              | 11°53              | 3°22              | 9° 2              | 9°31              | 27°49              | 27°42              | 22°51              | 12°21              | M24  |
| T 25 | 12 9 18  | 4°14'25               | 24°17              | 6°31               | 23°22              | 21°47             | 27°44              | 11°56              | 3°22              | 9° 0              | 9°32              | 27°49              | 27°39              | 22°58              | 12°24              | T 25 |
| W26  | 12 13 15 | 5°13'44               | 8 <sup>h</sup> 30  | 7°27               | 24°36              | 22°28             | 27°53              | 11°58              | 3°23              | 8°58              | 9°33              | 27°D49             | 27°35              | 23° 5              | 12°28              | W26  |
| T 27 | 12 17 11 | 6°13'01               | 22°37              | 8°26               | 25°50              | 23° 9             | 28° 2              | 12° 1              | 3°24              | 8°57              | 9°34              | 27°49              | 27°32              | 23°12              | 12°31              | T 27 |
| F 28 | 12 21 8  | 7°12'17               | 6 <sup>h</sup> 36  | 9°28               | 27° 4              | 23°50             | 28°11              | 12° 3              | 3°25              | 8°55              | 9°35              | 27°50              | 27°29              | 23°18              | 12°35              | F 28 |
| S 29 | 12 25 4  | 8°11'30               | 20°25              | 10°32              | 28°18              | 24°31             | 28°20              | 12° 5              | 3°26              | 8°53              | 9°37              | 27°51              | 27°26              | 23°25              | 12°38              | S 29 |
| S 30 | 12 29 1  | 9°10'42               | 4 <sup>h</sup> 3   | 11°39              | 29°32              | 25°12             | 28°29              | 12° 8              | 3°27              | 8°52              | 9°38              | 27°52              | 27°23              | 23°32              | 12°42              | S 30 |
| M31  | 12 32 57 | 10 <sup>h</sup> 9'52  | 17 <sup>h</sup> 29 | 12 <sup>h</sup> 48 | 0 <sup>h</sup> 46  | 25°53             | 28°37              | 12°10              | 3°28              | 8°50              | 9°39              | 27 <sup>h</sup> 52 | 27 <sup>h</sup> 19 | 23 <sup>h</sup> 38 | 12 <sup>h</sup> 46 | M31  |

| Day  | ☉    | ☾     |      | ♀     |      | ♀     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |      | ♂    |      | ♂     |      | ♂    |      | ♂     |       | ♂    |     | ♂    |     |
|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|------|------|-------|-------|------|-----|------|-----|
|      | decl | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl | lat  | decl  | lat   | decl | lat | decl | lat |
| S 1  | 7s42 | 21s23 | 3s52 | 5s33  | 3n37 | 3s45  | 1s19 | 23s42 | 0s20 | 21s34 | 0s 9 | 22s24 | 0n40 | 23n44 | 0n19 | 2s22 | 1n35 | 23s55 | 6s 6 | 0s51 | 0s26 | 28n11 | 13n21 | 1s58 |     |      |     |
| S 2  | 7 19 | 16 5  | 2 53 | 6 1   | 3 31 | 3 15  | 1 18 | 23 41 | 0 21 | 21 32 | 0 9  | 22 23 | 0 40 | 23 44 | 0 19 | 2 21 | 1 35 | 23 55 | 6 7  | 0 51 | 0 27 | 28 12 | 13 21 | 1 58 |     |      |     |
| M 3  | 6 56 | 10 3  | 1 45 | 6 30  | 3 23 | 2 44  | 1 17 | 23 40 | 0 22 | 21 30 | 0 9  | 22 23 | 0 40 | 23 44 | 0 19 | 2 20 | 1 35 | 23 55 | 6 7  | 0 52 | 0 28 | 28 12 | 13 22 | 1 58 |     |      |     |
| T 4  | 6 33 | 3 39  | 0 32 | 6 59  | 3 13 | 2 13  | 1 16 | 23 39 | 0 23 | 21 28 | 0 9  | 22 23 | 0 40 | 23 44 | 0 19 | 2 20 | 1 35 | 23 55 | 6 7  | 0 52 | 0 30 | 28 13 | 13 23 | 1 58 |     |      |     |
| W 5  | 6 10 | 2n45  | 0n41 | 7 27  | 3 3  | 1 42  | 1 15 | 23 37 | 0 24 | 21 26 | 0 9  | 22 22 | 0 40 | 23 44 | 0 19 | 2 19 | 1 35 | 23 54 | 6 7  | 0 52 | 0 31 | 28 14 | 13 24 | 1 58 |     |      |     |
| T 6  | 5 47 | 8 54  | 1 51 | 7 55  | 2 51 | 1 11  | 1 13 | 23 36 | 0 25 | 21 24 | 0 10 | 22 22 | 0 40 | 23 44 | 0 19 | 2 19 | 1 35 | 23 54 | 6 7  | 0 52 | 0 32 | 28 14 | 13 25 | 1 58 |     |      |     |
| F 7  | 5 24 | 14 31 | 2 53 | 8 21  | 2 38 | 0 40  | 1 12 | 23 34 | 0 26 | 21 23 | 0 10 | 22 22 | 0 40 | 23 44 | 0 19 | 2 18 | 1 35 | 23 54 | 6 7  | 0 52 | 0 34 | 28 15 | 13 26 | 1 58 |     |      |     |
| S 8  | 5 0  | 19 27 | 3 46 | 8 45  | 2 24 | 0 9   | 1 11 | 23 32 | 0 27 | 21 21 | 0 10 | 22 21 | 0 40 | 23 44 | 0 19 | 2 17 | 1 35 | 23 54 | 6 8  | 0 51 | 0 35 | 28 15 | 13 26 | 1 58 |     |      |     |
| S 9  | 4 37 | 23 29 | 4 28 | 9 8   | 2 10 | 0n22  | 1 9  | 23 30 | 0 28 | 21 19 | 0 10 | 22 21 | 0 40 | 23 44 | 0 19 | 2 17 | 1 35 | 23 53 | 6 8  | 0 51 | 0 36 | 28 16 | 13 27 | 1 58 |     |      |     |
| M10  | 4 13 | 26 28 | 4 57 | 9 28  | 1 56 | 0 53  | 1 8  | 23 27 | 0 29 | 21 17 | 0 10 | 22 21 | 0 40 | 23 44 | 0 19 | 2 16 | 1 35 | 23 53 | 6 8  | 0 51 | 0 37 | 28 17 | 13 28 | 1 58 |     |      |     |
| T 11 | 3 50 | 28 15 | 5 13 | 9 47  | 1 41 | 1 24  | 1 6  | 23 25 | 0 30 | 21 15 | 0 10 | 22 20 | 0 40 | 23 44 | 0 19 | 2 16 | 1 35 | 23 53 | 6 8  | 0 51 | 0 39 | 28 17 | 13 29 | 1 58 |     |      |     |
| W12  | 3 26 | 28 44 | 5 16 | 10 3  | 1 26 | 1 55  | 1 4  | 23 22 | 0 32 | 21 13 | 0 10 | 22 20 | 0 40 | 23 44 | 0 19 | 2 15 | 1 35 | 23 53 | 6 8  | 0 51 | 0 40 | 28 18 | 13 30 | 1 58 |     |      |     |
| T 13 | 3 3  | 27 53 | 5 5  | 10 17 | 1 12 | 2 26  | 1 3  | 23 19 | 0 33 | 21 11 | 0 10 | 22 20 | 0 40 | 23 44 | 0 19 | 2 14 | 1 35 | 23 52 | 6 8  | 0 51 | 0 41 | 28 18 | 13 31 | 1 58 |     |      |     |
| F 14 | 2 39 | 25 43 | 4 41 | 10 29 | 0 58 | 2 57  | 1 1  | 23 16 | 0 34 | 21 10 | 0 11 | 22 19 | 0 40 | 23 44 | 0 19 | 2 14 | 1 35 | 23 52 | 6 9  | 0 51 | 0 42 | 28 19 | 13 32 | 1 58 |     |      |     |
| S 15 | 2 15 | 22 20 | 4 4  | 10 38 | 0 44 | 3 27  | 0 59 | 23 13 | 0 35 | 21 8  | 0 11 | 22 19 | 0 40 | 23 44 | 0 19 | 2 13 | 1 35 | 23 52 | 6 9  | 0 51 | 0 44 | 28 19 | 13 33 | 1 58 |     |      |     |
| S 16 | 1 52 | 17 52 | 3 14 | 10 45 | 0 30 | 3 58  | 0 57 | 23 9  | 0 36 | 21 6  | 0 11 | 22 19 | 0 40 | 23 44 | 0 19 | 2 12 | 1 35 | 23 52 | 6 9  | 0 51 | 0 45 | 28 20 | 13 34 | 1 58 |     |      |     |
| M17  | 1 28 | 12 30 | 2 14 | 10 50 | 0 17 | 4 29  | 0 55 | 23 5  | 0 37 | 21 4  | 0 11 | 22 18 | 0 40 | 23 44 | 0 19 | 2 12 | 1 35 | 23 52 | 6 9  | 0 51 | 0 46 | 28 20 | 13 35 | 1 58 |     |      |     |
| T 18 | 1 4  | 6 28  | 1 4  | 10 53 | 0 4  | 4 59  | 0 53 | 23 1  | 0 38 | 21 2  | 0 11 | 22 18 | 0 40 | 23 44 | 0 19 | 2 11 | 1 36 | 23 51 | 6 9  | 0 51 | 0 47 | 28 21 | 13 36 | 1 58 |     |      |     |
| W19  | 0 41 | 0 1   | 0s10 | 10 53 | 0s 9 | 5 30  | 0 51 | 22 57 | 0 40 | 21 1  | 0 11 | 22 18 | 0 40 | 23 44 | 0 19 | 2 10 | 1 36 | 23 51 | 6 10 | 0 51 | 0 49 | 28 21 | 13 37 | 1 58 |     |      |     |
| T 20 | 0 17 | 6s34  | 1 25 | 10 52 | 0 21 | 6 0   | 0 49 | 22 53 | 0 41 | 20 59 | 0 11 | 22 18 | 0 40 | 23 44 | 0 19 | 2 10 | 1 36 | 23 51 | 6 10 | 0 51 | 0 50 | 28 22 | 13 38 | 1 58 |     |      |     |
| F 21 | 0n 7 | 12 57 | 2 36 | 10 49 | 0 32 | 6 30  | 0 47 | 22 48 | 0 42 | 20 57 | 0 11 | 22 17 | 0 40 | 23 44 | 0 19 | 2 9  | 1 36 | 23 51 | 6 10 | 0 52 | 0 51 | 28 22 | 13 39 | 1 58 |     |      |     |
| S 22 | 0 30 | 18 45 | 3 39 | 10 43 | 0 43 | 7 1   | 0 45 | 22 44 | 0 43 | 20 55 | 0 12 | 22 17 | 0 40 | 23 44 | 0 19 | 2 8  | 1 36 | 23 51 | 6 10 | 0 52 | 0 53 | 28 23 | 13 40 | 1 58 |     |      |     |
| S 23 | 0 54 | 23 33 | 4 28 | 10 36 | 0 54 | 7 31  | 0 43 | 22 39 | 0 44 | 20 54 | 0 12 | 22 17 | 0 40 | 23 44 | 0 19 | 2 8  | 1 36 | 23 51 | 6 10 | 0 52 | 0 54 | 28 23 | 13 41 | 1 58 |     |      |     |
| M24  | 1 18 | 26 57 | 5 2  | 10 27 | 1 4  | 8 0   | 0 41 | 22 34 | 0 45 | 20 52 | 0 12 | 22 17 | 0 40 | 23 44 | 0 19 | 2 7  | 1 36 | 23 50 | 6 11 | 0 52 | 0 55 | 28 24 | 13 42 | 1 58 |     |      |     |
| T 25 | 1 41 | 28 37 | 5 16 | 10 16 | 1 13 | 8 30  | 0 38 | 22 28 | 0 47 | 20 50 | 0 12 | 22 16 | 0 40 | 23 44 | 0 19 | 2 6  | 1 36 | 23 50 | 6 11 | 0 52 | 0 56 | 28 24 | 13 43 | 1 58 |     |      |     |
| W26  | 2 5  | 28 22 | 5 11 | 10 3  | 1 22 | 8 59  | 0 36 | 22 23 | 0 48 | 20 49 | 0 12 | 22 16 | 0 40 | 23 44 | 0 19 | 2 6  | 1 36 | 23 50 | 6 11 | 0 52 | 0 58 | 28 25 | 13 44 | 1 58 |     |      |     |
| T 27 | 2 28 | 26 18 | 4 48 | 9 49  | 1 31 | 9 28  | 0 34 | 22 17 | 0 49 | 20 47 | 0 12 | 22 16 | 0 40 | 23 44 | 0 19 | 2 5  | 1 36 | 23 50 | 6 11 | 0 52 | 0 59 | 28 25 | 13 45 | 1 58 |     |      |     |
| F 28 | 2 52 | 22 38 | 4 7  | 9 33  | 1 38 | 9 57  | 0 31 | 22 12 | 0 50 | 20 45 | 0 12 | 22 16 | 0 40 | 23 44 | 0 19 | 2 4  | 1 36 | 23 50 | 6 11 | 0 52 | 1 0  | 28 26 | 13 46 | 1 58 |     |      |     |
| S 29 | 3 15 | 17 45 | 3 13 | 9 15  | 1 46 | 10 26 | 0 29 | 22 6  | 0 52 | 20 44 | 0 13 | 22 16 | 0 40 | 23 44 | 0 18 | 2 4  | 1 36 | 23 50 | 6 12 | 0 51 | 1 1  | 28 26 | 13 47 | 1 58 |     |      |     |
| S 30 | 3 39 | 12 2  | 2 8  | 8 56  | 1 53 | 10 55 | 0 26 | 21 59 | 0 53 | 20 42 | 0 13 | 22 15 | 0 40 | 23 44 | 0 18 | 2 3  | 1 36 | 23 50 | 6 12 | 0 51 | 1 3  | 28 26 | 13 48 | 1 58 |     |      |     |
| M31  | 4n 2 | 5s50  | 0s57 | 8s35  | 1s59 | 11n23 | 0s24 | 21s53 | 0s54 | 20s40 | 0s13 | 22s15 | 0n40 | 23n44 | 0n18 | 2s 3 | 1n36 | 23s50 | 6s12 | 0s51 | 1s 4 | 28n27 | 13n49 | 1s58 |     |      |     |

## ASTRODIENST EPHEMERIS for the year 1783

geocentric

APRIL 1783

00:00 UT

| Day  | Sid.t    | ☉         | ☽       | ♊       | ♋       | ♌       | ♍       | ♎       | ♏      | ♐      | ♑      | ♒       | ♓       | ♈       | ♉       | Day  |
|------|----------|-----------|---------|---------|---------|---------|---------|---------|--------|--------|--------|---------|---------|---------|---------|------|
| T 1  | 12 36 54 | 11° 9'00  | 0° 42'  | 14° 0'  | 28° 0'  | 26° 34' | 28° 46' | 12° 12' | 3° 29' | 8° 49' | 9° 40' | 27° 52' | 27° 16' | 23° 45' | 12° 49' | T 1  |
| W 2  | 12 40 51 | 12° 8'06  | 13° 41' | 15° 13' | 3° 13'  | 27° 15' | 28° 54' | 12° 14' | 3° 30' | 8° 47' | 9° 41' | 27° 52' | 27° 13' | 23° 52' | 12° 53' | W 2  |
| T 3  | 12 44 47 | 13° 7'10  | 26° 25' | 16° 29' | 4° 27'  | 27° 56' | 29° 2'  | 12° 16' | 3° 31' | 8° 45' | 9° 42' | 27° 51' | 27° 10' | 23° 59' | 12° 57' | T 3  |
| F 4  | 12 48 44 | 14° 6'12  | 8° 56'  | 17° 47' | 5° 41'  | 28° 37' | 29° 10' | 12° 18' | 3° 32' | 8° 44' | 9° 43' | 27° 49' | 27° 7'  | 24° 5'  | 13° 1'  | F 4  |
| S 5  | 12 52 40 | 15° 5'11  | 21° 14' | 19° 6'  | 6° 55'  | 29° 18' | 29° 18' | 12° 19' | 3° 33' | 8° 42' | 9° 44' | 27° 46' | 27° 4'  | 24° 12' | 13° 4'  | S 5  |
| S 6  | 12 56 37 | 16° 4'09  | 3° 21'  | 20° 28' | 8° 8'   | 29° 59' | 29° 26' | 12° 21' | 3° 35' | 8° 40' | 9° 45' | 27° 43' | 27° 0'  | 24° 19' | 13° 8'  | S 6  |
| M 7  | 13 0 33  | 17° 3'04  | 15° 20' | 21° 51' | 9° 22'  | 0° 40'  | 29° 33' | 12° 22' | 3° 36' | 8° 39' | 9° 46' | 27° 40' | 26° 57' | 24° 26' | 13° 12' | M 7  |
| T 8  | 13 4 30  | 18° 1'58  | 27° 14' | 23° 16' | 10° 35' | 1° 21'  | 29° 41' | 12° 24' | 3° 38' | 8° 37' | 9° 47' | 27° 38' | 26° 54' | 24° 32' | 13° 16' | T 8  |
| W 9  | 13 8 26  | 19° 0'49  | 9° 6'   | 24° 43' | 11° 49' | 2° 2'   | 29° 48' | 12° 25' | 3° 39' | 8° 35' | 9° 47' | 27° 37' | 26° 51' | 24° 39' | 13° 20' | W 9  |
| T 10 | 13 12 23 | 19° 59'37 | 21° 2'  | 26° 11' | 13° 2'  | 2° 43'  | 29° 55' | 12° 26' | 3° 41' | 8° 34' | 9° 48' | 27° 37' | 26° 48' | 24° 46' | 13° 24' | T 10 |
| F 11 | 13 16 20 | 20° 58'24 | 3° 0'   | 27° 42' | 14° 16' | 3° 24'  | 0° 2'   | 12° 27' | 3° 42' | 8° 32' | 9° 49' | 27° 37' | 26° 45' | 24° 52' | 13° 28' | F 11 |
| S 12 | 13 20 16 | 21° 57'08 | 15° 24' | 29° 14' | 15° 29' | 4° 5'   | 0° 9'   | 12° 28' | 3° 44' | 8° 31' | 9° 50' | 27° 38' | 26° 41' | 24° 59' | 13° 31' | S 12 |
| S 13 | 13 24 13 | 22° 55'49 | 27° 58' | 0° 47'  | 16° 42' | 4° 46'  | 0° 16'  | 12° 29' | 3° 45' | 8° 29' | 9° 51' | 27° 40' | 26° 38' | 25° 6'  | 13° 35' | S 13 |
| M14  | 13 28 9  | 23° 54'29 | 10° 53' | 2° 22'  | 17° 56' | 5° 26'  | 0° 22'  | 12° 30' | 3° 47' | 8° 27' | 9° 51' | 27° 41' | 26° 35' | 25° 13' | 13° 39' | M14  |
| T 15 | 13 32 6  | 24° 53'06 | 24° 11' | 3° 59'  | 19° 9'  | 6° 7'   | 0° 29'  | 12° 31' | 3° 49' | 8° 26' | 9° 52' | 27° 42' | 26° 32' | 25° 19' | 13° 43' | T 15 |
| W16  | 13 36 2  | 25° 51'42 | 7° 53'  | 5° 38'  | 20° 22' | 6° 48'  | 0° 35'  | 12° 31' | 3° 51' | 8° 24' | 9° 53' | 27° 42' | 26° 29' | 25° 26' | 13° 47' | W16  |
| T 17 | 13 39 59 | 26° 50'15 | 21° 58' | 7° 18'  | 21° 35' | 7° 29'  | 0° 41'  | 12° 32' | 3° 52' | 8° 23' | 9° 53' | 27° 40' | 26° 25' | 25° 33' | 13° 51' | T 17 |
| F 18 | 13 43 55 | 27° 48'46 | 6° 11'  | 9° 0'   | 22° 48' | 8° 9'   | 0° 47'  | 12° 32' | 3° 54' | 8° 21' | 9° 54' | 27° 37' | 26° 22' | 25° 39' | 13° 55' | F 18 |
| S 19 | 13 47 52 | 28° 47'16 | 20° 59' | 10° 44' | 24° 1'  | 8° 50'  | 0° 53'  | 12° 32' | 3° 56' | 8° 20' | 9° 55' | 27° 33' | 26° 19' | 25° 46' | 13° 59' | S 19 |
| S 20 | 13 51 49 | 29° 45'44 | 5° 42'  | 12° 29' | 25° 14' | 9° 31'  | 0° 58'  | 12° 33' | 3° 58' | 8° 18' | 9° 55' | 27° 28' | 26° 16' | 25° 53' | 14° 4'  | S 20 |
| M21  | 13 55 45 | 0° 44'10  | 20° 25' | 14° 16' | 26° 27' | 10° 12' | 1° 4'   | 12° 33' | 4° 0'  | 8° 17' | 9° 56' | 27° 24' | 26° 13' | 26° 0'  | 14° 8'  | M21  |
| T 22 | 13 59 42 | 1° 42'34  | 5° 0'   | 16° 4'  | 27° 40' | 10° 52' | 1° 9'   | 12° 33' | 4° 2'  | 8° 15' | 9° 56' | 27° 20' | 26° 10' | 26° 6'  | 14° 12' | T 22 |
| W23  | 14 3 38  | 2° 40'57  | 19° 22' | 17° 55' | 28° 53' | 11° 33' | 1° 14'  | 12° 33' | 4° 4'  | 8° 14' | 9° 57' | 27° 18' | 26° 6'  | 26° 13' | 14° 16' | W23  |
| T 24 | 14 7 35  | 3° 39'19  | 3° 29'  | 19° 47' | 0° 11'  | 12° 14' | 1° 19'  | 12° 33' | 4° 6'  | 8° 12' | 9° 57' | 27° 17' | 26° 3'  | 26° 20' | 14° 20' | T 24 |
| F 25 | 14 11 31 | 4° 37'39  | 17° 18' | 21° 40' | 1° 19'  | 12° 54' | 1° 24'  | 12° 32' | 4° 9'  | 8° 11' | 9° 58' | 27° 18' | 26° 0'  | 26° 27' | 14° 24' | F 25 |
| S 26 | 14 15 28 | 5° 35'57  | 0° 51'  | 23° 36' | 2° 32'  | 13° 35' | 1° 29'  | 12° 32' | 4° 11' | 8° 9'  | 9° 58' | 27° 19' | 25° 57' | 26° 33' | 14° 28' | S 26 |
| S 27 | 14 19 24 | 6° 34'13  | 14° 8'  | 25° 33' | 3° 44'  | 14° 15' | 1° 33'  | 12° 31' | 4° 13' | 8° 8'  | 9° 59' | 27° 21' | 25° 54' | 26° 40' | 14° 32' | S 27 |
| M28  | 14 23 21 | 7° 32'29  | 27° 11' | 27° 31' | 4° 57'  | 14° 56' | 1° 37'  | 12° 31' | 4° 15' | 8° 6'  | 9° 59' | 27° 21' | 25° 51' | 26° 47' | 14° 37' | M28  |
| T 29 | 14 27 18 | 8° 30'42  | 10° 9'  | 29° 32' | 6° 10'  | 15° 36' | 1° 41'  | 12° 30' | 4° 18' | 8° 5'  | 9° 59' | 27° 21' | 25° 47' | 26° 53' | 14° 41' | T 29 |
| W30  | 14 31 14 | 9° 28'54  | 22° 40' | 1° 34'  | 7° 11'  | 16° 17' | 1° 45'  | 12° 29' | 4° 20' | 8° 4'  | 10° 0' | 27° 18' | 25° 44' | 27° 0'  | 14° 45' | W30  |

| Day  | ☉     | ☾     |      | ♊     |      | ♀     |      | ♈     |      | ♉     |      | ♊     |      | ♋     |      | ♌    |      | ♍     |      | ♎    |      | ♏     |       | ♐    |     | ♑    |     | ♒    |     | ♓    |     | ♈    |     |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|------|------|-------|-------|------|-----|------|-----|------|-----|------|-----|------|-----|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl | lat  | decl  | lat   | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat |
| T 1  | 4n25  | 0n31  | 0n16 | 8s13  | 2s 5 | 11n51 | 0s21 | 21s47 | 0s56 | 20s39 | 0s13 | 22s15 | 0n40 | 23n44 | 0n18 | 2s 2 | 1n36 | 23s50 | 6s12 | 0s51 | 1s 5 | 28n27 | 13n50 | 1s58 |     |      |     |      |     |      |     |      |     |
| W 2  | 4 48  | 6 44  | 1 26 | 7 50  | 2 10 | 12 19 | 0 19 | 21 40 | 0 57 | 20 37 | 0 13 | 22 15 | 0 40 | 23 44 | 0 18 | 2 1  | 1 36 | 23 49 | 6 13 | 0 51 | 1 6  | 28 28 | 13 51 | 1 58 |     |      |     |      |     |      |     |      |     |
| T 3  | 5 11  | 12 33 | 2 31 | 7 24  | 2 15 | 12 46 | 0 16 | 21 33 | 0 58 | 20 36 | 0 13 | 22 15 | 0 40 | 23 44 | 0 18 | 2 1  | 1 36 | 23 49 | 6 13 | 0 52 | 1 8  | 28 28 | 13 52 | 1 58 |     |      |     |      |     |      |     |      |     |
| F 4  | 5 34  | 17 46 | 3 28 | 6 58  | 2 19 | 13 13 | 0 14 | 21 26 | 0 59 | 20 34 | 0 13 | 22 15 | 0 40 | 23 44 | 0 18 | 2 0  | 1 36 | 23 49 | 6 13 | 0 52 | 1 9  | 28 28 | 13 53 | 1 58 |     |      |     |      |     |      |     |      |     |
| S 5  | 5 57  | 22 10 | 4 13 | 6 30  | 2 22 | 13 40 | 0 11 | 21 19 | 1 1  | 20 33 | 0 14 | 22 14 | 0 40 | 23 44 | 0 18 | 1 59 | 1 36 | 23 49 | 6 13 | 0 53 | 1 10 | 28 29 | 13 54 | 1 58 |     |      |     |      |     |      |     |      |     |
| S 6  | 6 20  | 25 33 | 4 47 | 6 1   | 2 26 | 14 6  | 0 8  | 21 11 | 1 2  | 20 31 | 0 14 | 22 14 | 0 40 | 23 44 | 0 18 | 1 59 | 1 36 | 23 49 | 6 13 | 0 54 | 1 11 | 28 29 | 13 56 | 1 58 |     |      |     |      |     |      |     |      |     |
| M 7  | 6 42  | 27 45 | 5 7  | 5 30  | 2 28 | 14 32 | 0 6  | 21 4  | 1 3  | 20 30 | 0 14 | 22 14 | 0 40 | 23 44 | 0 18 | 1 58 | 1 36 | 23 49 | 6 14 | 0 56 | 1 13 | 28 29 | 13 57 | 1 58 |     |      |     |      |     |      |     |      |     |
| T 8  | 7 5   | 28 41 | 5 15 | 4 59  | 2 30 | 14 58 | 0 3  | 20 56 | 1 5  | 20 28 | 0 14 | 22 14 | 0 40 | 23 44 | 0 18 | 1 57 | 1 36 | 23 49 | 6 14 | 0 56 | 1 14 | 28 30 | 13 58 | 1 58 |     |      |     |      |     |      |     |      |     |
| W 9  | 7 27  | 28 17 | 5 8  | 4 26  | 2 32 | 15 23 | 0 0  | 20 48 | 1 6  | 20 27 | 0 14 | 22 14 | 0 40 | 23 44 | 0 18 | 1 57 | 1 36 | 23 49 | 6 14 | 0 57 | 1 15 | 28 30 | 13 59 | 1 58 |     |      |     |      |     |      |     |      |     |
| T 10 | 7 50  | 26 35 | 4 49 | 3 52  | 2 33 | 15 48 | 0n 2 | 20 40 | 1 8  | 20 26 | 0 14 | 22 14 | 0 40 | 23 44 | 0 18 | 1 56 | 1 36 | 23 49 | 6 14 | 0 57 | 1 17 | 28 30 | 14 0  | 1 58 |     |      |     |      |     |      |     |      |     |
| F 11 | 8 12  | 23 39 | 4 16 | 3 16  | 2 34 | 16 13 | 0 5  | 20 32 | 1 9  | 20 24 | 0 15 | 22 14 | 0 40 | 23 43 | 0 18 | 1 55 | 1 36 | 23 49 | 6 15 | 0 57 | 1 18 | 28 31 | 14 1  | 1 58 |     |      |     |      |     |      |     |      |     |
| S 12 | 8 34  | 19 37 | 3 32 | 2 40  | 2 34 | 16 37 | 0 8  | 20 24 | 1 10 | 20 23 | 0 15 | 22 14 | 0 40 | 23 43 | 0 18 | 1 55 | 1 36 | 23 49 | 6 15 | 0 56 | 1 19 | 28 31 | 14 2  | 1 58 |     |      |     |      |     |      |     |      |     |
| S 13 | 8 56  | 14 38 | 2 36 | 2 2   | 2 33 | 17 1  | 0 10 | 20 16 | 1 12 | 20 22 | 0 15 | 22 14 | 0 40 | 23 43 | 0 18 | 1 54 | 1 36 | 23 49 | 6 15 | 0 56 | 1 20 | 28 31 | 14 3  | 1 58 |     |      |     |      |     |      |     |      |     |
| M14  | 9 17  | 8 54  | 1 31 | 1 23  | 2 32 | 17 24 | 0 13 | 20 7  | 1 13 | 20 21 | 0 15 | 22 14 | 0 40 | 23 43 | 0 18 | 1 54 | 1 36 | 23 49 | 6 15 | 0 55 | 1 22 | 28 31 | 14 5  | 1 58 |     |      |     |      |     |      |     |      |     |
| T 15 | 9 39  | 2 37  | 0 19 | 0 43  | 2 31 | 17 47 | 0 16 | 19 58 | 1 15 | 20 19 | 0 15 | 22 13 | 0 40 | 23 43 | 0 18 | 1 53 | 1 36 | 23 49 | 6 16 | 0 55 | 1 23 | 28 32 | 14 6  | 1 58 |     |      |     |      |     |      |     |      |     |
| W16  | 10 0  | 3s59  | 0s55 | 0 2   | 2 29 | 18 10 | 0 19 | 19 49 | 1 16 | 20 18 | 0 15 | 22 13 | 0 40 | 23 43 | 0 18 | 1 52 | 1 36 | 23 49 | 6 16 | 0 55 | 1 24 | 28 32 | 14 7  | 1 58 |     |      |     |      |     |      |     |      |     |
| T 17 | 10 21 | 10 33 | 2 9  | 0n40  | 2 26 | 18 32 | 0 21 | 19 40 | 1 17 | 20 17 | 0 15 | 22 13 | 0 40 | 23 43 | 0 18 | 1 52 | 1 36 | 23 49 | 6 16 | 0 56 | 1 25 | 28 32 | 14 8  | 1 58 |     |      |     |      |     |      |     |      |     |
| F 18 | 10 43 | 16 44 | 3 16 | 1 23  | 2 23 | 18 53 | 0 24 | 19 31 | 1 19 | 20 16 | 0 16 | 22 13 | 0 40 | 23 43 | 0 18 | 1 51 | 1 36 | 23 49 | 6 16 | 0 57 | 1 27 | 28 32 | 14 9  | 1 58 |     |      |     |      |     |      |     |      |     |
| S 19 | 11 3  | 22 3  | 4 11 | 2 6   | 2 20 | 19 14 | 0 27 | 19 22 | 1 20 | 20 15 | 0 16 | 22 13 | 0 39 | 23 43 | 0 18 | 1 51 | 1 36 | 23 49 | 6 17 | 0 58 | 1 28 | 28 33 | 14 10 | 1 59 |     |      |     |      |     |      |     |      |     |
| S 20 | 11 24 | 26 2  | 4 49 | 2 51  | 2 16 | 19 35 | 0 30 | 19 12 | 1 22 | 20 14 | 0 16 | 22 13 | 0 39 | 23 43 | 0 18 | 1 50 | 1 36 | 23 49 | 6 17 | 1 0  | 1 29 | 28 33 | 14 11 | 1 59 |     |      |     |      |     |      |     |      |     |
| M21  | 11 45 | 28 16 | 5 9  | 3 37  | 2 11 | 19 55 | 0 32 | 19 3  | 1 23 | 20 13 | 0 16 | 22 13 | 0 39 | 23 43 | 0 18 | 1 49 | 1 36 | 23 50 | 6 17 | 1 2  | 1 30 | 28 33 | 14 13 | 1 59 |     |      |     |      |     |      |     |      |     |
| T 22 | 12 5  | 28 31 | 5 9  | 4 23  | 2 6  | 20 14 | 0 35 | 18 53 | 1 25 | 20 12 | 0 16 | 22 13 | 0 39 | 23 43 | 0 18 | 1 49 | 1 36 | 23 50 | 6 17 | 1 4  | 1 32 | 28 33 | 14 14 | 1 59 |     |      |     |      |     |      |     |      |     |
| W23  | 12 25 | 26 50 | 4 49 | 5 11  | 2 0  | 20 33 | 0 38 | 18 43 | 1 26 | 20 11 | 0 16 | 22 13 | 0 39 | 23 43 | 0 18 | 1 48 | 1 36 | 23 50 | 6 18 | 1 4  | 1 33 | 28 34 | 14 15 | 1 59 |     |      |     |      |     |      |     |      |     |
| T 24 | 12 45 | 23 29 | 4 12 | 5 59  | 1 54 | 20 52 | 0 41 | 18 33 | 1 28 | 20 10 | 0 17 | 22 13 | 0 39 | 23 43 | 0 18 | 1 48 | 1 36 | 23 50 | 6 18 | 1 5  | 1 34 | 28 34 | 14 16 | 1 59 |     |      |     |      |     |      |     |      |     |
| F 25 | 13 5  | 18 51 | 3 20 | 6 47  | 1 48 | 21 9  | 0 43 | 18 23 | 1 29 | 20 9  | 0 17 | 22 13 | 0 39 | 23 43 | 0 18 | 1 47 | 1 36 | 23 50 | 6 18 | 1 5  | 1 36 | 28 34 | 14 17 | 1 59 |     |      |     |      |     |      |     |      |     |
| S 26 | 13 24 | 13 21 | 2 19 | 7 37  | 1 41 | 21 27 | 0 46 | 18 13 | 1 31 | 20 8  | 0 17 | 22 14 | 0 39 | 23 43 | 0 18 | 1 47 | 1 35 | 23 50 | 6 18 | 1 4  | 1 37 | 28 34 | 14 18 | 1 59 |     |      |     |      |     |      |     |      |     |
| S 27 | 13 44 | 7 21  | 1 11 | 8 26  | 1 33 | 21 43 | 0 49 | 18 3  | 1 32 | 20 7  | 0 17 | 22 14 | 0 39 | 23 42 | 0 18 | 1 46 | 1 35 | 23 50 | 6 18 | 1 3  | 1 38 | 28 34 | 14 20 | 1 59 |     |      |     |      |     |      |     |      |     |
| M28  | 14 3  | 1 8   | 0 1  | 9 17  | 1 25 | 22 0  | 0 51 | 17 52 | 1 34 | 20 6  | 0 17 | 22 14 | 0 39 | 23 42 | 0 18 | 1 46 | 1 35 | 23 50 | 6 19 | 1 3  | 1 39 | 28 34 | 14 21 | 1 59 |     |      |     |      |     |      |     |      |     |
| T 29 | 14 22 | 5n 1  | 1n 8 | 10 7  | 1 17 | 22 15 | 0 54 | 17 42 | 1 35 | 20 6  | 0 17 | 22 14 | 0 39 | 23 42 | 0 18 | 1 45 | 1 35 | 23 50 | 6 19 | 1 3  | 1 41 | 28 35 | 14 22 | 1 59 |     |      |     |      |     |      |     |      |     |
| W30  | 14n40 | 10n53 | 2n13 | 10n58 | 1s 8 | 22n30 | 0n57 | 17s31 | 1s37 | 20s 5 | 0s18 | 22s14 | 0n39 | 23n42 | 0n18 | 1s44 | 1n35 | 23s51 | 6s19 | 1s 5 | 1s42 | 28n35 | 14n23 | 1s59 |     |      |     |      |     |      |     |      |     |

ASTRODIENST EPHEMERIS for the year 1783  
geocentric

MAY 1783

00:00 UT

| Day  | Sid.t    | ☉                     | ☽                   | ♂                  | ♀                  | ♂                  | ♂                 | ♂                  | ♂                 | ♂                 | ♂                 | ♂                  | ♂                  | ♂                  | ♂                  | Day  |
|------|----------|-----------------------|---------------------|--------------------|--------------------|--------------------|-------------------|--------------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|------|
| T 1  | 14 35 11 | 10 <sup>8</sup> 27'04 | 5 <sup>8</sup> 8    | 3 <sup>8</sup> 37  | 8 <sup>II</sup> 35 | 16 <sup>≈</sup> 57 | 1 <sup>≈</sup> 49 | 12°R29             | 4 <sup>2</sup> 23 | 8°R 2             | 10 <sup>≈</sup> 0 | 27°R13             | 25 <sup>≈</sup> 41 | 27 <sup>II</sup> 7 | 14 <sup>8</sup> 49 | T 1  |
| F 2  | 14 39 7  | 11°25'13              | 17°27               | 5°42               | 9°47               | 17°37              | 1°53              | 12 <sup>3</sup> 28 | 4°25              | 8 <sup>≈</sup> 1  | 10° 0             | 27 <sup>≈</sup> 6  | 25°38              | 27°14              | 14°53              | F 2  |
| S 3  | 14 43 4  | 12°23'20              | 29°36               | 7°48               | 11° 0              | 18°18              | 1°56              | 12°27              | 4°28              | 8° 0              | 10° 0             | 26°58              | 25°35              | 27°20              | 14°57              | S 3  |
| S 4  | 14 47 0  | 13°21'25              | 11 <sup>II</sup> 38 | 9°56               | 12°12              | 18°58              | 1°59              | 12°25              | 4°30              | 7°58              | 10° 1             | 26°50              | 25°31              | 27°27              | 15° 2              | S 4  |
| M 5  | 14 50 57 | 14°19'29              | 23°34               | 12° 4              | 13°25              | 19°38              | 2° 2              | 12°24              | 4°33              | 7°57              | 10° 1             | 26°41              | 25°28              | 27°34              | 15° 6              | M 5  |
| T 6  | 14 54 53 | 15°17'30              | 5 <sup>2</sup> 26   | 14°13              | 14°37              | 20°18              | 2° 5              | 12°23              | 4°35              | 7°56              | 10° 1             | 26°33              | 25°25              | 27°41              | 15°10              | T 6  |
| W 7  | 14 58 50 | 16°15'30              | 17°18               | 16°24              | 15°49              | 20°59              | 2° 8              | 12°22              | 4°38              | 7°55              | 10° 1             | 26°27              | 25°22              | 27°47              | 15°14              | W 7  |
| T 8  | 15 2 47  | 17°13'28              | 29°12               | 18°34              | 17° 1              | 21°39              | 2°10              | 12°20              | 4°41              | 7°54              | 10° 1             | 26°24              | 25°19              | 27°54              | 15°18              | T 8  |
| F 9  | 15 6 43  | 18°11'25              | 11 <sup>II</sup> 14 | 20°45              | 18°14              | 22°19              | 2°13              | 12°18              | 4°43              | 7°52              | 10° 1             | 26°22              | 25°16              | 28° 1              | 15°22              | F 9  |
| S 10 | 15 10 40 | 19° 9'19              | 23°28               | 22°56              | 19°26              | 22°58              | 2°15              | 12°17              | 4°46              | 7°51              | 10° 1             | 26°D22             | 25°12              | 28° 7              | 15°27              | S 10 |
| S 11 | 15 14 36 | 20° 7'12              | 5 <sup>II</sup> 59  | 25° 6              | 20°38              | 23°38              | 2°17              | 12°15              | 4°49              | 7°50              | 10°R 1            | 26°22              | 25° 9              | 28°14              | 15°31              | S 11 |
| M12  | 15 18 33 | 21° 5'02              | 18°51               | 27°16              | 21°50              | 24°18              | 2°19              | 12°13              | 4°52              | 7°49              | 10° 1             | 26°23              | 25° 6              | 28°21              | 15°35              | M12  |
| T 13 | 15 22 29 | 22° 2'51              | 2 <sup>≈</sup> 9    | 29°25              | 23° 2              | 24°58              | 2°20              | 12°11              | 4°55              | 7°48              | 10° 1             | 26°R23             | 25° 3              | 28°28              | 15°39              | T 13 |
| W14  | 15 26 26 | 23° 0'39              | 15°55               | 1 <sup>II</sup> 32 | 24°13              | 25°38              | 2°22              | 12° 9              | 4°57              | 7°47              | 10° 1             | 26°22              | 25° 0              | 28°34              | 15°43              | W14  |
| T 15 | 15 30 22 | 23°58'25              | 0 <sup>II</sup> 9   | 3°38               | 25°25              | 26°17              | 2°23              | 12° 7              | 5° 0              | 7°46              | 10° 1             | 26°18              | 24°56              | 28°41              | 15°48              | T 15 |
| F 16 | 15 34 19 | 24°56'09              | 14°47               | 5°43               | 26°37              | 26°57              | 2°24              | 12° 5              | 5° 3              | 7°45              | 10° 1             | 26°12              | 24°53              | 28°48              | 15°52              | F 16 |
| S 17 | 15 38 16 | 25°53'52              | 29°44               | 7°46               | 27°49              | 27°36              | 2°25              | 12° 2              | 5° 6              | 7°44              | 10° 1             | 26° 4              | 24°50              | 28°54              | 15°56              | S 17 |
| S 18 | 15 42 12 | 26°51'33              | 14 <sup>≈</sup> 51  | 9°46               | 29° 0              | 28°16              | 2°25              | 12° 0              | 5° 9              | 7°43              | 10° 1             | 25°55              | 24°47              | 29° 1              | 16° 0              | S 18 |
| M19  | 15 46 9  | 27°49'14              | 29°57               | 11°44              | 0 <sup>2</sup> 12  | 28°55              | 2°26              | 11°58              | 5°12              | 7°42              | 10° 1             | 25°46              | 24°44              | 29° 8              | 16° 4              | M19  |
| T 20 | 15 50 5  | 28°46'53              | 14 <sup>3</sup> 53  | 13°40              | 1°23               | 29°35              | 2°26              | 11°55              | 5°15              | 7°41              | 10° 0             | 25°39              | 24°41              | 29°15              | 16° 8              | T 20 |
| W21  | 15 54 2  | 29°44'31              | 29°32               | 15°33              | 2°35               | 0 <sup>≈</sup> 14  | 2°R26             | 11°52              | 5°18              | 7°40              | 10° 0             | 25°33              | 24°37              | 29°21              | 16°12              | W21  |
| T 22 | 15 57 58 | 0 <sup>II</sup> 42'09 | 13 <sup>≈</sup> 48  | 17°24              | 3°46               | 0°53               | 2°26              | 11°50              | 5°21              | 7°39              | 10° 0             | 25°30              | 24°34              | 29°28              | 16°16              | T 22 |
| F 23 | 16 1 55  | 1°39'45               | 27°40               | 19°12              | 4°58               | 1°32               | 2°26              | 11°47              | 5°25              | 7°38              | 9°59              | 25°D29             | 24°31              | 29°35              | 16°21              | F 23 |
| S 24 | 16 5 51  | 2°37'20               | 11 <sup>≈</sup> 8   | 20°57              | 6° 9               | 2°11               | 2°25              | 11°44              | 5°28              | 7°38              | 9°59              | 25°29              | 24°28              | 29°42              | 16°25              | S 24 |
| S 25 | 16 9 48  | 3°34'54               | 24°16               | 22°39              | 7°20               | 2°50               | 2°24              | 11°41              | 5°31              | 7°37              | 9°59              | 25°R29             | 24°25              | 29°48              | 16°29              | S 25 |
| M26  | 16 13 45 | 4°32'28               | 7°Y 5               | 24°18              | 8°31               | 3°29               | 2°24              | 11°38              | 5°34              | 7°36              | 9°58              | 25°29              | 24°22              | 29°55              | 16°33              | M26  |
| T 27 | 16 17 41 | 5°30'00               | 19°40               | 25°54              | 9°42               | 4° 8               | 2°22              | 11°35              | 5°37              | 7°35              | 9°58              | 25°26              | 24°18              | 0 <sup>2</sup> 2   | 16°37              | T 27 |
| W28  | 16 21 38 | 6°27'32               | 2 <sup>8</sup> 3    | 27°27              | 10°53              | 4°46               | 2°21              | 11°32              | 5°41              | 7°35              | 9°58              | 25°21              | 24°15              | 0° 8               | 16°41              | W28  |
| T 29 | 16 25 34 | 7°25'03               | 14°17               | 28°57              | 12° 4              | 5°25               | 2°20              | 11°29              | 5°44              | 7°34              | 9°57              | 25°13              | 24°12              | 0°15               | 16°45              | T 29 |
| F 30 | 16 29 31 | 8°22'31               | 26°24               | 0 <sup>2</sup> 25  | 13°15              | 6° 3               | 2°18              | 11°26              | 5°47              | 7°33              | 9°57              | 25° 3              | 24° 9              | 0°22               | 16°49              | F 30 |
| S 31 | 16 33 27 | 9 <sup>II</sup> 20'02 | 8 <sup>II</sup> 24  | 1 <sup>2</sup> 49  | 14 <sup>2</sup> 26 | 6 <sup>≈</sup> 42  | 2 <sup>≈</sup> 16 | 11 <sup>3</sup> 22 | 5 <sup>2</sup> 51 | 7 <sup>≈</sup> 33 | 9 <sup>≈</sup> 56 | 24 <sup>≈</sup> 51 | 24 <sup>≈</sup> 6  | 0 <sup>2</sup> 29  | 16 <sup>8</sup> 53 | S 31 |

| Day  | ☉     | ☽          | ♂        | ♀        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        |
|------|-------|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|      | decl  | decl lat   | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat |
| T 1  | 14n59 | 16n14 3n10 | 11n49    | 0s59     | 22n44    | 0n59     | 17s20    | 1s38     | 20s 4    | 0s18     | 22s14    | 0n39     | 23n42    | 0n18     | 1s44     | 1n35     |
| F 2  | 15 17 | 20 51 3 57 | 12 40    | 0 49     | 22 58    | 1 2      | 17 9     | 1 40     | 20 4     | 0 18     | 22 14    | 0 39     | 23 42    | 0 18     | 1 43     | 1 35     |
| S 3  | 15 34 | 24 32 4 33 | 13 30    | 0 40     | 23 11    | 1 4      | 16 58    | 1 42     | 20 3     | 0 18     | 22 14    | 0 39     | 23 42    | 0 18     | 1 43     | 1 35     |
| S 4  | 15 52 | 27 6 4 56  | 14 21    | 0 29     | 23 23    | 1 7      | 16 47    | 1 43     | 20 2     | 0 18     | 22 14    | 0 39     | 23 42    | 0 18     | 1 42     | 1 35     |
| M 5  | 16 9  | 28 25 5 6  | 15 10    | 0 19     | 23 35    | 1 9      | 16 36    | 1 45     | 20 2     | 0 19     | 22 14    | 0 39     | 23 42    | 0 18     | 1 42     | 1 35     |
| T 6  | 16 27 | 28 24 5 3  | 15 59    | 0 9      | 23 46    | 1 12     | 16 25    | 1 46     | 20 1     | 0 19     | 22 15    | 0 39     | 23 42    | 0 18     | 1 42     | 1 35     |
| W 7  | 16 43 | 27 6 4 47  | 16 47    | 0n 2     | 23 57    | 1 14     | 16 14    | 1 48     | 20 1     | 0 19     | 22 15    | 0 39     | 23 42    | 0 18     | 1 41     | 1 35     |
| T 8  | 17 0  | 24 33 4 18 | 17 34    | 0 12     | 24 6     | 1 17     | 16 2     | 1 50     | 20 1     | 0 19     | 22 15    | 0 39     | 23 41    | 0 18     | 1 41     | 1 35     |
| F 9  | 17 16 | 20 55 3 38 | 18 20    | 0 23     | 24 15    | 1 19     | 15 51    | 1 51     | 20 0     | 0 19     | 22 15    | 0 39     | 23 41    | 0 18     | 1 40     | 1 35     |
| S 10 | 17 32 | 16 21 2 47 | 19 4     | 0 33     | 24 24    | 1 21     | 15 39    | 1 53     | 20 0     | 0 19     | 22 15    | 0 39     | 23 41    | 0 18     | 1 40     | 1 35     |
| S 11 | 17 48 | 10 59 1 47 | 19 46    | 0 44     | 24 32    | 1 23     | 15 28    | 1 55     | 20 0     | 0 20     | 22 15    | 0 39     | 23 41    | 0 18     | 1 39     | 1 35     |
| M12  | 18 3  | 5 2 0 40   | 20 26    | 0 54     | 24 39    | 1 26     | 15 16    | 1 56     | 20 0     | 0 20     | 22 16    | 0 39     | 23 41    | 0 18     | 1 39     | 1 35     |
| T 13 | 18 18 | 1s20 0s31  | 21 5     | 1 3      | 24 45    | 1 28     | 15 4     | 1 58     | 19 59    | 0 20     | 22 16    | 0 39     | 23 41    | 0 18     | 1 39     | 1 35     |
| W14  | 18 33 | 7 51 1 43  | 21 41    | 1 12     | 24 50    | 1 30     | 14 52    | 2 0      | 19 59    | 0 20     | 22 16    | 0 39     | 23 41    | 0 18     | 1 38     | 1 35     |
| T 15 | 18 47 | 14 12 2 50 | 22 14    | 1 21     | 24 55    | 1 32     | 14 40    | 2 1      | 19 59    | 0 20     | 22 16    | 0 39     | 23 41    | 0 18     | 1 38     | 1 35     |
| F 16 | 19 2  | 19 56 3 49 | 22 45    | 1 29     | 25 0     | 1 34     | 14 28    | 2 3      | 19 59    | 0 21     | 22 16    | 0 39     | 23 41    | 0 18     | 1 37     | 1 35     |
| S 17 | 19 15 | 24 33 4 33 | 23 13    | 1 37     | 25 3     | 1 36     | 14 16    | 2 5      | 19 59    | 0 21     | 22 17    | 0 39     | 23 41    | 0 18     | 1 37     | 1 35     |
| S 18 | 19 29 | 27 33 4 58 | 23 39    | 1 44     | 25 6     | 1 38     | 14 4     | 2 6      | 19 59    | 0 21     | 22 17    | 0 39     | 23 40    | 0 18     | 1 37     | 1 35     |
| M19  | 19 42 | 28 31 5 3  | 24 2     | 1 50     | 25 8     | 1 40     | 13 52    | 2 8      | 19 59    | 0 21     | 22 17    | 0 39     | 23 40    | 0 18     | 1 36     | 1 35     |
| T 20 | 19 55 | 27 23 4 47 | 24 23    | 1 56     | 25 9     | 1 41     | 13 40    | 2 10     | 19 59    | 0 21     | 22 17    | 0 39     | 23 40    | 0 18     | 1 36     | 1 35     |
| W21  | 20 7  | 24 23 4 12 | 24 41    | 2 1      | 25 10    | 1 43     | 13 27    | 2 11     | 19 59    | 0 22     | 22 18    | 0 39     | 23 40    | 0 18     | 1 36     | 1 35     |
| T 22 | 20 19 | 19 56 3 23 | 24 56    | 2 5      | 25 10    | 1 45     | 13 15    | 2 13     | 20 0     | 0 22     | 22 18    | 0 39     | 23 40    | 0 18     | 1 35     | 1 35     |
| F 23 | 20 31 | 14 32 2 22 | 25 9     | 2 8      | 25 9     | 1 46     | 13 3     | 2 15     | 20 0     | 0 22     | 22 18    | 0 39     | 23 40    | 0 18     | 1 35     | 1 35     |
| S 24 | 20 43 | 8 34 1 16  | 25 20    | 2 10     | 25 7     | 1 48     | 12 50    | 2 17     | 20 0     | 0 22     | 22 19    | 0 39     | 23 40    | 0 18     | 1 35     | 1 35     |
| S 25 | 20 54 | 2 23 0 7   | 25 28    | 2 12     | 25 5     | 1 49     | 12 38    | 2 18     | 20 1     | 0 22     | 22 19    | 0 39     | 23 40    | 0 18     | 1 35     | 1 35     |
| M26  | 21 5  | 3n45 1n 1  | 25 34    | 2 13     | 25 2     | 1 51     | 12 25    | 2 20     | 20 1     | 0 23     | 22 19    | 0 39     | 23 39    | 0 18     | 1 34     | 1 35     |
| T 27 | 21 15 | 9 37 2 5   | 25 38    | 2 13     | 24 59    | 1 52     | 12 13    | 2 22     | 20 1     | 0 23     | 22 19    | 0 39     | 23 39    | 0 18     | 1 34     | 1 35     |
| W28  | 21 25 | 15 2 3 1   | 25 39    | 2 13     | 24 54    | 1 53     | 12 0     | 2 24     | 20 2     | 0 23     | 22 20    | 0 38     | 23 39    | 0 18     | 1 34     | 1 35     |
| T 29 | 21 35 | 19 46 3 48 | 25 39    | 2 11     | 24 49    | 1 54     | 11 48    | 2 26     | 20 2     | 0 23     | 22 20    | 0 38     | 23 39    | 0 18     | 1 34     | 1 34     |
| F 30 | 21 44 | 23 39 4 24 | 25 37    | 2 9      | 24 43    | 1 56     | 11 35    | 2 27     | 20 3     | 0 23     | 22 20    | 0 38     | 23 39    | 0 18     | 1 33     | 1 34     |
| S 31 | 21n53 | 26n29      | 4n48     | 25n33    | 2n 6     | 24n37    | 1n57     | 11s22    | 2s29     | 0s 4     | 23s21    | 0n38     | 23n39    | 0n18     | 1s33     | 1n34     |

Julian Day Number = 2372407.5, Delta T = 22.29 sec  
Ecliptic obliquity = 23°28'12", Nutation = - 0°00'00", out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 21°42'55", Lahiri = 20°49'55"Greg. Calendar



# ASTRODIENST EPHEMERIS for the year 1783

## geocentric

JUNE 1783

00:00 UT

| Day  | Sid.t    | ☉        | ☽     | ♀      | ♀     | ♂     | ♂     | ♂      | ♂    | ♂     | ♂     | ♂      | ♂     | ♂    | ♂     | Day  |
|------|----------|----------|-------|--------|-------|-------|-------|--------|------|-------|-------|--------|-------|------|-------|------|
| S 1  | 16 37 24 | 10Ⅱ1730  | 20Ⅱ20 | 3☿ 9   | 15☿37 | 7♂20  | 2°R14 | 11°R19 | 5☿54 | 7°R32 | 9°R56 | 24°R37 | 24♂ 2 | 0☿35 | 16♂57 | S 1  |
| M 2  | 16 41 20 | 11°14'57 | 2☿13  | 4°27   | 16°47 | 7°58  | 2♂12  | 11☿15  | 5°57 | 7♂32  | 9♂55  | 24♂24  | 23°59 | 0°42 | 17° 1 | M 2  |
| T 3  | 16 45 17 | 12°12'23 | 14° 4 | 5°42   | 17°58 | 8°36  | 2°10  | 11°12  | 6° 1 | 7°31  | 9°55  | 24°12  | 23°56 | 0°49 | 17° 4 | T 3  |
| W 4  | 16 49 14 | 13° 9'49 | 25°56 | 6°53   | 19° 9 | 9°14  | 2° 7  | 11° 8  | 6° 4 | 7°31  | 9°54  | 24° 2  | 23°53 | 0°56 | 17° 8 | W 4  |
| T 5  | 16 53 10 | 14° 7'13 | 7♂51  | 8° 1   | 20°19 | 9°51  | 2° 4  | 11° 5  | 6° 7 | 7°30  | 9°53  | 23°55  | 23°50 | 1° 2 | 17°12 | T 5  |
| F 6  | 16 57 7  | 15° 4'35 | 19°52 | 9° 5   | 21°29 | 10°29 | 2° 1  | 11° 1  | 6°11 | 7°30  | 9°53  | 23°50  | 23°47 | 1° 9 | 17°16 | F 6  |
| S 7  | 17 1 3   | 16° 1'57 | 2♂ 5  | 10° 6  | 22°40 | 11° 7 | 1°58  | 10°57  | 6°14 | 7°29  | 9°52  | 23°48  | 23°43 | 1°16 | 17°20 | S 7  |
| S 8  | 17 5 0   | 16°59'18 | 14°33 | 11° 4  | 23°50 | 11°44 | 1°55  | 10°53  | 6°18 | 7°29  | 9°51  | 23°48  | 23°40 | 1°22 | 17°24 | S 8  |
| M 9  | 17 8 56  | 17°56'38 | 27°21 | 11°58  | 25° 0 | 12°21 | 1°51  | 10°50  | 6°21 | 7°29  | 9°51  | 23°48  | 23°37 | 1°29 | 17°27 | M 9  |
| T 10 | 17 12 53 | 18°53'57 | 10♂34 | 12°48  | 26°10 | 12°58 | 1°48  | 10°46  | 6°25 | 7°28  | 9°50  | 23°47  | 23°34 | 1°36 | 17°31 | T 10 |
| W11  | 17 16 49 | 19°51'14 | 24°15 | 13°34  | 27°20 | 13°35 | 1°44  | 10°42  | 6°28 | 7°28  | 9°49  | 23°45  | 23°31 | 1°43 | 17°35 | W11  |
| T 12 | 17 20 46 | 20°48'31 | 8♂26  | 14°17  | 28°30 | 14°12 | 1°40  | 10°38  | 6°32 | 7°28  | 9°48  | 23°40  | 23°28 | 1°49 | 17°39 | T 12 |
| F 13 | 17 24 43 | 21°45'48 | 23° 5 | 14°55  | 29°40 | 14°48 | 1°36  | 10°34  | 6°35 | 7°28  | 9°48  | 23°33  | 23°24 | 1°56 | 17°42 | F 13 |
| S 14 | 17 28 39 | 22°43'03 | 8♂ 8  | 15°29  | 0♂49  | 15°25 | 1°31  | 10°30  | 6°39 | 7°28  | 9°47  | 23°23  | 23°21 | 2° 3 | 17°46 | S 14 |
| S 15 | 17 32 36 | 23°40'18 | 23°24 | 16° 0  | 1°59  | 16° 1 | 1°27  | 10°26  | 6°42 | 7°28  | 9°46  | 23°13  | 23°18 | 2° 9 | 17°49 | S 15 |
| M16  | 17 36 32 | 24°37'33 | 8♂43  | 16°25  | 3° 8  | 16°37 | 1°22  | 10°21  | 6°46 | 7°27  | 9°45  | 23° 2  | 23°15 | 2°16 | 17°53 | M16  |
| T 17 | 17 40 29 | 25°34'47 | 23°54 | 16°47  | 4°18  | 17°13 | 1°18  | 10°17  | 6°49 | 7°27  | 9°44  | 22°53  | 23°12 | 2°23 | 17°57 | T 17 |
| W18  | 17 44 25 | 26°32'00 | 8♂47  | 17° 4  | 5°27  | 17°49 | 1°13  | 10°13  | 6°53 | 7°27  | 9°43  | 22°46  | 23° 9 | 2°30 | 18° 0 | W18  |
| T 19 | 17 48 22 | 27°29'14 | 23°16 | 17°16  | 6°36  | 18°25 | 1° 8  | 10° 9  | 6°57 | 7°D27 | 9°42  | 22°41  | 23° 5 | 2°36 | 18° 4 | T 19 |
| F 20 | 17 52 19 | 28°26'27 | 7♂16  | 17°24  | 7°45  | 19° 0 | 1° 2  | 10° 5  | 7° 0 | 7°27  | 9°41  | 22°39  | 23° 2 | 2°43 | 18° 7 | F 20 |
| S 21 | 17 56 15 | 29°23'40 | 20°49 | 17°R27 | 8°54  | 19°35 | 0°57  | 10° 0  | 7° 4 | 7°27  | 9°40  | 22°39  | 22°59 | 2°50 | 18°10 | S 21 |
| S 22 | 18 0 12  | 0☿20'53  | 3♂56  | 17°26  | 10° 3 | 20°11 | 0°51  | 9°56   | 7° 7 | 7°27  | 9°39  | 22°39  | 22°56 | 2°57 | 18°14 | S 22 |
| M23  | 18 4 8   | 1°18'06  | 16°42 | 17°20  | 11°12 | 20°45 | 0°46  | 9°52   | 7°11 | 7°28  | 9°38  | 22°38  | 22°53 | 3° 3 | 18°17 | M23  |
| T 24 | 18 8 5   | 2°15'19  | 29°10 | 17°10  | 12°21 | 21°20 | 0°40  | 9°47   | 7°15 | 7°28  | 9°37  | 22°36  | 22°49 | 3°10 | 18°21 | T 24 |
| W25  | 18 12 1  | 3°12'32  | 11♂25 | 16°56  | 13°29 | 21°54 | 0°34  | 9°43   | 7°18 | 7°28  | 9°36  | 22°31  | 22°46 | 3°17 | 18°24 | W25  |
| T 26 | 18 15 58 | 4° 9'45  | 23°30 | 16°37  | 14°38 | 22°29 | 0°28  | 9°39   | 7°22 | 7°28  | 9°35  | 22°23  | 22°43 | 3°23 | 18°27 | T 26 |
| F 27 | 18 19 54 | 5° 6'58  | 5Ⅱ29  | 16°15  | 15°46 | 23° 3 | 0°22  | 9°34   | 7°25 | 7°28  | 9°34  | 22°13  | 22°40 | 3°30 | 18°30 | F 27 |
| S 28 | 18 23 51 | 6° 4'11  | 17°24 | 15°49  | 16°54 | 23°36 | 0°15  | 9°30   | 7°29 | 7°29  | 9°33  | 22° 1  | 22°37 | 3°37 | 18°33 | S 28 |
| S 29 | 18 27 48 | 7° 1'24  | 29°16 | 15°20  | 18° 2 | 24°10 | 0° 9  | 9°25   | 7°33 | 7°29  | 9°32  | 21°47  | 22°34 | 3°44 | 18°37 | S 29 |
| M30  | 18 31 44 | 7☿58'37  | 11☿ 8 | 14☿48  | 19♂10 | 24♂43 | 0♂ 2  | 9☿21   | 7☿36 | 7♂29  | 9♂31  | 21♂34  | 22♂30 | 3☿50 | 18♂40 | M30  |

| Day  | ☉     | ☽     | ♀    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂    | Day  |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  |
| S 1  | 22n 1 | 28n 6 | 4n59 | 25n28 | 2n 2 | 24n30 | 1n57 | 11s10 | 2s31 | 20s 4 | 0s24 | 22s21 | 0n38 | 23n39 | 0n18 | 1s33 | 1n34 |
| M 2  | 22 9  | 28 24 | 4 57 | 25 21 | 1 57 | 24 22 | 1 58 | 10 57 | 2 33 | 20 5  | 0 24 | 22 21 | 0 38 | 23 38 | 0 18 | 1 33 | 1 34 |
| T 3  | 22 17 | 27 25 | 4 43 | 25 12 | 1 52 | 24 14 | 1 59 | 10 45 | 2 35 | 20 6  | 0 24 | 22 22 | 0 38 | 23 38 | 0 18 | 1 33 | 1 34 |
| W 4  | 22 24 | 25 10 | 4 16 | 25 3  | 1 46 | 24 5  | 2 0  | 10 32 | 2 36 | 20 6  | 0 24 | 22 22 | 0 38 | 23 38 | 0 18 | 1 33 | 1 34 |
| T 5  | 22 31 | 21 50 | 3 37 | 24 52 | 1 39 | 23 55 | 2 0  | 10 19 | 2 38 | 20 7  | 0 24 | 22 22 | 0 38 | 23 38 | 0 18 | 1 32 | 1 34 |
| F 6  | 22 38 | 17 33 | 2 49 | 24 40 | 1 31 | 23 44 | 2 1  | 10 7  | 2 40 | 20 8  | 0 25 | 22 23 | 0 38 | 23 38 | 0 18 | 1 32 | 1 34 |
| S 7  | 22 44 | 12 30 | 1 52 | 24 27 | 1 22 | 23 33 | 2 1  | 9 54  | 2 42 | 20 9  | 0 25 | 22 23 | 0 38 | 23 38 | 0 18 | 1 32 | 1 34 |
| S 8  | 22 50 | 6 50  | 0 49 | 24 13 | 1 13 | 23 22 | 2 2  | 9 42  | 2 44 | 20 10 | 0 25 | 22 24 | 0 38 | 23 37 | 0 18 | 1 32 | 1 34 |
| M 9  | 22 55 | 0 46  | 0s19 | 23 59 | 1 3  | 23 9  | 2 2  | 9 29  | 2 46 | 20 11 | 0 25 | 22 24 | 0 38 | 23 37 | 0 18 | 1 32 | 1 34 |
| T 10 | 23 0  | 5s32  | 1 27 | 23 44 | 0 53 | 22 56 | 2 2  | 9 17  | 2 47 | 20 12 | 0 25 | 22 24 | 0 38 | 23 37 | 0 18 | 1 32 | 1 34 |
| W11  | 23 5  | 11 48 | 2 33 | 23 28 | 0 41 | 22 43 | 2 2  | 9 4   | 2 49 | 20 13 | 0 26 | 22 25 | 0 38 | 23 37 | 0 18 | 1 32 | 1 34 |
| T 12 | 23 9  | 17 41 | 3 32 | 23 11 | 0 29 | 22 29 | 2 2  | 8 51  | 2 51 | 20 14 | 0 26 | 22 25 | 0 38 | 23 37 | 0 18 | 1 32 | 1 34 |
| F 13 | 23 13 | 22 45 | 4 19 | 22 55 | 0 17 | 22 14 | 2 2  | 8 39  | 2 53 | 20 15 | 0 26 | 22 25 | 0 38 | 23 37 | 0 18 | 1 32 | 1 34 |
| S 14 | 23 16 | 26 27 | 4 50 | 22 38 | 0 4  | 21 59 | 2 2  | 8 27  | 2 55 | 20 16 | 0 26 | 22 26 | 0 38 | 23 36 | 0 18 | 1 32 | 1 34 |
| S 15 | 23 19 | 28 18 | 5 0  | 22 20 | 0s10 | 21 43 | 2 1  | 8 14  | 2 57 | 20 18 | 0 26 | 22 26 | 0 38 | 23 36 | 0 18 | 1 32 | 1 34 |
| M16  | 23 22 | 27 59 | 4 49 | 22 3  | 0 25 | 21 27 | 2 1  | 8 2   | 2 59 | 20 19 | 0 27 | 22 27 | 0 37 | 23 36 | 0 18 | 1 32 | 1 34 |
| T 17 | 23 24 | 25 35 | 4 18 | 21 46 | 0 39 | 21 10 | 2 1  | 7 49  | 3 1  | 20 20 | 0 27 | 22 27 | 0 37 | 23 36 | 0 18 | 1 32 | 1 34 |
| W18  | 23 25 | 21 27 | 3 29 | 21 29 | 0 55 | 20 52 | 2 0  | 7 37  | 3 2  | 20 21 | 0 27 | 22 27 | 0 37 | 23 36 | 0 18 | 1 32 | 1 34 |
| T 19 | 23 27 | 16 7  | 2 28 | 21 12 | 1 10 | 20 34 | 1 59 | 7 25  | 3 4  | 20 23 | 0 27 | 22 28 | 0 37 | 23 36 | 0 18 | 1 32 | 1 34 |
| F 20 | 23 28 | 10 6  | 1 20 | 20 55 | 1 26 | 20 16 | 1 58 | 7 13  | 3 6  | 20 24 | 0 27 | 22 28 | 0 37 | 23 35 | 0 18 | 1 32 | 1 34 |
| S 21 | 23 28 | 3 48  | 0 10 | 20 38 | 1 42 | 19 57 | 1 58 | 7 1   | 3 8  | 20 25 | 0 28 | 22 29 | 0 37 | 23 35 | 0 18 | 1 32 | 1 33 |
| S 22 | 23 28 | 2n29  | 0n59 | 20 22 | 1 58 | 19 37 | 1 57 | 6 48  | 3 10 | 20 27 | 0 28 | 22 29 | 0 37 | 23 35 | 0 18 | 1 32 | 1 33 |
| M23  | 23 28 | 8 28  | 2 3  | 20 7  | 2 15 | 19 17 | 1 55 | 6 36  | 3 12 | 20 28 | 0 28 | 22 29 | 0 37 | 23 35 | 0 18 | 1 32 | 1 33 |
| T 24 | 23 27 | 14 0  | 3 0  | 19 52 | 2 31 | 18 57 | 1 54 | 6 24  | 3 14 | 20 30 | 0 28 | 22 30 | 0 37 | 23 35 | 0 18 | 1 32 | 1 33 |
| W25  | 23 26 | 18 53 | 3 47 | 19 38 | 2 47 | 18 36 | 1 53 | 6 13  | 3 16 | 20 31 | 0 28 | 22 30 | 0 37 | 23 34 | 0 18 | 1 32 | 1 33 |
| T 26 | 23 24 | 22 55 | 4 24 | 19 25 | 3 2  | 18 15 | 1 51 | 6 1   | 3 18 | 20 32 | 0 29 | 22 31 | 0 37 | 23 34 | 0 18 | 1 32 | 1 33 |
| F 27 | 23 22 | 25 58 | 4 48 | 19 13 | 3 17 | 17 53 | 1 50 | 5 49  | 3 20 | 20 34 | 0 29 | 22 31 | 0 37 | 23 34 | 0 18 | 1 33 | 1 33 |
| S 28 | 23 20 | 27 50 | 4 59 | 19 2  | 3 32 | 17 31 | 1 48 | 5 37  | 3 21 | 20 36 | 0 29 | 22 31 | 0 37 | 23 34 | 0 18 | 1 33 | 1 33 |
| S 29 | 23 17 | 28 26 | 4 58 | 18 52 | 3 45 | 17 8  | 1 47 | 5 26  | 3 23 | 20 37 | 0 29 | 22 32 | 0 36 | 23 34 | 0 18 | 1 33 | 1 33 |
| M30  | 23n14 | 27n42 | 4n43 | 18n42 | 3s58 | 16n45 | 1n45 | 5s14  | 3s25 | 20s39 | 0s29 | 22s32 | 0n36 | 23n33 | 0n18 | 1s33 | 1n33 |

Julian Day Number = 2372438.5, Delta T = 22.29 sec

Ecliptic obliquity = 23°28'11", Nutation = 0°00'01", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 21°42'59", Lahiri = 20°49'59"Greg. Calendar

## ASTRODIENST EPHEMERIS for the year 1783

geocentric

JULY 1783

00:00 UT

| Day  | Sid.t    | ☉        | ☽      | ♀      | ♂      | ♂      | ♂      | ♂     | ♂     | ♂     | ♂     | ♂      | ♂      | ♂     | ♂      | Day  |
|------|----------|----------|--------|--------|--------|--------|--------|-------|-------|-------|-------|--------|--------|-------|--------|------|
| T 1  | 18 35 41 | 8°55'50  | 23°00  | 14°R14 | 20°L18 | 25°H16 | 29°R56 | 9°R17 | 7°D40 | 7°A30 | 9°R30 | 21°R22 | 22°H27 | 3°D57 | 18°B43 | T 1  |
| W 2  | 18 39 37 | 9°53'03  | 4°L55  | 13°D38 | 21°26  | 25°49  | 29°D49 | 9°Z12 | 7°44  | 7°30  | 9°A29 | 21°H12 | 22°24  | 4° 4  | 18°46  | W 2  |
| T 3  | 18 43 34 | 10°50'16 | 16°54  | 13° 1  | 22°34  | 26°21  | 29°42  | 9° 8  | 7°47  | 7°31  | 9°28  | 21° 5  | 22°21  | 4°10  | 18°49  | T 3  |
| F 4  | 18 47 30 | 11°47'29 | 29° 0  | 12°24  | 23°41  | 26°54  | 29°35  | 9° 3  | 7°51  | 7°31  | 9°26  | 21° 1  | 22°18  | 4°17  | 18°52  | F 4  |
| S 5  | 18 51 27 | 12°44'41 | 11°H16 | 11°46  | 24°48  | 27°25  | 29°28  | 8°59  | 7°54  | 7°32  | 9°25  | 20°58  | 22°15  | 4°24  | 18°54  | S 5  |
| S 6  | 18 55 23 | 13°41'54 | 23°46  | 11°10  | 25°56  | 27°57  | 29°21  | 8°54  | 7°58  | 7°32  | 9°24  | 20°D58 | 22°11  | 4°31  | 18°57  | S 6  |
| M 7  | 18 59 20 | 14°39'06 | 6°A34  | 10°35  | 27° 3  | 28°28  | 29°14  | 8°50  | 8° 2  | 7°33  | 9°23  | 20°58  | 22° 8  | 4°37  | 19° 0  | M 7  |
| T 8  | 19 3 17  | 15°36'18 | 19°43  | 10° 1  | 28° 9  | 28°59  | 29° 6  | 8°46  | 8° 5  | 7°33  | 9°22  | 20°R59 | 22° 5  | 4°44  | 19° 3  | T 8  |
| W 9  | 19 7 13  | 16°33'30 | 3°H18  | 9°31   | 29°16  | 29°30  | 28°59  | 8°41  | 8° 9  | 7°34  | 9°20  | 20°57  | 22° 2  | 4°51  | 19° 6  | W 9  |
| T 10 | 19 11 10 | 17°30'42 | 17°21  | 9° 4   | 0°H23  | 0°V 1  | 28°51  | 8°37  | 8°12  | 7°35  | 9°19  | 20°54  | 21°59  | 4°58  | 19° 8  | T 10 |
| F 11 | 19 15 6  | 18°27'55 | 1°A50  | 8°40   | 1°29   | 0°31   | 28°44  | 8°33  | 8°16  | 7°35  | 9°18  | 20°49  | 21°55  | 5° 4  | 19°11  | F 11 |
| S 12 | 19 19 3  | 19°25'07 | 16°43  | 8°21   | 2°35   | 1° 0   | 28°36  | 8°28  | 8°20  | 7°36  | 9°17  | 20°41  | 21°52  | 5°11  | 19°13  | S 12 |
| S 13 | 19 22 59 | 20°22'20 | 1°D52  | 8° 6   | 3°42   | 1°30   | 28°29  | 8°24  | 8°23  | 7°37  | 9°15  | 20°33  | 21°49  | 5°18  | 19°16  | S 13 |
| M14  | 19 26 56 | 21°19'32 | 17° 9  | 7°56   | 4°47   | 1°59   | 28°21  | 8°20  | 8°27  | 7°38  | 9°14  | 20°24  | 21°46  | 5°24  | 19°18  | M14  |
| T 15 | 19 30 52 | 22°16'46 | 2°A21  | 7°D51  | 5°53   | 2°28   | 28°14  | 8°16  | 8°30  | 7°38  | 9°13  | 20°17  | 21°43  | 5°31  | 19°21  | T 15 |
| W16  | 19 34 49 | 23°13'59 | 17°19  | 7°51   | 6°59   | 2°56   | 28° 6  | 8°11  | 8°34  | 7°39  | 9°11  | 20°11  | 21°40  | 5°38  | 19°23  | W16  |
| T 17 | 19 38 46 | 24°11'13 | 1°H54  | 7°57   | 8° 4   | 3°24   | 27°58  | 8° 7  | 8°37  | 7°40  | 9°10  | 20° 7  | 21°36  | 5°45  | 19°26  | T 17 |
| F 18 | 19 42 42 | 25° 8'28 | 16° 3  | 8° 9   | 9° 9   | 3°52   | 27°50  | 8° 3  | 8°41  | 7°41  | 9° 9  | 20°D 6 | 21°33  | 5°51  | 19°28  | F 18 |
| S 19 | 19 46 39 | 26° 5'44 | 29°43  | 8°26   | 10°14  | 4°19   | 27°43  | 7°59  | 8°44  | 7°42  | 9° 8  | 20° 6  | 21°30  | 5°58  | 19°30  | S 19 |
| S 20 | 19 50 35 | 27° 3'00 | 12°V55 | 8°49   | 11°19  | 4°46   | 27°35  | 7°55  | 8°48  | 7°43  | 9° 6  | 20° 7  | 21°27  | 6° 5  | 19°32  | S 20 |
| M21  | 19 54 32 | 28° 0'17 | 25°44  | 9°18   | 12°23  | 5°12   | 27°27  | 7°51  | 8°51  | 7°44  | 9° 5  | 20°R 8 | 21°24  | 6°11  | 19°34  | M21  |
| T 22 | 19 58 28 | 28°57'35 | 8°B13  | 9°53   | 13°28  | 5°38   | 27°19  | 7°47  | 8°55  | 7°45  | 9° 4  | 20° 7  | 21°20  | 6°18  | 19°36  | T 22 |
| W23  | 20 2 25  | 29°54'55 | 20°26  | 10°33  | 14°32  | 6° 4   | 27°12  | 7°43  | 8°58  | 7°46  | 9° 2  | 20° 5  | 21°17  | 6°25  | 19°38  | W23  |
| T 24 | 20 6 21  | 0°L52'15 | 2°H28  | 11°19  | 15°36  | 6°29   | 27° 4  | 7°39  | 9° 2  | 7°47  | 9° 1  | 20° 1  | 21°14  | 6°32  | 19°40  | T 24 |
| F 25 | 20 10 18 | 1°49'36  | 14°24  | 12°11  | 16°39  | 6°53   | 26°56  | 7°35  | 9° 5  | 7°48  | 8°59  | 19°55  | 21°11  | 6°38  | 19°42  | F 25 |
| S 26 | 20 14 15 | 2°46'58  | 26°16  | 13° 9  | 17°43  | 7°17   | 26°49  | 7°32  | 9° 8  | 7°49  | 8°58  | 19°47  | 21° 8  | 6°45  | 19°44  | S 26 |
| S 27 | 20 18 11 | 3°44'21  | 8°D 7  | 14°12  | 18°46  | 7°41   | 26°41  | 7°28  | 9°12  | 7°51  | 8°57  | 19°38  | 21° 5  | 6°52  | 19°46  | S 27 |
| M28  | 20 22 8  | 4°41'45  | 20° 0  | 15°20  | 19°49  | 8° 4   | 26°33  | 7°24  | 9°15  | 7°52  | 8°55  | 19°30  | 21° 1  | 6°58  | 19°48  | M28  |
| T 29 | 20 26 4  | 5°39'10  | 1°L57  | 16°34  | 20°52  | 8°27   | 26°26  | 7°21  | 9°19  | 7°53  | 8°54  | 19°22  | 20°58  | 7° 5  | 19°49  | T 29 |
| W30  | 20 30 1  | 6°36'35  | 13°59  | 17°53  | 21°54  | 8°49   | 26°18  | 7°17  | 9°22  | 7°54  | 8°53  | 19°16  | 20°55  | 7°12  | 19°51  | W30  |
| T 31 | 20 33 57 | 7°L34'02 | 26°L 8 | 19°D17 | 22°H56 | 9°V10  | 26°Z11 | 7°Z13 | 9°D25 | 7°A56 | 8°A51 | 19°H11 | 20°H52 | 7°D19 | 19°B53 | T 31 |

| Day  | ☉     | ☽     | ♀    | ♂     | ♂    | ♂     | ♂    | ♂    | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂    |
|------|-------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|-------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl  | lat  | lat  |
| T 1  | 23n10 | 25n43 | 4n17 | 18n34 | 4s 9 | 16n22 | 1n43 | 5s 3 | 3s27 | 20s40 | 0s29 | 22s32 | 0n36 | 23n33 | 0n18 | 1s33 |
| W 2  | 23 6  | 22 35 | 3 38 | 18 28 | 4 20 | 15 58 | 1 41 | 4 52 | 3 29 | 20 42 | 0 30 | 22 33 | 0 36 | 23 33 | 0 18 | 1 33 |
| T 3  | 23 2  | 18 30 | 2 50 | 18 22 | 4 29 | 15 34 | 1 39 | 4 41 | 3 31 | 20 43 | 0 30 | 22 33 | 0 36 | 23 33 | 0 18 | 1 34 |
| F 4  | 22 57 | 13 37 | 1 54 | 18 18 | 4 36 | 15 9  | 1 36 | 4 30 | 3 33 | 20 45 | 0 30 | 22 34 | 0 36 | 23 33 | 0 18 | 1 34 |
| S 5  | 22 52 | 8 8   | 0 51 | 18 15 | 4 43 | 14 45 | 1 34 | 4 19 | 3 35 | 20 47 | 0 30 | 22 34 | 0 36 | 23 32 | 0 18 | 1 34 |
| S 6  | 22 46 | 2 15  | 0s15 | 18 14 | 4 47 | 14 20 | 1 31 | 4 8  | 3 37 | 20 48 | 0 30 | 22 34 | 0 36 | 23 32 | 0 18 | 1 34 |
| M 7  | 22 40 | 3s52  | 1 22 | 18 14 | 4 50 | 13 54 | 1 29 | 3 57 | 3 39 | 20 50 | 0 30 | 22 35 | 0 36 | 23 32 | 0 18 | 1 35 |
| T 8  | 22 33 | 9 59  | 2 27 | 18 15 | 4 51 | 13 28 | 1 26 | 3 46 | 3 41 | 20 52 | 0 31 | 22 35 | 0 36 | 23 32 | 0 18 | 1 35 |
| W 9  | 22 27 | 15 51 | 3 25 | 18 18 | 4 51 | 13 2  | 1 23 | 3 36 | 3 43 | 20 53 | 0 31 | 22 36 | 0 36 | 23 32 | 0 18 | 1 35 |
| T 10 | 22 19 | 21 5  | 4 14 | 18 21 | 4 49 | 12 36 | 1 20 | 3 26 | 3 44 | 20 55 | 0 31 | 22 36 | 0 35 | 23 31 | 0 18 | 1 36 |
| F 11 | 22 12 | 25 15 | 4 48 | 18 26 | 4 45 | 12 10 | 1 17 | 3 15 | 3 46 | 20 57 | 0 31 | 22 36 | 0 35 | 23 31 | 0 19 | 1 36 |
| S 12 | 22 4  | 27 50 | 5 3  | 18 33 | 4 40 | 11 43 | 1 14 | 3 5  | 3 48 | 20 59 | 0 31 | 22 37 | 0 35 | 23 31 | 0 19 | 1 36 |
| S 13 | 21 55 | 28 25 | 4 58 | 18 40 | 4 34 | 11 16 | 1 11 | 2 55 | 3 50 | 21 0  | 0 31 | 22 37 | 0 35 | 23 31 | 0 19 | 1 37 |
| M14  | 21 47 | 26 52 | 4 32 | 18 48 | 4 26 | 10 49 | 1 7  | 2 46 | 3 52 | 21 2  | 0 32 | 22 37 | 0 35 | 23 31 | 0 19 | 1 37 |
| T 15 | 21 38 | 23 20 | 3 46 | 18 57 | 4 17 | 10 21 | 1 4  | 2 36 | 3 54 | 21 4  | 0 32 | 22 38 | 0 35 | 23 30 | 0 19 | 1 37 |
| W16  | 21 28 | 18 18 | 2 46 | 19 7  | 4 8  | 9 54  | 1 0  | 2 26 | 3 56 | 21 5  | 0 32 | 22 38 | 0 35 | 23 30 | 0 19 | 1 38 |
| T 17 | 21 18 | 12 18 | 1 36 | 19 18 | 3 57 | 9 26  | 0 57 | 2 17 | 3 58 | 21 7  | 0 32 | 22 38 | 0 35 | 23 30 | 0 19 | 1 38 |
| F 18 | 21 8  | 5 51  | 0 22 | 19 29 | 3 45 | 8 58  | 0 53 | 2 8  | 4 0  | 21 9  | 0 32 | 22 39 | 0 35 | 23 30 | 0 19 | 1 38 |
| S 19 | 20 57 | 0n40  | 0n51 | 19 40 | 3 32 | 8 30  | 0 49 | 1 59 | 4 1  | 21 10 | 0 32 | 22 39 | 0 35 | 23 29 | 0 19 | 1 39 |
| S 20 | 20 47 | 6 56  | 1 59 | 19 52 | 3 19 | 8 1   | 0 45 | 1 50 | 4 3  | 21 12 | 0 32 | 22 40 | 0 34 | 23 29 | 0 19 | 1 39 |
| M21  | 20 35 | 12 44 | 2 59 | 20 4  | 3 5  | 7 33  | 0 41 | 1 41 | 4 5  | 21 14 | 0 33 | 22 40 | 0 34 | 23 29 | 0 19 | 1 40 |
| T 22 | 20 24 | 17 52 | 3 49 | 20 15 | 2 51 | 7 4   | 0 36 | 1 32 | 4 7  | 21 15 | 0 33 | 22 40 | 0 34 | 23 29 | 0 19 | 1 40 |
| W23  | 20 12 | 22 10 | 4 27 | 20 27 | 2 37 | 6 35  | 0 32 | 1 24 | 4 9  | 21 17 | 0 33 | 22 41 | 0 34 | 23 29 | 0 19 | 1 41 |
| T 24 | 19 59 | 25 28 | 4 53 | 20 38 | 2 22 | 6 7   | 0 28 | 1 16 | 4 11 | 21 19 | 0 33 | 22 41 | 0 34 | 23 28 | 0 19 | 1 41 |
| F 25 | 19 47 | 27 37 | 5 6  | 20 48 | 2 7  | 5 38  | 0 23 | 1 8  | 4 12 | 21 20 | 0 33 | 22 41 | 0 34 | 23 28 | 0 19 | 1 42 |
| S 26 | 19 34 | 28 30 | 5 5  | 20 58 | 1 52 | 5 9   | 0 18 | 1 0  | 4 14 | 21 22 | 0 33 | 22 42 | 0 34 | 23 28 | 0 19 | 1 42 |
| S 27 | 19 20 | 28 4  | 4 51 | 21 7  | 1 37 | 4 39  | 0 14 | 0 52 | 4 16 | 21 24 | 0 33 | 22 42 | 0 34 | 23 28 | 0 19 | 1 43 |
| M28  | 19 7  | 26 21 | 4 25 | 21 14 | 1 22 | 4 10  | 0 9  | 0 45 | 4 18 | 21 25 | 0 34 | 22 42 | 0 34 | 23 27 | 0 19 | 1 43 |
| T 29 | 18 53 | 23 26 | 3 47 | 21 20 | 1 7  | 3 41  | 0 4  | 0 37 | 4 20 | 21 27 | 0 34 | 22 43 | 0 34 | 23 27 | 0 19 | 1 44 |
| W30  | 18 39 | 19 30 | 2 59 | 21 25 | 0 52 | 3 12  | 0s 1 | 0 30 | 4 21 | 21 28 | 0 34 | 22 43 | 0 33 | 23 27 | 0 19 | 1 44 |
| T 31 | 18n24 | 14n44 | 2n 1 | 21n27 | 0s38 | 2n42  | 0s 7 | 0s24 | 4s23 | 21s30 | 0s34 | 22s43 | 0n33 | 23n27 | 0n19 | 1s45 |

Julian Day Number = 2372468.5, Delta T = 22.29 sec

Ecliptic obliquity = 23°28'11", Nutation = 0°00'03", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 21°43'03", Lahiri = 20°50'03"Greg. Calendar



ASTRODIENST EPHEMERIS for the year 1783  
geocentric

AUGUST 1783

00:00 UT

| Day  | Sid.t    | ☉        | ☽     | ♀     | ♂     | ♂      | ♂      | ♂     | ♂     | ♂    | ♂     | ♂      | ♂     | ♂     | ♂      | Day  |
|------|----------|----------|-------|-------|-------|--------|--------|-------|-------|------|-------|--------|-------|-------|--------|------|
| F 1  | 20 37 54 | 8♌31'29  | 8♍24  | 20♋45 | 23♍58 | 9♍31   | 26°R 3 | 7°R10 | 9♋29  | 7♌57 | 8°R50 | 19°R 9 | 20♋49 | 7♋25  | 19♌54  | F 1  |
| S 2  | 20 41 51 | 9°28'57  | 20°52 | 22°18 | 25° 0 | 9°52   | 25♋56  | 7♋7   | 9°32  | 7°58 | 8♋49  | 19°D 8 | 20°46 | 7°32  | 19°56  | S 2  |
| S 3  | 20 45 47 | 10°26'26 | 3♌31  | 23°56 | 26° 1 | 10°11  | 25°48  | 7° 3  | 9°35  | 8° 0 | 8°47  | 19♋9   | 20°42 | 7°39  | 19°57  | S 3  |
| M 4  | 20 49 44 | 11°23'55 | 16°26 | 25°37 | 27° 2 | 10°31  | 25°41  | 7° 0  | 9°38  | 8° 1 | 8°46  | 19°11  | 20°39 | 7°45  | 19°58  | M 4  |
| T 5  | 20 53 40 | 12°21'26 | 29°39 | 27°22 | 28° 3 | 10°49  | 25°34  | 6°57  | 9°41  | 8° 2 | 8°44  | 19°12  | 20°36 | 7°52  | 20° 0  | T 5  |
| W 6  | 20 57 37 | 13°18'57 | 13♌12 | 29°11 | 29° 4 | 11° 7  | 25°27  | 6°54  | 9°45  | 8° 4 | 8°43  | 19°R13 | 20°33 | 7°59  | 20° 1  | W 6  |
| T 7  | 21 1 33  | 14°16'29 | 27° 7 | 1♌2   | 0♌4   | 11°25  | 25°20  | 6°51  | 9°48  | 8° 5 | 8°42  | 19°12  | 20°30 | 8° 6  | 20° 2  | T 7  |
| F 8  | 21 5 30  | 15°14'02 | 11♌23 | 2°56  | 1° 3  | 11°42  | 25°13  | 6°48  | 9°51  | 8° 7 | 8°40  | 19°10  | 20°26 | 8°12  | 20° 3  | F 8  |
| S 9  | 21 9 26  | 16°11'36 | 25°59 | 4°52  | 2° 3  | 11°58  | 25° 6  | 6°45  | 9°54  | 8° 8 | 8°39  | 19° 6  | 20°23 | 8°19  | 20° 4  | S 9  |
| S 10 | 21 13 23 | 17° 9'11 | 10♋49 | 6°50  | 3° 2  | 12°13  | 25° 0  | 6°42  | 9°57  | 8°10 | 8°38  | 19° 2  | 20°20 | 8°26  | 20° 5  | S 10 |
| M 11 | 21 17 20 | 18° 6'47 | 25°48 | 8°49  | 4° 0  | 12°28  | 24°53  | 6°39  | 10° 0 | 8°11 | 8°36  | 18°58  | 20°17 | 8°33  | 20° 6  | M 11 |
| T 12 | 21 21 16 | 19° 4'24 | 10♋46 | 10°50 | 4°59  | 12°42  | 24°47  | 6°37  | 10° 3 | 8°13 | 8°35  | 18°54  | 20°14 | 8°39  | 20° 7  | T 12 |
| W 13 | 21 25 13 | 20° 2'02 | 25°34 | 12°51 | 5°56  | 12°56  | 24°40  | 6°34  | 10° 6 | 8°15 | 8°34  | 18°51  | 20°11 | 8°46  | 20° 8  | W 13 |
| T 14 | 21 29 9  | 20°59'41 | 10♋5  | 14°53 | 6°54  | 13° 9  | 24°34  | 6°31  | 10° 9 | 8°16 | 8°32  | 18°50  | 20° 7 | 8°53  | 20° 9  | T 14 |
| F 15 | 21 33 6  | 21°57'22 | 24°14 | 16°55 | 7°51  | 13°21  | 24°28  | 6°29  | 10°12 | 8°18 | 8°31  | 18°D49 | 20° 4 | 8°59  | 20° 9  | F 15 |
| S 16 | 21 37 2  | 22°55'04 | 7♍57  | 18°56 | 8°47  | 13°32  | 24°22  | 6°27  | 10°15 | 8°20 | 8°30  | 18°50  | 20° 1 | 9° 6  | 20°10  | S 16 |
| S 17 | 21 40 59 | 23°52'48 | 21°14 | 20°58 | 9°43  | 13°42  | 24°16  | 6°24  | 10°18 | 8°21 | 8°28  | 18°52  | 19°58 | 9°13  | 20°10  | S 17 |
| M 18 | 21 44 55 | 24°50'34 | 4♌7   | 22°59 | 10°39 | 13°52  | 24°10  | 6°22  | 10°21 | 8°23 | 8°27  | 18°53  | 19°55 | 9°20  | 20°11  | M 18 |
| T 19 | 21 48 52 | 25°48'21 | 16°40 | 24°59 | 11°34 | 14° 1  | 24° 5  | 6°20  | 10°23 | 8°25 | 8°26  | 18°54  | 19°52 | 9°26  | 20°11  | T 19 |
| W 20 | 21 52 49 | 26°46'10 | 28°55 | 26°58 | 12°28 | 14° 9  | 23°59  | 6°18  | 10°26 | 8°26 | 8°24  | 18°R55 | 19°48 | 9°33  | 20°12  | W 20 |
| T 21 | 21 56 45 | 27°44'00 | 10♌59 | 28°56 | 13°22 | 14°17  | 23°54  | 6°16  | 10°29 | 8°28 | 8°23  | 18°54  | 19°45 | 9°40  | 20°12  | T 21 |
| F 22 | 22 0 42  | 28°41'53 | 22°54 | 0♍54  | 14°16 | 14°23  | 23°49  | 6°14  | 10°32 | 8°30 | 8°22  | 18°52  | 19°42 | 9°46  | 20°12  | F 22 |
| S 23 | 22 4 38  | 29°39'47 | 4♋46  | 2°50  | 15° 9 | 14°29  | 23°44  | 6°12  | 10°34 | 8°32 | 8°21  | 18°50  | 19°39 | 9°53  | 20°13  | S 23 |
| S 24 | 22 8 35  | 0♍37'43  | 16°39 | 4°45  | 16° 1 | 14°34  | 23°39  | 6°11  | 10°37 | 8°34 | 8°19  | 18°47  | 19°36 | 10° 0 | 20°13  | S 24 |
| M 25 | 22 12 31 | 1°35'40  | 28°35 | 6°39  | 16°53 | 14°38  | 23°34  | 6° 9  | 10°39 | 8°36 | 8°18  | 18°45  | 19°32 | 10° 7 | 20°13  | M 25 |
| T 26 | 22 16 28 | 2°33'40  | 10♌37 | 8°31  | 17°44 | 14°41  | 23°30  | 6° 8  | 10°42 | 8°37 | 8°17  | 18°42  | 19°29 | 10°13 | 20°R13 | T 26 |
| W 27 | 22 20 24 | 3°31'41  | 22°48 | 10°23 | 18°34 | 14°44  | 23°26  | 6° 6  | 10°45 | 8°39 | 8°16  | 18°40  | 19°26 | 10°20 | 20°13  | W 27 |
| T 28 | 22 24 21 | 4°29'43  | 5♍10  | 12°13 | 19°24 | 14°45  | 23°21  | 6° 5  | 10°47 | 8°41 | 8°14  | 18°39  | 19°23 | 10°27 | 20°13  | T 28 |
| F 29 | 22 28 18 | 5°27'47  | 17°43 | 14° 1 | 20°13 | 14°R46 | 23°17  | 6° 4  | 10°50 | 8°43 | 8°13  | 18°D39 | 19°20 | 10°33 | 20°12  | F 29 |
| S 30 | 22 32 14 | 6°25'53  | 0♌28  | 15°49 | 21° 2 | 14°46  | 23°14  | 6° 3  | 10°52 | 8°45 | 8°12  | 18°39  | 19°17 | 10°40 | 20°12  | S 30 |
| S 31 | 22 36 11 | 7♍24'00  | 13♌27 | 17♍35 | 21♌49 | 14°Y44 | 23♋10  | 6♋2   | 10♋54 | 8♌47 | 8♌11  | 18♋40  | 19♋13 | 10♋47 | 20♋12  | S 31 |

| Day  | ☉     | ☽     | ♀    | ♂     | ♂    | ♂     | ♂    | ♂    | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂    |
|------|-------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|-------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl |
| F 1  | 18n 9 | 9n19  | 0n58 | 21n28 | 0s24 | 2n13  | 0s12 | 0s17 | 4s25 | 21s31 | 0s34 | 22s43 | 0n33 | 23n27 | 0n19 | 1s45 |
| S 2  | 17 54 | 3 29  | 0s 9 | 21 27 | 0 10 | 1 43  | 0 17 | 0 10 | 4 27 | 21 33 | 0 34 | 22 44 | 0 33 | 23 26 | 0 19 | 1 46 |
| S 3  | 17 39 | 2s35  | 1 17 | 21 24 | 0n 3 | 1 14  | 0 23 | 0 4  | 4 28 | 21 34 | 0 34 | 22 44 | 0 33 | 23 26 | 0 19 | 1 46 |
| M 4  | 17 23 | 8 40  | 2 23 | 21 18 | 0 15 | 0 45  | 0 28 | 0n 2 | 4 30 | 21 36 | 0 34 | 22 44 | 0 33 | 23 26 | 0 19 | 1 47 |
| T 5  | 17 7  | 14 31 | 3 23 | 21 9  | 0 27 | 0 15  | 0 34 | 0 8  | 4 31 | 21 37 | 0 34 | 22 45 | 0 33 | 23 26 | 0 19 | 1 48 |
| W 6  | 16 51 | 19 50 | 4 12 | 20 58 | 0 38 | 0s14  | 0 40 | 0 13 | 4 33 | 21 39 | 0 34 | 22 45 | 0 33 | 23 26 | 0 19 | 1 48 |
| T 7  | 16 34 | 24 13 | 4 49 | 20 44 | 0 48 | 0 43  | 0 46 | 0 18 | 4 35 | 21 40 | 0 35 | 22 45 | 0 32 | 23 25 | 0 19 | 1 49 |
| F 8  | 16 17 | 27 16 | 5 9  | 20 28 | 0 58 | 1 13  | 0 52 | 0 24 | 4 36 | 21 41 | 0 35 | 22 45 | 0 32 | 23 25 | 0 19 | 1 49 |
| S 9  | 16 0  | 28 34 | 5 9  | 20 9  | 1 6  | 1 42  | 0 58 | 0 28 | 4 38 | 21 43 | 0 35 | 22 46 | 0 32 | 23 25 | 0 19 | 1 50 |
| S 10 | 15 43 | 27 50 | 4 50 | 19 47 | 1 14 | 2 11  | 1 4  | 0 33 | 4 39 | 21 44 | 0 35 | 22 46 | 0 32 | 23 25 | 0 19 | 1 51 |
| M 11 | 15 25 | 25 6  | 4 10 | 19 23 | 1 21 | 2 40  | 1 10 | 0 38 | 4 41 | 21 45 | 0 35 | 22 46 | 0 32 | 23 24 | 0 19 | 1 51 |
| T 12 | 15 7  | 20 39 | 3 13 | 18 56 | 1 27 | 3 9   | 1 17 | 0 42 | 4 42 | 21 46 | 0 35 | 22 46 | 0 32 | 23 24 | 0 19 | 1 52 |
| W 13 | 14 49 | 14 58 | 2 4  | 18 27 | 1 32 | 3 38  | 1 23 | 0 46 | 4 43 | 21 48 | 0 35 | 22 47 | 0 32 | 23 24 | 0 19 | 1 53 |
| T 14 | 14 31 | 8 32  | 0 48 | 17 56 | 1 36 | 4 7   | 1 30 | 0 49 | 4 45 | 21 49 | 0 35 | 22 47 | 0 32 | 23 24 | 0 19 | 1 53 |
| F 15 | 14 12 | 1 51  | 0n30 | 17 22 | 1 40 | 4 35  | 1 36 | 0 53 | 4 46 | 21 50 | 0 35 | 22 47 | 0 31 | 23 24 | 0 19 | 1 54 |
| S 16 | 13 54 | 4n44  | 1 43 | 16 47 | 1 43 | 5 4   | 1 43 | 0 56 | 4 47 | 21 51 | 0 35 | 22 47 | 0 31 | 23 23 | 0 19 | 1 55 |
| S 17 | 13 35 | 10 54 | 2 49 | 16 11 | 1 44 | 5 32  | 1 50 | 0 59 | 4 49 | 21 52 | 0 35 | 22 48 | 0 31 | 23 23 | 0 19 | 1 55 |
| M 18 | 13 15 | 16 25 | 3 44 | 15 32 | 1 46 | 6 0   | 1 56 | 1 2  | 4 50 | 21 53 | 0 35 | 22 48 | 0 31 | 23 23 | 0 19 | 1 56 |
| T 19 | 12 56 | 21 5  | 4 26 | 14 53 | 1 46 | 6 28  | 2 3  | 1 4  | 4 51 | 21 54 | 0 36 | 22 48 | 0 31 | 23 23 | 0 19 | 1 57 |
| W 20 | 12 36 | 24 45 | 4 56 | 14 12 | 1 46 | 6 56  | 2 10 | 1 6  | 4 52 | 21 55 | 0 36 | 22 48 | 0 31 | 23 23 | 0 19 | 1 57 |
| T 21 | 12 17 | 27 16 | 5 12 | 13 30 | 1 45 | 7 24  | 2 17 | 1 8  | 4 53 | 21 56 | 0 36 | 22 49 | 0 31 | 23 22 | 0 19 | 1 58 |
| F 22 | 11 57 | 28 30 | 5 14 | 12 47 | 1 43 | 7 51  | 2 24 | 1 10 | 4 54 | 21 57 | 0 36 | 22 49 | 0 31 | 23 22 | 0 19 | 1 59 |
| S 23 | 11 36 | 28 25 | 5 3  | 12 3  | 1 41 | 8 18  | 2 32 | 1 11 | 4 55 | 21 58 | 0 36 | 22 49 | 0 30 | 23 22 | 0 19 | 2 0  |
| S 24 | 11 16 | 27 2  | 4 38 | 11 19 | 1 39 | 8 45  | 2 39 | 1 12 | 4 55 | 21 59 | 0 36 | 22 49 | 0 30 | 23 22 | 0 19 | 2 0  |
| M 25 | 10 55 | 24 25 | 4 2  | 10 34 | 1 36 | 9 12  | 2 46 | 1 13 | 4 56 | 22 0  | 0 36 | 22 49 | 0 30 | 23 22 | 0 19 | 2 1  |
| T 26 | 10 35 | 20 43 | 3 15 | 9 48  | 1 32 | 9 38  | 2 54 | 1 14 | 4 57 | 22 1  | 0 36 | 22 50 | 0 30 | 23 21 | 0 19 | 2 2  |
| W 27 | 10 14 | 16 6  | 2 18 | 9 3   | 1 28 | 10 5  | 3 1  | 1 14 | 4 58 | 22 2  | 0 36 | 22 50 | 0 30 | 23 21 | 0 19 | 2 3  |
| T 28 | 9 52  | 10 46 | 1 14 | 8 17  | 1 24 | 10 31 | 3 9  | 1 14 | 4 58 | 22 2  | 0 36 | 22 50 | 0 30 | 23 21 | 0 19 | 2 3  |
| F 29 | 9 31  | 4 56  | 0 5  | 7 30  | 1 19 | 10 56 | 3 16 | 1 14 | 4 58 | 22 3  | 0 36 | 22 50 | 0 30 | 23 21 | 0 19 | 2 4  |
| S 30 | 9 10  | 1s11  | 1s 5 | 6 44  | 1 14 | 11 22 | 3 24 | 1 14 | 4 59 | 22 4  | 0 36 | 22 50 | 0 30 | 23 21 | 0 19 | 2 5  |
| S 31 | 8n48  | 7s21  | 2s13 | 5n57  | 1n 8 | 11s47 | 3s31 | 1n13 | 4s59 | 22s 4 | 0s36 | 22s51 | 0n29 | 23n21 | 0n19 | 2s 6 |

Julian Day Number = 2372499.5, Delta T = 22.29 sec  
Ecliptic obliquity = 23°28'12, Nutation = 0°00'04, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 21°43'07, Lahiri = 20°50'08Greg. Calendar



## ASTRODIENST EPHEMERIS for the year 1783

geocentric

OCTOBER 1783

00:00 UT

| Day  | Sid.t   | ☉        | ☽      | ♀      | ♀     | ♂     | ♂     | ♂    | ♂      | ♂     | ♂     | ♂      | ♂     | ♂     | ♂      | ♂    | Day |
|------|---------|----------|--------|--------|-------|-------|-------|------|--------|-------|-------|--------|-------|-------|--------|------|-----|
| W 1  | 0 38 24 | 7♂40'32  | 4♂31   | 2♂48   | 6°R22 | 8°R19 | 22♂50 | 6♂18 | 11♂46  | 9♂53  | 7°R44 | 18°R34 | 17♂35 | 14♂15 | 19°R33 | W 1  |     |
| T 2  | 0 42 20 | 8°39'40  | 18°37  | 3°53   | 6♂22  | 8°Y 1 | 22°53 | 6°20 | 11°47  | 9°56  | 7♂43  | 18♂32  | 17°32 | 14°22 | 19♂31  | T 2  |     |
| F 3  | 0 46 17 | 9°38'50  | 2♂47   | 4°56   | 6°19  | 7°43  | 22°56 | 6°22 | 11°48  | 9°58  | 7°43  | 18°31  | 17°29 | 14°28 | 19°28  | F 3  |     |
| S 4  | 0 50 13 | 10°38'01 | 16°59  | 5°57   | 6°14  | 7°25  | 22°58 | 6°25 | 11°48  | 10° 0 | 7°42  | 18°D31 | 17°25 | 14°35 | 19°26  | S 4  |     |
| S 5  | 0 54 10 | 11°37'15 | 1♂11   | 6°55   | 6° 7  | 7° 7  | 23° 2 | 6°27 | 11°49  | 10° 2 | 7°42  | 18°32  | 17°22 | 14°42 | 19°24  | S 5  |     |
| M 6  | 0 58 7  | 12°36'30 | 15°20  | 7°50   | 5°57  | 6°49  | 23° 5 | 6°29 | 11°50  | 10° 4 | 7°41  | 18°33  | 17°19 | 14°48 | 19°22  | M 6  |     |
| T 7  | 1 2 3   | 13°35'46 | 29°24  | 8°42   | 5°44  | 6°32  | 23° 8 | 6°32 | 11°50  | 10° 7 | 7°41  | 18°35  | 17°16 | 14°55 | 19°19  | T 7  |     |
| W 8  | 1 6 0   | 14°35'05 | 13♂21  | 9°30   | 5°30  | 6°16  | 23°12 | 6°35 | 11°51  | 10° 9 | 7°41  | 18°R35 | 17°13 | 15° 2 | 19°17  | W 8  |     |
| T 9  | 1 9 56  | 15°34'25 | 27° 9  | 10°15  | 5°12  | 5°59  | 23°16 | 6°37 | 11°51  | 10°11 | 7°40  | 18°35  | 17° 9 | 15° 8 | 19°14  | T 9  |     |
| F 10 | 1 13 53 | 16°33'48 | 10°Y45 | 10°56  | 4°53  | 5°43  | 23°19 | 6°40 | 11°52  | 10°13 | 7°40  | 18°34  | 17° 6 | 15°15 | 19°12  | F 10 |     |
| S 11 | 1 17 49 | 17°33'12 | 24° 6  | 11°32  | 4°31  | 5°28  | 23°24 | 6°43 | 11°52  | 10°16 | 7°40  | 18°31  | 17° 3 | 15°22 | 19° 9  | S 11 |     |
| S 12 | 1 21 46 | 18°32'38 | 7♂11   | 12° 3  | 4° 7  | 5°13  | 23°28 | 6°46 | 11°53  | 10°18 | 7°39  | 18°26  | 17° 0 | 15°29 | 19° 7  | S 12 |     |
| M13  | 1 25 42 | 19°32'07 | 20° 0  | 12°29  | 3°42  | 4°58  | 23°32 | 6°49 | 11°53  | 10°20 | 7°39  | 18°21  | 16°57 | 15°35 | 19° 4  | M13  |     |
| T 14 | 1 29 39 | 20°31'38 | 2♂132  | 12°48  | 3°14  | 4°44  | 23°37 | 6°52 | 11°53  | 10°22 | 7°39  | 18°16  | 16°54 | 15°42 | 19° 1  | T 14 |     |
| W15  | 1 33 36 | 21°31'11 | 14°50  | 13° 2  | 2°44  | 4°31  | 23°42 | 6°56 | 11°53  | 10°24 | 7°39  | 18°11  | 16°50 | 15°49 | 18°59  | W15  |     |
| T 16 | 1 37 32 | 22°30'47 | 26°55  | 13°R 8 | 2°13  | 4°18  | 23°47 | 6°59 | 11°53  | 10°27 | 7°39  | 18° 6  | 16°47 | 15°55 | 18°56  | T 16 |     |
| F 17 | 1 41 29 | 23°30'24 | 8♂51   | 13° 7  | 1°40  | 4° 6  | 23°52 | 7° 2 | 11°54  | 10°29 | 7°39  | 18° 3  | 16°44 | 16° 2 | 18°53  | F 17 |     |
| S 18 | 1 45 25 | 24°30'04 | 20°42  | 12°57  | 1° 7  | 3°55  | 23°58 | 7° 6 | 11°R54 | 10°31 | 7°38  | 18°D 2 | 16°41 | 16° 9 | 18°51  | S 18 |     |
| S 19 | 1 49 22 | 25°29'46 | 2♂134  | 12°40  | 0°32  | 3°45  | 24° 3 | 7° 9 | 11°54  | 10°33 | 7°38  | 18° 2  | 16°38 | 16°16 | 18°48  | S 19 |     |
| M20  | 1 53 18 | 26°29'31 | 14°32  | 12°13  | 29♂56 | 3°35  | 24° 9 | 7°13 | 11°53  | 10°35 | 7°38  | 18° 4  | 16°35 | 16°22 | 18°45  | M20  |     |
| T 21 | 1 57 15 | 27°29'17 | 26°40  | 11°37  | 29°20 | 3°26  | 24°15 | 7°17 | 11°53  | 10°38 | 7°D38 | 18° 5  | 16°31 | 16°29 | 18°42  | T 21 |     |
| W22  | 2 1 11  | 28°29'06 | 9♂2    | 10°53  | 28°43 | 3°17  | 24°21 | 7°21 | 11°53  | 10°40 | 7°38  | 18° 7  | 16°28 | 16°36 | 18°39  | W22  |     |
| T 23 | 2 5 8   | 29°28'57 | 21°44  | 10° 0  | 28° 7 | 3°10  | 24°27 | 7°25 | 11°53  | 10°42 | 7°38  | 18°R 7 | 16°25 | 16°42 | 18°36  | T 23 |     |
| F 24 | 2 9 5   | 0♂28'50  | 4♂47   | 8°59   | 27°30 | 3° 3  | 24°33 | 7°29 | 11°53  | 10°44 | 7°38  | 18° 6  | 16°22 | 16°49 | 18°33  | F 24 |     |
| S 25 | 2 13 1  | 1°28'45  | 18°12  | 7°51   | 26°54 | 2°57  | 24°40 | 7°33 | 11°52  | 10°46 | 7°38  | 18° 2  | 16°19 | 16°56 | 18°30  | S 25 |     |
| S 26 | 2 16 58 | 2°28'42  | 1♂59   | 6°39   | 26°19 | 2°51  | 24°46 | 7°37 | 11°52  | 10°48 | 7°39  | 17°57  | 16°15 | 17° 2 | 18°27  | S 26 |     |
| M27  | 2 20 54 | 3°28'42  | 16° 5  | 5°22   | 25°45 | 2°47  | 24°53 | 7°41 | 11°51  | 10°50 | 7°39  | 17°50  | 16°12 | 17° 9 | 18°24  | M27  |     |
| T 28 | 2 24 51 | 4°28'43  | 0♂24   | 4° 5   | 25°11 | 2°43  | 25° 0 | 7°45 | 11°51  | 10°52 | 7°39  | 17°42  | 16° 9 | 17°16 | 18°21  | T 28 |     |
| W29  | 2 28 47 | 5°28'46  | 14°51  | 2°49   | 24°39 | 2°40  | 25° 7 | 7°50 | 11°50  | 10°55 | 7°39  | 17°35  | 16° 6 | 17°23 | 18°18  | W29  |     |
| T 30 | 2 32 44 | 6°28'50  | 29°19  | 1°36   | 24° 9 | 2°39  | 25°15 | 7°54 | 11°50  | 10°57 | 7°39  | 17°28  | 16° 3 | 17°29 | 18°15  | T 30 |     |
| F 31 | 2 36 40 | 7♂28'57  | 13♂44  | 0♂29   | 23♂40 | 2°Y37 | 25♂22 | 7♂59 | 11♂49  | 10♂59 | 7♂40  | 17♂24  | 16♂ 0 | 17♂36 | 18♂12  | F 31 |     |

| Day  | ☉     | ☾     |      | ♀     |      | ♀     |      | ♂    |      | ♂     |      | ♂     |      | ♂     |      | ♂    |      | ♂     |      | ♂    |      | ♂     |       | ♂    |     | ♂    |     |
|------|-------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|-------|------|------|------|-------|------|------|------|-------|-------|------|-----|------|-----|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl | lat  | decl  | lat   | decl | lat | decl | lat |
| W 1  | 3s 3  | 26s 4 | 5s 5 | 14s52 | 2s33 | 20s28 | 7s14 | 0s30 | 4s 8 | 22s 8 | 0s37 | 22s54 | 0n26 | 23n17 | 0n20 | 2s32 | 1n31 | 24s44 | 6s36 | 4s32 | 4s55 | 27n17 | 15n16 | 2s28 |     |      |     |
| T 2  | 3 26  | 28 12 | 5 15 | 15 20 | 2 39 | 20 32 | 7 18 | 0 33 | 4 4  | 22 8  | 0 37 | 22 54 | 0 26 | 23 17 | 0 20 | 2 33 | 1 31 | 24 44 | 6 36 | 4 33 | 4 56 | 27 16 | 15 15 | 2 28 |     |      |     |
| F 3  | 3 50  | 28 31 | 5 5  | 15 47 | 2 45 | 20 35 | 7 22 | 0 37 | 4 1  | 22 7  | 0 37 | 22 54 | 0 25 | 23 17 | 0 20 | 2 34 | 1 31 | 24 44 | 6 36 | 4 33 | 4 57 | 27 15 | 15 14 | 2 28 |     |      |     |
| S 4  | 4 13  | 26 58 | 4 37 | 16 12 | 2 51 | 20 37 | 7 26 | 0 41 | 3 57 | 22 7  | 0 37 | 22 54 | 0 25 | 23 17 | 0 20 | 2 35 | 1 31 | 24 44 | 6 36 | 4 33 | 4 59 | 27 13 | 15 14 | 2 29 |     |      |     |
| S 5  | 4 36  | 23 41 | 3 52 | 16 36 | 2 56 | 20 37 | 7 29 | 0 44 | 3 53 | 22 6  | 0 37 | 22 54 | 0 25 | 23 17 | 0 20 | 2 36 | 1 31 | 24 44 | 6 36 | 4 33 | 5 0  | 27 12 | 15 13 | 2 29 |     |      |     |
| M 6  | 4 59  | 19 1  | 2 53 | 16 59 | 3 0  | 20 36 | 7 31 | 0 47 | 3 49 | 22 6  | 0 37 | 22 54 | 0 25 | 23 17 | 0 20 | 2 36 | 1 31 | 24 44 | 6 36 | 4 32 | 5 1  | 27 11 | 15 12 | 2 29 |     |      |     |
| T 7  | 5 22  | 13 19 | 1 43 | 17 20 | 3 4  | 20 33 | 7 33 | 0 50 | 3 45 | 22 5  | 0 37 | 22 54 | 0 25 | 23 17 | 0 20 | 2 37 | 1 31 | 24 44 | 6 35 | 4 31 | 5 2  | 27 10 | 15 11 | 2 29 |     |      |     |
| W 8  | 5 45  | 7 0   | 0 29 | 17 39 | 3 8  | 20 30 | 7 34 | 0 53 | 3 40 | 22 4  | 0 37 | 22 54 | 0 25 | 23 17 | 0 20 | 2 38 | 1 31 | 24 44 | 6 35 | 4 31 | 5 3  | 27 9  | 15 10 | 2 29 |     |      |     |
| T 9  | 6 8   | 0 25  | 0n47 | 17 56 | 3 11 | 20 24 | 7 35 | 0 56 | 3 36 | 22 4  | 0 37 | 22 54 | 0 25 | 23 17 | 0 20 | 2 39 | 1 31 | 24 44 | 6 35 | 4 31 | 5 5  | 27 8  | 15 10 | 2 30 |     |      |     |
| F 10 | 6 31  | 6n 4  | 1 58 | 18 12 | 3 14 | 20 18 | 7 35 | 0 58 | 3 32 | 22 3  | 0 37 | 22 54 | 0 25 | 23 17 | 0 20 | 2 40 | 1 31 | 24 44 | 6 35 | 4 32 | 5 6  | 27 6  | 15 9  | 2 30 |     |      |     |
| S 11 | 6 54  | 12 11 | 3 2  | 18 25 | 3 16 | 20 9  | 7 34 | 1 0  | 3 27 | 22 2  | 0 37 | 22 54 | 0 24 | 23 17 | 0 20 | 2 41 | 1 31 | 24 44 | 6 35 | 4 33 | 5 7  | 27 5  | 15 8  | 2 30 |     |      |     |
| S 12 | 7 17  | 17 38 | 3 55 | 18 35 | 3 17 | 20 0  | 7 33 | 1 2  | 3 23 | 22 2  | 0 37 | 22 54 | 0 24 | 23 17 | 0 20 | 2 42 | 1 31 | 24 44 | 6 35 | 4 35 | 5 8  | 27 4  | 15 7  | 2 30 |     |      |     |
| M13  | 7 39  | 22 10 | 4 34 | 18 44 | 3 17 | 19 48 | 7 30 | 1 4  | 3 19 | 22 1  | 0 37 | 22 53 | 0 24 | 23 17 | 0 20 | 2 42 | 1 31 | 24 44 | 6 35 | 4 37 | 5 10 | 27 3  | 15 6  | 2 30 |     |      |     |
| T 14 | 8 2   | 25 36 | 5 0  | 18 49 | 3 16 | 19 36 | 7 27 | 1 5  | 3 14 | 22 0  | 0 37 | 22 53 | 0 24 | 23 17 | 0 21 | 2 43 | 1 31 | 24 44 | 6 35 | 4 39 | 5 11 | 27 1  | 15 5  | 2 30 |     |      |     |
| W15  | 8 24  | 27 45 | 5 11 | 18 51 | 3 14 | 19 22 | 7 23 | 1 6  | 3 10 | 21 59 | 0 37 | 22 53 | 0 24 | 23 17 | 0 21 | 2 44 | 1 31 | 24 44 | 6 35 | 4 41 | 5 12 | 27 0  | 15 4  | 2 31 |     |      |     |
| T 16 | 8 46  | 28 34 | 5 8  | 18 50 | 3 12 | 19 6  | 7 18 | 1 7  | 3 5  | 21 58 | 0 37 | 22 53 | 0 24 | 23 17 | 0 21 | 2 45 | 1 31 | 24 44 | 6 35 | 4 43 | 5 13 | 26 59 | 15 3  | 2 31 |     |      |     |
| F 17 | 9 8   | 28 1  | 4 51 | 18 46 | 3 7  | 18 49 | 7 13 | 1 8  | 3 1  | 21 57 | 0 36 | 22 53 | 0 24 | 23 17 | 0 21 | 2 46 | 1 31 | 24 44 | 6 34 | 4 44 | 5 15 | 26 58 | 15 2  | 2 31 |     |      |     |
| S 18 | 9 30  | 26 12 | 4 22 | 18 38 | 3 2  | 18 31 | 7 6  | 1 8  | 2 56 | 21 57 | 0 36 | 22 53 | 0 24 | 23 17 | 0 21 | 2 47 | 1 31 | 24 44 | 6 34 | 4 44 | 5 16 | 26 56 | 15 2  | 2 31 |     |      |     |
| S 19 | 9 52  | 23 13 | 3 42 | 18 25 | 2 54 | 18 12 | 6 59 | 1 8  | 2 51 | 21 56 | 0 36 | 22 53 | 0 24 | 23 17 | 0 21 | 2 48 | 1 31 | 24 43 | 6 34 | 4 44 | 5 17 | 26 55 | 15 1  | 2 31 |     |      |     |
| M20  | 10 14 | 19 14 | 2 52 | 18 9  | 2 46 | 17 52 | 6 51 | 1 8  | 2 47 | 21 55 | 0 36 | 22 53 | 0 23 | 23 17 | 0 21 | 2 48 | 1 31 | 24 43 | 6 34 | 4 44 | 5 18 | 26 54 | 15 0  | 2 32 |     |      |     |
| T 21 | 10 36 | 14 26 | 1 54 | 17 48 | 2 35 | 17 30 | 6 42 | 1 7  | 2 42 | 21 53 | 0 36 | 22 53 | 0 23 | 23 17 | 0 21 | 2 49 | 1 31 | 24 43 | 6 34 | 4 43 | 5 20 | 26 53 | 14 59 | 2 32 |     |      |     |
| W22  | 10 57 | 8 57  | 0 49 | 17 22 | 2 23 | 17 8  | 6 32 | 1 6  | 2 38 | 21 52 | 0 36 | 22 53 | 0 23 | 23 17 | 0 21 | 2 50 | 1 31 | 24 43 | 6 34 | 4 42 | 5 21 | 26 51 | 14 58 | 2 32 |     |      |     |
| T 23 | 11 18 | 2 59  | 0s20 | 16 52 | 2 9  | 16 45 | 6 22 | 1 5  | 2 33 | 21 51 | 0 36 | 22 53 | 0 23 | 23 17 | 0 21 | 2 51 | 1 31 | 24 43 | 6 34 | 4 42 | 5 22 | 26 50 | 14 57 | 2 32 |     |      |     |
| F 24 | 11 39 | 3s16  | 1 29 | 16 17 | 1 53 | 16 21 | 6 11 | 1 4  | 2 29 | 21 50 | 0 36 | 22 53 | 0 23 | 23 17 | 0 21 | 2 52 | 1 31 | 24 43 | 6 34 | 4 43 | 5 23 | 26 49 | 14 56 | 2 32 |     |      |     |
| S 25 | 12 0  | 9 32  | 2 35 | 15 39 | 1 35 | 15 57 | 5 59 | 1 2  | 2 25 | 21 49 | 0 36 | 22 52 | 0 23 | 23 17 | 0 21 | 2 52 | 1 31 | 24 43 | 6 34 | 4 44 | 5 24 | 26 47 | 14 55 | 2 32 |     |      |     |
| S 26 | 12 21 | 15 32 | 3 34 | 14 57 | 1 17 | 15 32 | 5 46 | 1 0  | 2 20 | 21 48 | 0 36 | 22 52 | 0 23 | 23 17 | 0 21 | 2 53 | 1 31 | 24 43 | 6 33 | 4 46 | 5 26 | 26 46 | 14 54 | 2 32 |     |      |     |
| M27  | 12 41 | 20 51 | 4 22 | 14 13 | 0 57 | 15 8  | 5 33 | 0 58 | 2 16 | 21 47 | 0 36 | 22 52 | 0 23 | 23 17 | 0 21 | 2 54 | 1 31 | 24 43 | 6 33 | 4 49 | 5 27 | 26 45 | 14 53 | 2 33 |     |      |     |
| T 28 | 13 2  | 25 2  | 4 53 | 13 28 | 0 36 | 14 43 | 5 20 | 0 56 | 2 11 | 21 45 | 0 36 | 22 52 | 0 23 | 23 17 | 0 21 | 2 55 | 1 31 | 24 42 | 6 33 | 4 52 | 5 28 | 26 43 | 14 52 | 2 33 |     |      |     |
| W29  | 13 22 | 27 41 | 5 7  | 12 42 | 0 16 | 14 18 | 5 6  | 0 53 | 2 7  | 21 44 | 0 36 | 22 52 | 0 22 | 23 17 | 0 21 | 2 56 | 1 31 | 24 42 | 6 33 | 4 55 | 5 29 | 26 42 | 14 51 | 2 33 |     |      |     |
| T 30 | 13 42 | 28 29 | 5 1  | 11 58 | 0n 5 | 13 53 | 4 52 | 0 50 | 2 3  | 21 43 | 0 36 | 22 52 | 0 22 | 23 17 | 0 21 | 2 56 | 1 31 | 24 42 | 6 33 | 4 57 | 5 31 | 26 41 | 14 50 | 2 33 |     |      |     |
| F 31 | 14s 2 | 27s20 | 4s35 | 11s16 | 0n25 | 13s29 | 4s37 | 0s46 | 1s59 | 21s41 | 0s36 | 22s52 | 0n22 | 23n18 | 0n21 | 2s57 | 1n31 | 24s42 | 6s33 | 4s59 | 5s32 | 26n39 | 14n49 | 2s33 |     |      |     |

ASTRODIENST EPHEMERIS for the year 1783  
geocentric

NOVEMBER 1783

00:00 UT

| Day  | Sid.t   | ☉        | ☽     | ♀      | ♂      | ♂     | ♂     | ♂     | ♂      | ♂     | ♂    | ♂      | ♂     | ♂     | ♂      | Day  |
|------|---------|----------|-------|--------|--------|-------|-------|-------|--------|-------|------|--------|-------|-------|--------|------|
| S 1  | 2 40 37 | 8♍29'04  | 28♋1  | 29°R31 | 23°R13 | 2°D37 | 25♋30 | 8♋3   | 11°R48 | 11♎1  | 7♎40 | 17°R21 | 15♋56 | 17♋43 | 18°R 9 | S 1  |
| S 2  | 2 44 34 | 9°29'14  | 12♋7  | 28♎41  | 22♎48  | 2°V37 | 25°38 | 8° 8  | 11♋48  | 11° 3 | 7°40 | 17°D21 | 15°53 | 17°49 | 18♋6   | S 2  |
| M 3  | 2 48 30 | 10°29'24 | 26° 3 | 28° 3  | 22°25  | 2°39  | 25°46 | 8°13  | 11°47  | 11° 5 | 7°41 | 17♋22  | 15°50 | 17°56 | 18° 2  | M 3  |
| T 4  | 2 52 27 | 11°29'37 | 9♋46  | 27°36  | 22° 4  | 2°41  | 25°54 | 8°18  | 11°46  | 11° 7 | 7°41 | 17°23  | 15°47 | 18° 3 | 17°59  | T 4  |
| W 5  | 2 56 23 | 12°29'50 | 23°19 | 27°20  | 21°46  | 2°44  | 26° 2 | 8°23  | 11°45  | 11° 9 | 7°41 | 17°R23 | 15°44 | 18°10 | 17°56  | W 5  |
| T 6  | 3 0 20  | 13°30'05 | 6°V41 | 27°D16 | 21°30  | 2°47  | 26°10 | 8°28  | 11°44  | 11°11 | 7°42 | 17°21  | 15°41 | 18°16 | 17°53  | T 6  |
| F 7  | 3 4 16  | 14°30'22 | 19°52 | 27°23  | 21°16  | 2°52  | 26°19 | 8°33  | 11°43  | 11°13 | 7°42 | 17°16  | 15°37 | 18°23 | 17°50  | F 7  |
| S 8  | 3 8 13  | 15°30'40 | 2♋52  | 27°41  | 21° 5  | 2°57  | 26°27 | 8°38  | 11°42  | 11°15 | 7°43 | 17° 9  | 15°34 | 18°30 | 17°47  | S 8  |
| S 9  | 3 12 9  | 16°31'01 | 15°40 | 28° 8  | 20°57  | 3° 3  | 26°36 | 8°43  | 11°41  | 11°16 | 7°43 | 17° 0  | 15°31 | 18°36 | 17°43  | S 9  |
| M10  | 3 16 6  | 17°31'22 | 28°16 | 28°45  | 20°50  | 3° 9  | 26°45 | 8°48  | 11°40  | 11°18 | 7°44 | 16°49  | 15°28 | 18°43 | 17°40  | M10  |
| T 11 | 3 20 3  | 18°31'46 | 10♎40 | 29°29  | 20°47  | 3°17  | 26°54 | 8°53  | 11°38  | 11°20 | 7°44 | 16°37  | 15°25 | 18°50 | 17°37  | T 11 |
| W12  | 3 23 59 | 19°32'11 | 22°52 | 0♍20   | 20°D45 | 3°25  | 27° 3 | 8°59  | 11°37  | 11°22 | 7°45 | 16°26  | 15°21 | 18°56 | 17°34  | W12  |
| T 13 | 3 27 56 | 20°32'38 | 4♋54  | 1°18   | 20°47  | 3°33  | 27°12 | 9° 4  | 11°36  | 11°24 | 7°46 | 16°15  | 15°18 | 19° 3 | 17°31  | T 13 |
| F 14 | 3 31 52 | 21°33'07 | 16°48 | 2°21   | 20°50  | 3°43  | 27°22 | 9°10  | 11°34  | 11°26 | 7°46 | 16° 7  | 15°15 | 19°10 | 17°27  | F 14 |
| S 15 | 3 35 49 | 22°33'38 | 28°38 | 3°28   | 20°56  | 3°53  | 27°31 | 9°15  | 11°33  | 11°28 | 7°47 | 16° 2  | 15°12 | 19°17 | 17°24  | S 15 |
| S 16 | 3 39 45 | 23°34'10 | 10♎28 | 4°40   | 21° 4  | 4° 4  | 27°41 | 9°21  | 11°32  | 11°29 | 7°48 | 15°59  | 15° 9 | 19°23 | 17°21  | S 16 |
| M17  | 3 43 42 | 24°34'45 | 22°23 | 5°55   | 21°15  | 4°15  | 27°51 | 9°26  | 11°30  | 11°31 | 7°48 | 15°D58 | 15° 6 | 19°30 | 17°18  | M17  |
| T 18 | 3 47 38 | 25°35'21 | 4♎27  | 7°14   | 21°28  | 4°27  | 28° 0 | 9°32  | 11°28  | 11°33 | 7°49 | 15°58  | 15° 2 | 19°37 | 17°15  | T 18 |
| W19  | 3 51 35 | 26°35'58 | 16°48 | 8°34   | 21°43  | 4°40  | 28°10 | 9°38  | 11°27  | 11°35 | 7°50 | 15°R58 | 14°59 | 19°43 | 17°12  | W19  |
| T 20 | 3 55 32 | 27°36'37 | 29°29 | 9°57   | 22° 0  | 4°53  | 28°21 | 9°44  | 11°25  | 11°36 | 7°51 | 15°58  | 14°56 | 19°50 | 17° 8  | T 20 |
| F 21 | 3 59 28 | 28°37'18 | 12♎35 | 11°22  | 22°19  | 5° 7  | 28°31 | 9°50  | 11°24  | 11°38 | 7°51 | 15°55  | 14°53 | 19°57 | 17° 5  | F 21 |
| S 22 | 4 3 25  | 29°38'01 | 26° 8 | 12°48  | 22°40  | 5°21  | 28°41 | 9°55  | 11°22  | 11°40 | 7°52 | 15°49  | 14°50 | 20° 3 | 17° 2  | S 22 |
| S 23 | 4 7 21  | 0♎38'45  | 10♍9  | 14°16  | 23° 3  | 5°36  | 28°52 | 10° 1 | 11°20  | 11°41 | 7°53 | 15°41  | 14°47 | 20°10 | 16°59  | S 23 |
| M24  | 4 11 18 | 1°39'31  | 24°34 | 15°44  | 23°27  | 5°52  | 29° 2 | 10° 7 | 11°18  | 11°43 | 7°54 | 15°31  | 14°43 | 20°17 | 16°56  | M24  |
| T 25 | 4 15 14 | 2°40'18  | 9♎18  | 17°13  | 23°54  | 6° 8  | 29°13 | 10°14 | 11°17  | 11°44 | 7°55 | 15°19  | 14°40 | 20°23 | 16°53  | T 25 |
| W26  | 4 19 11 | 3°41'07  | 24°12 | 18°43  | 24°22  | 6°25  | 29°24 | 10°20 | 11°15  | 11°46 | 7°56 | 15° 7  | 14°37 | 20°30 | 16°50  | W26  |
| T 27 | 4 23 7  | 4°41'56  | 9♋8   | 20°14  | 24°52  | 6°42  | 29°34 | 10°26 | 11°13  | 11°47 | 7°57 | 14°57  | 14°34 | 20°37 | 16°47  | T 27 |
| F 28 | 4 27 4  | 5°42'47  | 23°56 | 21°45  | 25°23  | 7° 0  | 29°45 | 10°32 | 11°11  | 11°49 | 7°58 | 14°49  | 14°31 | 20°44 | 16°44  | F 28 |
| S 29 | 4 31 1  | 6°43'39  | 8♎30  | 23°17  | 25°56  | 7°18  | 29°57 | 10°38 | 11° 9  | 11°50 | 7°59 | 14°45  | 14°27 | 20°50 | 16°41  | S 29 |
| S 30 | 4 34 57 | 7♎44'31  | 22♎45 | 24♍49  | 26♎30  | 7°V37 | 0♎8   | 10♋45 | 11♎7   | 11♎52 | 8♎0  | 14♋42  | 14♋24 | 20♋57 | 16♋38  | S 30 |

| Day  | ☉     | ☾     |      | ♀     |      | ♀     |      | ♂    |      | ♂     |      | ♂     |      | ♂     |      | ♂    |      | ♂     |      | ♂    |      | ♂     |       | ♂    |     | ♂    |     | ♂    |     |
|------|-------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|-------|------|------|------|-------|------|------|------|-------|-------|------|-----|------|-----|------|-----|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl | lat  | decl  | lat   | decl | lat | decl | lat | decl | lat |
| S 1  | 14s21 | 24s24 | 3s53 | 10s38 | 0n44 | 13s 5 | 4s22 | 0s42 | 1s54 | 21s40 | 0s36 | 22s51 | 0n22 | 23n18 | 0n21 | 2s58 | 1n31 | 24s42 | 6s33 | 5s 0 | 5s33 | 26n38 | 14n48 | 2s33 |     |      |     |      |     |
| S 2  | 14 40 | 20 1  | 2 58 | 10 4  | 1 1  | 12 42 | 4 7  | 0 39 | 1 50 | 21 38 | 0 36 | 22 51 | 0 22 | 23 18 | 0 21 | 2 59 | 1 31 | 24 41 | 6 33 | 5 0  | 5 34 | 26 37 | 14 47 | 2 33 |     |      |     |      |     |
| M 3  | 14 59 | 14 37 | 1 52 | 9 36  | 1 17 | 12 19 | 3 52 | 0 34 | 1 46 | 21 37 | 0 36 | 22 51 | 0 22 | 23 18 | 0 21 | 3 0  | 1 31 | 24 41 | 6 33 | 5 0  | 5 36 | 26 35 | 14 46 | 2 33 |     |      |     |      |     |
| T 4  | 15 18 | 8 33  | 0 41 | 9 13  | 1 31 | 11 58 | 3 37 | 0 30 | 1 42 | 21 35 | 0 36 | 22 51 | 0 22 | 23 18 | 0 21 | 3 0  | 1 31 | 24 41 | 6 32 | 5 0  | 5 37 | 26 34 | 14 45 | 2 34 |     |      |     |      |     |
| W 5  | 15 36 | 2 10  | 0n32 | 8 56  | 1 43 | 11 37 | 3 22 | 0 25 | 1 38 | 21 34 | 0 36 | 22 51 | 0 22 | 23 18 | 0 21 | 3 1  | 1 31 | 24 41 | 6 32 | 5 0  | 5 38 | 26 33 | 14 44 | 2 34 |     |      |     |      |     |
| T 6  | 15 55 | 4n13  | 1 41 | 8 45  | 1 54 | 11 16 | 3 7  | 0 20 | 1 34 | 21 32 | 0 36 | 22 50 | 0 22 | 23 18 | 0 21 | 3 2  | 1 31 | 24 41 | 6 32 | 5 0  | 5 39 | 26 31 | 14 43 | 2 34 |     |      |     |      |     |
| F 7  | 16 13 | 10 19 | 2 45 | 8 39  | 2 2  | 10 57 | 2 52 | 0 15 | 1 31 | 21 31 | 0 36 | 22 50 | 0 22 | 23 18 | 0 21 | 3 2  | 1 31 | 24 40 | 6 32 | 5 2  | 5 41 | 26 30 | 14 42 | 2 34 |     |      |     |      |     |
| S 8  | 16 30 | 15 54 | 3 38 | 8 39  | 2 9  | 10 39 | 2 37 | 0 9  | 1 27 | 21 29 | 0 36 | 22 50 | 0 21 | 23 18 | 0 21 | 3 3  | 1 31 | 24 40 | 6 32 | 5 5  | 5 42 | 26 28 | 14 41 | 2 34 |     |      |     |      |     |
| S 9  | 16 48 | 20 41 | 4 19 | 8 44  | 2 14 | 10 22 | 2 22 | 0 3  | 1 23 | 21 27 | 0 36 | 22 50 | 0 21 | 23 18 | 0 21 | 3 4  | 1 31 | 24 40 | 6 32 | 5 8  | 5 43 | 26 27 | 14 40 | 2 34 |     |      |     |      |     |
| M10  | 17 5  | 24 28 | 4 47 | 8 54  | 2 17 | 10 7  | 2 7  | 0n 2 | 1 19 | 21 26 | 0 36 | 22 49 | 0 21 | 23 19 | 0 21 | 3 5  | 1 31 | 24 40 | 6 32 | 5 13 | 5 44 | 26 25 | 14 39 | 2 34 |     |      |     |      |     |
| T 11 | 17 22 | 27 3  | 5 1  | 9 8   | 2 20 | 9 52  | 1 53 | 0 9  | 1 16 | 21 24 | 0 36 | 22 49 | 0 21 | 23 19 | 0 21 | 3 5  | 1 31 | 24 39 | 6 32 | 5 17 | 5 45 | 26 24 | 14 38 | 2 34 |     |      |     |      |     |
| W12  | 17 38 | 28 17 | 5 1  | 9 25  | 2 21 | 9 39  | 1 39 | 0 15 | 1 12 | 21 22 | 0 36 | 22 49 | 0 21 | 23 19 | 0 21 | 3 6  | 1 31 | 24 39 | 6 32 | 5 22 | 5 47 | 26 23 | 14 37 | 2 34 |     |      |     |      |     |
| T 13 | 17 55 | 28 10 | 4 47 | 9 45  | 2 20 | 9 26  | 1 25 | 0 22 | 1 9  | 21 20 | 0 36 | 22 49 | 0 21 | 23 19 | 0 21 | 3 7  | 1 31 | 24 39 | 6 31 | 5 26 | 5 48 | 26 21 | 14 36 | 2 35 |     |      |     |      |     |
| F 14 | 18 10 | 26 44 | 4 21 | 10 8  | 2 19 | 9 15  | 1 12 | 0 29 | 1 5  | 21 19 | 0 36 | 22 48 | 0 21 | 23 19 | 0 21 | 3 7  | 1 31 | 24 39 | 6 31 | 5 29 | 5 49 | 26 20 | 14 35 | 2 35 |     |      |     |      |     |
| S 15 | 18 26 | 24 7  | 3 44 | 10 33 | 2 17 | 9 5   | 0 59 | 0 36 | 1 2  | 21 17 | 0 36 | 22 48 | 0 21 | 23 19 | 0 21 | 3 8  | 1 32 | 24 38 | 6 31 | 5 31 | 5 50 | 26 18 | 14 34 | 2 35 |     |      |     |      |     |
| S 16 | 18 41 | 20 28 | 2 57 | 10 59 | 2 14 | 8 57  | 0 46 | 0 43 | 0 59 | 21 15 | 0 36 | 22 48 | 0 21 | 23 19 | 0 21 | 3 9  | 1 32 | 24 38 | 6 31 | 5 32 | 5 52 | 26 17 | 14 33 | 2 35 |     |      |     |      |     |
| M17  | 18 56 | 16 0  | 2 2  | 11 28 | 2 10 | 8 49  | 0 34 | 0 51 | 0 56 | 21 13 | 0 36 | 22 48 | 0 21 | 23 20 | 0 21 | 3 9  | 1 32 | 24 38 | 6 31 | 5 33 | 5 53 | 26 15 | 14 32 | 2 35 |     |      |     |      |     |
| T 18 | 19 11 | 10 50 | 1 1  | 11 57 | 2 6  | 8 43  | 0 22 | 0 58 | 0 52 | 21 11 | 0 36 | 22 47 | 0 20 | 23 20 | 0 21 | 3 10 | 1 32 | 24 37 | 6 31 | 5 32 | 5 54 | 26 14 | 14 32 | 2 35 |     |      |     |      |     |
| W19  | 19 25 | 5 9   | 0s 4 | 12 27 | 2 2  | 8 37  | 0 10 | 1 6  | 0 49 | 21 9  | 0 36 | 22 47 | 0 20 | 23 20 | 0 21 | 3 11 | 1 32 | 24 37 | 6 31 | 5 32 | 5 55 | 26 12 | 14 31 | 2 35 |     |      |     |      |     |
| T 20 | 19 39 | 0s53  | 1 11 | 12 59 | 1 56 | 8 33  | 0n 2 | 1 14 | 0 46 | 21 7  | 0 36 | 22 47 | 0 20 | 23 20 | 0 21 | 3 11 | 1 32 | 24 37 | 6 31 | 5 33 | 5 57 | 26 11 | 14 30 | 2 35 |     |      |     |      |     |
| F 21 | 19 53 | 7 4   | 2 16 | 13 30 | 1 51 | 8 30  | 0 13 | 1 22 | 0 43 | 21 5  | 0 36 | 22 46 | 0 20 | 23 20 | 0 22 | 3 12 | 1 32 | 24 37 | 6 31 | 5 34 | 5 58 | 26 9  | 14 29 | 2 35 |     |      |     |      |     |
| S 22 | 20 6  | 13 8  | 3 16 | 14 2  | 1 45 | 8 28  | 0 23 | 1 31 | 0 40 | 21 3  | 0 36 | 22 46 | 0 20 | 23 20 | 0 22 | 3 12 | 1 32 | 24 36 | 6 31 | 5 36 | 5 59 | 26 8  | 14 28 | 2 35 |     |      |     |      |     |
| S 23 | 20 19 | 18 45 | 4 5  | 14 34 | 1 39 | 8 27  | 0 33 | 1 39 | 0 37 | 21 0  | 0 36 | 22 46 | 0 20 | 23 21 | 0 22 | 3 13 | 1 32 | 24 36 | 6 30 | 5 39 | 6 0  | 26 6  | 14 27 | 2 35 |     |      |     |      |     |
| M24  | 20 31 | 23 28 | 4 41 | 15 6  | 1 32 | 8 27  | 0 43 | 1 48 | 0 35 | 20 58 | 0 36 | 22 45 | 0 20 | 23 21 | 0 22 | 3 14 | 1 32 | 24 36 | 6 30 | 5 43 | 6 1  | 26 5  | 14 26 | 2 35 |     |      |     |      |     |
| T 25 | 20 43 | 26 48 | 4 59 | 15 37 | 1 26 | 8 28  | 0 53 | 1 57 | 0 32 | 20 56 | 0 36 | 22 45 | 0 20 | 23 21 | 0 22 | 3 14 | 1 32 | 24 35 | 6 30 | 5 48 | 6 3  | 26 3  | 14 25 | 2 35 |     |      |     |      |     |
| W26  | 20 55 | 28 17 | 4 57 | 16 9  | 1 19 | 8 30  | 1 2  | 2 6  | 0 29 | 20 54 | 0 36 | 22 44 | 0 20 | 23 21 | 0 22 | 3 15 | 1 32 | 24 35 | 6 30 | 5 52 | 6 4  | 26 2  | 14 24 | 2 35 |     |      |     |      |     |
| T 27 | 21 6  | 27 43 | 4 35 | 16 40 | 1 12 | 8 32  | 1 11 | 2 15 | 0 26 | 20 52 | 0 36 | 22 44 | 0 20 | 23 21 | 0 22 | 3 15 | 1 32 | 24 35 | 6 30 | 5 56 | 6 5  | 26 0  | 14 23 | 2 35 |     |      |     |      |     |
| F 28 | 21 17 | 25 11 | 3 54 | 17 11 | 1 5  | 8 36  | 1 19 | 2 25 | 0 24 | 20 49 | 0 36 | 22 44 | 0 20 | 23 21 | 0 22 | 3 16 | 1 32 | 24 34 | 6 30 | 5 59 | 6 6  | 25 58 | 14 22 | 2 36 |     |      |     |      |     |
| S 29 | 21 28 | 21 2  | 2 59 | 17 41 | 0 58 | 8 40  | 1 28 | 2 34 | 0 21 | 20 47 | 0 36 | 22 43 | 0 19 | 23 22 | 0 22 | 3 16 | 1 32 | 24 34 | 6 30 | 6 1  | 6 8  | 25 57 | 14 21 | 2 36 |     |      |     |      |     |
| S 30 | 21s38 | 15s44 | 1s53 | 18s10 | 0n51 | 8s45  | 1n35 | 2n44 | 0s19 | 20s45 | 0s36 | 22s43 | 0n19 | 23n22 | 0n22 | 3s17 | 1n32 | 24s33 | 6s30 | 6s 2 | 6s 9 | 25n55 | 14n21 | 2s36 |     |      |     |      |     |

ASTRODIENST EPHEMERIS for the year 1783  
geocentric

DECEMBER 1783

00:00 UT

| Day  | Sid.t   | ☉        | ☽     | ♊     | ♋     | ♌     | ♍    | ♎     | ♏     | ♐     | ♑    | ♒      | ♓     | ♈     | ♉      | Day  |
|------|---------|----------|-------|-------|-------|-------|------|-------|-------|-------|------|--------|-------|-------|--------|------|
| M 1  | 4 38 54 | 8♌45'24  | 6♋41  | 26♍21 | 27♎6  | 7♏56  | 0♎19 | 10♐51 | 11♑5  | 11♒53 | 8♓1  | 14♑R42 | 14♒21 | 21♓4  | 16♑R35 | M 1  |
| T 2  | 4 42 50 | 9♌46'18  | 20♐18 | 27♎53 | 27♋43 | 8♌16  | 0♐30 | 10♑57 | 11♒3  | 11♓55 | 8♑2  | 14♒42  | 14♓18 | 21♑10 | 16♒32  | T 2  |
| W 3  | 4 46 47 | 10♌47'12 | 3♏37  | 29♑26 | 28♒21 | 8♐36  | 0♑42 | 11♑4  | 11♑1  | 11♓56 | 8♑3  | 14♑41  | 14♓15 | 21♑17 | 16♑29  | W 3  |
| T 4  | 4 50 43 | 11♌48'08 | 16♑41 | 0♒59  | 29♑1  | 8♓56  | 0♓53 | 11♑10 | 10♓58 | 11♓57 | 8♑4  | 14♑38  | 14♓12 | 21♑24 | 16♑27  | T 4  |
| F 5  | 4 54 40 | 12♌49'04 | 29♑32 | 2♑31  | 29♑42 | 9♑17  | 1♑5  | 11♑17 | 10♓56 | 11♓59 | 8♑6  | 14♑32  | 14♑8  | 21♑30 | 16♑24  | F 5  |
| S 6  | 4 58 36 | 13♌50'01 | 12♒12 | 4♑4   | 0♍24  | 9♑39  | 1♑17 | 11♑23 | 10♓54 | 12♑0  | 8♑7  | 14♑23  | 14♑5  | 21♑37 | 16♑21  | S 6  |
| S 7  | 5 2 33  | 14♌50'58 | 24♑42 | 5♑37  | 1♑7   | 10♑1  | 1♑29 | 11♑30 | 10♓52 | 12♑1  | 8♑8  | 14♑11  | 14♑2  | 21♑44 | 16♑18  | S 7  |
| M 8  | 5 6 30  | 15♌51'57 | 7♒11  | 7♑10  | 1♑51  | 10♑23 | 1♑41 | 11♑36 | 10♓50 | 12♑2  | 8♑9  | 13♑57  | 13♓59 | 21♑51 | 16♑16  | M 8  |
| T 9  | 5 10 26 | 16♌52'56 | 19♑15 | 8♑44  | 2♑36  | 10♑46 | 1♑53 | 11♑43 | 10♑47 | 12♑4  | 8♑11 | 13♑43  | 13♓56 | 21♑57 | 16♑13  | T 9  |
| W10  | 5 14 23 | 17♌53'57 | 1♓19  | 10♑17 | 3♑22  | 11♑9  | 2♑5  | 11♑50 | 10♑45 | 12♑5  | 8♑12 | 13♑28  | 13♓53 | 22♑4  | 16♑10  | W10  |
| T 11 | 5 18 19 | 18♌54'58 | 13♑16 | 11♑50 | 4♑9   | 11♑32 | 2♑17 | 11♑56 | 10♑43 | 12♑6  | 8♑13 | 13♑15  | 13♓49 | 22♑11 | 16♑8   | T 11 |
| F 12 | 5 22 16 | 19♌56'00 | 25♑8  | 13♑24 | 4♑58  | 11♑56 | 2♑29 | 12♑3  | 10♑40 | 12♑7  | 8♑14 | 13♑4   | 13♓46 | 22♑17 | 16♑5   | F 12 |
| S 13 | 5 26 12 | 20♌57'03 | 6♒56  | 14♑57 | 5♑47  | 12♑20 | 2♑42 | 12♑10 | 10♑38 | 12♑8  | 8♑16 | 12♑56  | 13♑43 | 22♑24 | 16♑3   | S 13 |
| S 14 | 5 30 9  | 21♌58'06 | 18♑45 | 16♑31 | 6♑36  | 12♑45 | 2♑54 | 12♑17 | 10♑35 | 12♑9  | 8♑17 | 12♑52  | 13♑40 | 22♑31 | 16♑0   | S 14 |
| M15  | 5 34 6  | 22♌59'11 | 0♍38  | 18♑5  | 7♑27  | 13♑9  | 3♑6  | 12♑23 | 10♑33 | 12♑10 | 8♑19 | 12♑49  | 13♑37 | 22♑37 | 15♑58  | M15  |
| T 16 | 5 38 2  | 24♌0'16  | 12♑39 | 19♑39 | 8♑19  | 13♑34 | 3♑19 | 12♑30 | 10♑31 | 12♑11 | 8♑20 | 12♑D49 | 13♑33 | 22♑44 | 15♑56  | T 16 |
| W17  | 5 41 59 | 25♌1'22  | 24♑56 | 21♑13 | 9♑11  | 14♑0  | 3♑32 | 12♑37 | 10♑28 | 12♑12 | 8♑21 | 12♑R49 | 13♑30 | 22♑51 | 15♑53  | W17  |
| T 18 | 5 45 55 | 26♌2'29  | 7♒31  | 22♑47 | 10♑4  | 14♑26 | 3♑44 | 12♑44 | 10♑26 | 12♑13 | 8♑23 | 12♑48  | 13♑27 | 22♑57 | 15♑51  | T 18 |
| F 19 | 5 49 52 | 27♌3'37  | 20♑32 | 24♑22 | 10♑57 | 14♑52 | 3♑57 | 12♑51 | 10♑23 | 12♑14 | 8♑24 | 12♑46  | 13♑24 | 23♑4  | 15♑49  | F 19 |
| S 20 | 5 53 48 | 28♌4'45  | 4♍1   | 25♑57 | 11♑52 | 15♑18 | 4♑10 | 12♑58 | 10♑21 | 12♑15 | 8♑26 | 12♑42  | 13♑21 | 23♑11 | 15♑47  | S 20 |
| S 21 | 5 57 45 | 29♌5'55  | 18♑1  | 27♑31 | 12♑47 | 15♑45 | 4♑23 | 13♑5  | 10♑18 | 12♑16 | 8♑27 | 12♑34  | 13♑18 | 23♑18 | 15♑45  | S 21 |
| M22  | 6 1 41  | 0♓7'05   | 2♒29  | 29♑7  | 13♑42 | 16♑12 | 4♑36 | 13♑12 | 10♑16 | 12♑16 | 8♑29 | 12♑25  | 13♑14 | 23♑24 | 15♑43  | M22  |
| T 23 | 6 5 38  | 1♑8'15   | 17♑23 | 0♓42  | 14♑38 | 16♑39 | 4♑49 | 13♑19 | 10♑13 | 12♑17 | 8♑30 | 12♑14  | 13♑11 | 23♑31 | 15♑41  | T 23 |
| W24  | 6 9 35  | 2♑9'26   | 2♓32  | 2♑18  | 15♑35 | 17♑6  | 5♑2  | 13♑26 | 10♑10 | 12♑18 | 8♑32 | 12♑3   | 13♑8  | 23♑38 | 15♑39  | W24  |
| T 25 | 6 13 31 | 3♑10'37  | 17♑47 | 3♑53  | 16♑32 | 17♑34 | 5♑15 | 13♑33 | 10♑8  | 12♑19 | 8♑33 | 11♑53  | 13♑5  | 23♑44 | 15♑37  | T 25 |
| F 26 | 6 17 28 | 4♑11'48  | 2♓57  | 5♑30  | 17♑30 | 18♑2  | 5♑28 | 13♑40 | 10♑5  | 12♑19 | 8♑35 | 11♑46  | 13♑2  | 23♑51 | 15♑35  | F 26 |
| S 27 | 6 21 24 | 5♑13'00  | 17♑52 | 7♑6   | 18♑29 | 18♑30 | 5♑42 | 13♑47 | 10♑3  | 12♑20 | 8♑36 | 11♑41  | 12♑59 | 23♑58 | 15♑33  | S 27 |
| S 28 | 6 25 21 | 6♑14'11  | 2♒26  | 8♑43  | 19♑27 | 18♑59 | 5♑55 | 13♑54 | 10♑0  | 12♑20 | 8♑38 | 11♑39  | 12♑55 | 24♑4  | 15♑31  | S 28 |
| M29  | 6 29 17 | 7♑15'22  | 16♑34 | 10♑20 | 20♑27 | 19♑28 | 6♑8  | 14♑1  | 9♑57  | 12♑21 | 8♑40 | 11♑D38 | 12♑52 | 24♑11 | 15♑30  | M29  |
| T 30 | 6 33 14 | 8♑16'32  | 0♏17  | 11♑57 | 21♑27 | 19♑56 | 6♑22 | 14♑8  | 9♑55  | 12♑21 | 8♑41 | 11♑39  | 12♑49 | 24♑18 | 15♑28  | T 30 |
| W31  | 6 37 10 | 9♓17'43  | 13♏36 | 13♓35 | 22♍27 | 20♏26 | 6♓35 | 14♓15 | 9♓52  | 12♑22 | 8♓43 | 11♑R39 | 12♒46 | 24♓24 | 15♒27  | W31  |

| Day  | ☉     | ☽     |      | ♊     |      | ♋     |      | ♌    |      | ♍     |      | ♎     |      | ♏     |      | ♐    |      | ♑     |      | ♒    | ♓    | ♈     | ♉     | ♊    | ♋    | ♌   |
|------|-------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|-------|------|------|------|-------|------|------|------|-------|-------|------|------|-----|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl | decl | decl  | decl  | decl | decl | lat |
| M 1  | 21s47 | 9s43  | 0s42 | 18s39 | 0n44 | 8s51  | 1n43 | 2n54 | 0s16 | 20s42 | 0s36 | 22s42 | 0n19 | 23n22 | 0n22 | 3s17 | 1n32 | 24s33 | 6s30 | 6s 2 | 6s10 | 25n54 | 14n20 | 2s36 |      |     |
| T 2  | 21 57 | 3 24  | 0n30 | 19 7  | 0 37 | 8 58  | 1 50 | 3 4  | 0 14 | 20 40 | 0 36 | 22 42 | 0 19 | 23 22 | 0 22 | 3 18 | 1 32 | 24 33 | 6 30 | 6 2  | 6 11 | 25 52 | 14 19 | 2 36 |      |     |
| W 3  | 22 5  | 2n56  | 1 38 | 19 34 | 0 30 | 9 5   | 1 57 | 3 14 | 0 12 | 20 37 | 0 37 | 22 41 | 0 19 | 23 22 | 0 22 | 3 18 | 1 32 | 24 32 | 6 30 | 6 2  | 6 12 | 25 51 | 14 18 | 2 36 |      |     |
| T 4  | 22 14 | 9 2   | 2 40 | 20 1  | 0 23 | 9 13  | 2 4  | 3 24 | 0 9  | 20 35 | 0 37 | 22 41 | 0 19 | 23 23 | 0 22 | 3 19 | 1 32 | 24 32 | 6 29 | 6 4  | 6 14 | 25 49 | 14 17 | 2 36 |      |     |
| F 5  | 22 22 | 14 38 | 3 33 | 20 26 | 0 15 | 9 21  | 2 10 | 3 35 | 0 7  | 20 32 | 0 37 | 22 41 | 0 19 | 23 23 | 0 22 | 3 19 | 1 32 | 24 32 | 6 29 | 6 6  | 6 15 | 25 47 | 14 16 | 2 36 |      |     |
| S 6  | 22 29 | 19 33 | 4 14 | 20 51 | 0 8  | 9 30  | 2 16 | 3 45 | 0 5  | 20 30 | 0 37 | 22 40 | 0 19 | 23 23 | 0 22 | 3 20 | 1 32 | 24 31 | 6 29 | 6 9  | 6 16 | 25 46 | 14 16 | 2 36 |      |     |
| S 7  | 22 36 | 23 32 | 4 42 | 21 15 | 0 1  | 9 40  | 2 21 | 3 56 | 0 3  | 20 27 | 0 37 | 22 40 | 0 19 | 23 23 | 0 22 | 3 20 | 1 33 | 24 31 | 6 29 | 6 14 | 6 17 | 25 44 | 14 15 | 2 36 |      |     |
| M 8  | 22 43 | 26 24 | 4 57 | 21 38 | 0s 6 | 9 50  | 2 27 | 4 6  | 0 1  | 20 24 | 0 37 | 22 39 | 0 19 | 23 23 | 0 22 | 3 21 | 1 33 | 24 30 | 6 29 | 6 19 | 6 19 | 25 42 | 14 14 | 2 36 |      |     |
| T 9  | 22 49 | 27 59 | 4 58 | 21 59 | 0 12 | 10 1  | 2 32 | 4 17 | 0n 2 | 20 22 | 0 37 | 22 39 | 0 19 | 23 24 | 0 22 | 3 21 | 1 33 | 24 30 | 6 29 | 6 25 | 6 20 | 25 41 | 14 13 | 2 36 |      |     |
| W10  | 22 55 | 28 13 | 4 45 | 22 20 | 0 19 | 10 12 | 2 37 | 4 28 | 0 4  | 20 19 | 0 37 | 22 38 | 0 18 | 23 24 | 0 22 | 3 22 | 1 33 | 24 30 | 6 29 | 6 30 | 6 21 | 25 39 | 14 13 | 2 36 |      |     |
| T 11 | 23 0  | 27 7  | 4 20 | 22 40 | 0 26 | 10 24 | 2 41 | 4 39 | 0 5  | 20 16 | 0 37 | 22 38 | 0 18 | 23 24 | 0 22 | 3 22 | 1 33 | 24 29 | 6 29 | 6 35 | 6 22 | 25 38 | 14 12 | 2 36 |      |     |
| F 12 | 23 5  | 24 48 | 3 43 | 22 58 | 0 32 | 10 36 | 2 45 | 4 50 | 0 7  | 20 13 | 0 37 | 22 37 | 0 18 | 23 24 | 0 22 | 3 22 | 1 33 | 24 29 | 6 29 | 6 40 | 6 23 | 25 36 | 14 11 | 2 36 |      |     |
| S 13 | 23 10 | 21 25 | 2 57 | 23 16 | 0 39 | 10 48 | 2 49 | 5 1  | 0 9  | 20 11 | 0 37 | 22 37 | 0 18 | 23 24 | 0 22 | 3 23 | 1 33 | 24 28 | 6 29 | 6 43 | 6 25 | 25 34 | 14 10 | 2 36 |      |     |
| S 14 | 23 14 | 17 11 | 2 4  | 23 32 | 0 45 | 11 1  | 2 53 | 5 13 | 0 11 | 20 8  | 0 37 | 22 36 | 0 18 | 23 25 | 0 22 | 3 23 | 1 33 | 24 28 | 6 29 | 6 44 | 6 26 | 25 33 | 14 10 | 2 36 |      |     |
| M15  | 23 17 | 12 16 | 1 4  | 23 47 | 0 51 | 11 14 | 2 57 | 5 24 | 0 13 | 20 5  | 0 37 | 22 35 | 0 18 | 23 25 | 0 22 | 3 23 | 1 33 | 24 27 | 6 29 | 6 45 | 6 27 | 25 31 | 14 9  | 2 36 |      |     |
| T 16 | 23 20 | 6 50  | 0 1  | 24 1  | 0 57 | 11 27 | 3 0  | 5 35 | 0 15 | 20 2  | 0 37 | 22 35 | 0 18 | 23 25 | 0 22 | 3 24 | 1 33 | 24 27 | 6 29 | 6 45 | 6 28 | 25 29 | 14 8  | 2 36 |      |     |
| W17  | 23 23 | 1 3   | 1s 4 | 24 13 | 1 3  | 11 41 | 3 3  | 5 47 | 0 16 | 19 59 | 0 37 | 22 34 | 0 18 | 23 25 | 0 22 | 3 24 | 1 33 | 24 27 | 6 29 | 6 45 | 6 30 | 25 28 | 14 8  | 2 36 |      |     |
| T 18 | 23 25 | 4s56  | 2 7  | 24 25 | 1 8  | 11 55 | 3 6  | 5 58 | 0 18 | 19 56 | 0 37 | 22 34 | 0 18 | 23 26 | 0 22 | 3 24 | 1 33 | 24 26 | 6 29 | 6 46 | 6 31 | 25 26 | 14 7  | 2 36 |      |     |
| F 19 | 23 26 | 10 54 | 3 6  | 24 35 | 1 14 | 12 9  | 3 8  | 6 10 | 0 20 | 19 53 | 0 37 | 22 33 | 0 18 | 23 26 | 0 22 | 3 25 | 1 33 | 24 26 | 6 29 | 6 46 | 6 32 | 25 24 | 14 7  | 2 36 |      |     |
| S 20 | 23 27 | 16 35 | 3 56 | 24 43 | 1 19 | 12 23 | 3 11 | 6 22 | 0 21 | 19 50 | 0 37 | 22 33 | 0 18 | 23 26 | 0 22 | 3 25 | 1 33 | 24 25 | 6 28 | 6 48 | 6 33 | 25 22 | 14 6  | 2 36 |      |     |
| S 21 | 23 28 | 21 37 | 4 35 | 24 51 | 1 24 | 12 38 | 3 13 | 6 33 | 0 23 | 19 47 | 0 37 | 22 32 | 0 18 | 23 26 | 0 22 | 3 25 | 1 33 | 24 25 | 6 28 | 6 51 | 6 34 | 25 21 | 14 5  | 2 36 |      |     |
| M22  | 23 28 | 25 32 | 4 57 | 24 57 | 1 29 | 12 52 | 3 15 | 6 45 | 0 25 | 19 44 | 0 37 | 22 31 | 0 18 | 23 26 | 0 22 | 3 25 | 1 33 | 24 24 | 6 28 | 6 55 | 6 36 | 25 19 | 14 5  | 2 36 |      |     |
| T 23 | 23 28 | 27 51 | 5 1  | 25 2  | 1 34 | 13 7  | 3 16 | 6 57 | 0 26 | 19 41 | 0 37 | 22 31 | 0 17 | 23 27 | 0 22 | 3 26 | 1 33 | 24 24 | 6 28 | 6 59 | 6 37 | 25 17 | 14 4  | 2 36 |      |     |
| W24  | 23 27 | 28 10 | 4 43 | 25 5  | 1 38 | 13 22 | 3 18 | 7 9  | 0 28 | 19 38 | 0 37 | 22 30 | 0 17 | 23 27 | 0 22 | 3 26 | 1 33 | 24 23 | 6 28 | 7 3  | 6 38 | 25 15 | 14 4  | 2 36 |      |     |
| T 25 | 23 26 | 26 20 | 4 5  | 25 7  | 1 42 | 13 37 | 3 19 | 7 21 | 0 29 | 19 35 | 0 37 | 22 30 | 0 17 | 23 27 | 0 22 | 3 26 | 1 34 | 24 23 | 6 28 | 7 7  | 6 39 | 25 14 | 14 3  | 2 36 |      |     |
| F 26 | 23 24 | 22 36 | 3 10 | 25 7  | 1 46 | 13 52 | 3 20 | 7 33 | 0 30 | 19 32 | 0 37 | 22 29 | 0 17 | 23 27 | 0 22 | 3 26 | 1 34 | 24 23 | 6 28 | 7 10 | 6 41 | 25 12 | 14 3  | 2 35 |      |     |
| S 27 | 23 22 | 17 27 | 2 3  | 25 6  | 1 49 | 14 7  | 3 21 | 7 45 | 0 32 | 19 28 | 0 37 | 22 28 | 0 17 | 23 27 | 0 22 | 3 26 | 1 34 | 24 22 | 6 28 | 7 12 | 6 42 | 25 10 | 14 2  | 2 35 |      |     |
| S 28 | 23 19 | 11 23 | 0 49 | 25 4  | 1 53 | 14 22 | 3 22 | 7 57 | 0 33 | 19 25 | 0 37 | 22 28 | 0 17 | 23 28 | 0 22 | 3 27 | 1 34 | 24 22 | 6 28 | 7 12 | 6 43 | 25 8  | 14 2  | 2 35 |      |     |
| M29  | 23 16 | 4 54  | 0n26 | 24 59 | 1 56 | 14 37 | 3 23 | 8 9  | 0 35 | 19 22 | 0 37 | 22 27 | 0 17 | 23 28 | 0 22 | 3 27 | 1 34 | 24 21 | 6 28 | 7 12 | 6 44 | 25 7  | 14 1  | 2 35 |      |     |
| T 30 | 23 13 | 1n36  | 1 38 | 24 54 | 1 59 | 14 53 | 3 23 | 8 22 | 0 36 | 19 18 | 0 37 | 22 26 | 0 17 | 23 28 | 0 22 | 3 27 | 1 34 | 24 21 | 6 28 | 7 12 | 6 45 | 25 5  | 14 1  | 2 35 |      |     |
| W31  | 23s 9 | 7n52  | 2n42 | 24s47 | 2s 1 | 15s 8 | 3n23 | 8n34 | 0n37 | 19s15 | 0s37 | 22s26 | 0n17 | 23n28 | 0n22 | 3s27 | 1n34 | 24s20 | 6s28 | 7s12 | 6s47 | 25n 3 | 14n 1 | 2s35 |      |     |