



# Astrodienst Ephemeris Tables for the year 1774

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 1774  
geocentric

JANUARY 1774

00:00 UT

| Day  | Sid.t   | ☉        | ☽     | ♀      | ♀     | ♂     | ♂    | ♂      | ♂      | ♂      | ♂     | ♂      | ♂     | ♂     | ♂    | ♂    | Day |
|------|---------|----------|-------|--------|-------|-------|------|--------|--------|--------|-------|--------|-------|-------|------|------|-----|
| S 1  | 6 42 46 | 10♌44'44 | 13♏59 | 21°D 4 | 27♎36 | 15♌50 | 1♑46 | 26♏ 8  | 24°R34 | 20°R31 | 22♌24 | 25°R 2 | 26♏ 6 | 7♏29  | 4♑37 | S 1  |     |
| S 2  | 6 46 43 | 11°45'53 | 26°33 | 21♌13  | 28°40 | 16°37 | 1°53 | 26° 9  | 24♌33  | 20♏31  | 22°26 | 24♏56  | 26° 3 | 7°36  | 4°38 | S 2  |     |
| M 3  | 6 50 40 | 12°47'02 | 9♏19  | 21°30  | 29°44 | 17°23 | 2° 0 | 26° 9  | 24°31  | 20°31  | 22°28 | 24°53  | 25°59 | 7°42  | 4°39 | M 3  |     |
| T 4  | 6 54 36 | 13°48'11 | 22°18 | 21°53  | 0♏48  | 18°10 | 2° 8 | 26° 9  | 24°30  | 20°30  | 22°30 | 24°D52 | 25°56 | 7°49  | 4°40 | T 4  |     |
| W 5  | 6 58 33 | 14°49'20 | 5♏33  | 22°24  | 1°51  | 18°56 | 2°16 | 26°R 9 | 24°28  | 20°30  | 22°32 | 24°52  | 25°53 | 7°56  | 4°42 | W 5  |     |
| T 6  | 7 2 29  | 15°50'29 | 19° 8 | 23° 1  | 2°54  | 19°43 | 2°24 | 26° 9  | 24°27  | 20°29  | 22°34 | 24°R52 | 25°50 | 8° 3  | 4°43 | T 6  |     |
| F 7  | 7 6 26  | 16°51'38 | 3♏ 3  | 23°43  | 3°57  | 20°29 | 2°32 | 26° 9  | 24°26  | 20°29  | 22°36 | 24°51  | 25°47 | 8° 9  | 4°44 | F 7  |     |
| S 8  | 7 10 22 | 17°52'48 | 17°21 | 24°29  | 4°59  | 21°16 | 2°40 | 26° 9  | 24°25  | 20°28  | 22°38 | 24°48  | 25°44 | 8°16  | 4°45 | S 8  |     |
| S 9  | 7 14 19 | 18°53'57 | 1♌58  | 25°20  | 6° 1  | 22° 3 | 2°48 | 26° 8  | 24°23  | 20°28  | 22°40 | 24°42  | 25°40 | 8°23  | 4°47 | S 9  |     |
| M10  | 7 18 15 | 19°55'07 | 16°51 | 26°15  | 7° 3  | 22°50 | 2°57 | 26° 8  | 24°22  | 20°27  | 22°42 | 24°34  | 25°37 | 8°29  | 4°48 | M10  |     |
| T 11 | 7 22 12 | 20°56'16 | 1♌51  | 27°14  | 8° 4  | 23°36 | 3° 5 | 26° 7  | 24°21  | 20°26  | 22°44 | 24°24  | 25°34 | 8°36  | 4°49 | T 11 |     |
| W12  | 7 26 9  | 21°57'24 | 16°50 | 28°15  | 9° 5  | 24°23 | 3°14 | 26° 7  | 24°20  | 20°26  | 22°46 | 24°14  | 25°31 | 8°43  | 4°51 | W12  |     |
| T 13 | 7 30 5  | 22°58'33 | 1♌37  | 29°19  | 10° 5 | 25°10 | 3°23 | 26° 6  | 24°19  | 20°25  | 22°48 | 24° 4  | 25°28 | 8°50  | 4°52 | T 13 |     |
| F 14 | 7 34 2  | 23°59'40 | 16° 5 | 0♌26   | 11° 5 | 25°57 | 3°32 | 26° 5  | 24°18  | 20°24  | 22°50 | 23°57  | 25°25 | 8°56  | 4°54 | F 14 |     |
| S 15 | 7 37 58 | 25° 0'47 | 0♏ 8  | 1°35   | 12° 4 | 26°44 | 3°41 | 26° 4  | 24°17  | 20°24  | 22°52 | 23°51  | 25°21 | 9° 3  | 4°56 | S 15 |     |
| S 16 | 7 41 55 | 26° 1'53 | 13°44 | 2°46   | 13° 3 | 27°31 | 3°51 | 26° 3  | 24°17  | 20°23  | 22°54 | 23°49  | 25°18 | 9°10  | 4°57 | S 16 |     |
| M17  | 7 45 51 | 27° 2'59 | 26°52 | 3°59   | 14° 2 | 28°18 | 4° 0 | 26° 1  | 24°16  | 20°22  | 22°56 | 23°D49 | 25°15 | 9°16  | 4°59 | M17  |     |
| T 18 | 7 49 48 | 28° 4'03 | 9♑35  | 5°14   | 15° 0 | 29° 5 | 4°10 | 26° 0  | 24°15  | 20°21  | 22°58 | 23°49  | 25°12 | 9°23  | 5° 1 | T 18 |     |
| W19  | 7 53 44 | 29° 5'06 | 21°57 | 6°30   | 15°57 | 29°52 | 4°19 | 25°59  | 24°14  | 20°20  | 23° 0 | 23°50  | 25° 9 | 9°30  | 5° 3 | W19  |     |
| T 20 | 7 57 41 | 0♏ 6'09  | 4♏ 4  | 7°47   | 16°54 | 0♏39  | 4°29 | 25°57  | 24°14  | 20°19  | 23° 2 | 23°R50 | 25° 5 | 9°37  | 5° 5 | T 20 |     |
| F 21 | 8 1 38  | 1° 7'10  | 16° 1 | 9° 6   | 17°50 | 1°26  | 4°39 | 25°55  | 24°13  | 20°18  | 23° 4 | 23°49  | 25° 2 | 9°43  | 5° 7 | F 21 |     |
| S 22 | 8 5 34  | 2° 8'10  | 27°53 | 10°27  | 18°46 | 2°13  | 4°49 | 25°54  | 24°13  | 20°17  | 23° 6 | 23°45  | 24°59 | 9°50  | 5° 9 | S 22 |     |
| S 23 | 8 9 31  | 3° 9'10  | 9♏43  | 11°48  | 19°41 | 3° 0  | 5° 0 | 25°52  | 24°12  | 20°16  | 23° 8 | 23°39  | 24°56 | 9°57  | 5°11 | S 23 |     |
| M24  | 8 13 27 | 4°10'08  | 21°37 | 13°10  | 20°35 | 3°47  | 5°10 | 25°50  | 24°12  | 20°15  | 23°10 | 23°32  | 24°53 | 10° 3 | 5°13 | M24  |     |
| T 25 | 8 17 24 | 5°11'05  | 3♏38  | 14°34  | 21°29 | 4°34  | 5°20 | 25°48  | 24°11  | 20°14  | 23°12 | 23°23  | 24°50 | 10°10 | 5°15 | T 25 |     |
| W26  | 8 21 20 | 6°12'01  | 15°47 | 15°58  | 22°22 | 5°21  | 5°31 | 25°46  | 24°11  | 20°13  | 23°14 | 23°13  | 24°46 | 10°17 | 5°17 | W26  |     |
| T 27 | 8 25 17 | 7°12'56  | 28° 7 | 17°24  | 23°14 | 6° 8  | 5°42 | 25°43  | 24°11  | 20°12  | 23°16 | 23° 4  | 24°43 | 10°24 | 5°19 | T 27 |     |
| F 28 | 8 29 14 | 8°13'50  | 10♏37 | 18°50  | 24° 6 | 6°55  | 5°52 | 25°41  | 24°10  | 20°11  | 23°17 | 22°56  | 24°40 | 10°30 | 5°22 | F 28 |     |
| S 29 | 8 33 10 | 9°14'43  | 23°19 | 20°17  | 24°57 | 7°43  | 6° 3 | 25°39  | 24°10  | 20°10  | 23°19 | 22°51  | 24°37 | 10°37 | 5°24 | S 29 |     |
| S 30 | 8 37 7  | 10°15'34 | 6♏12  | 21°45  | 25°47 | 8°30  | 6°14 | 25°36  | 24°10  | 20° 9  | 23°21 | 22°47  | 24°34 | 10°44 | 5°26 | S 30 |     |
| M31  | 8 41 3  | 11°16'25 | 19♏16 | 23°14  | 26♏36 | 9°17  | 6♑25 | 25°33  | 24♌10  | 20♏ 8  | 23♌23 | 22°D46 | 24♏31 | 10♏51 | 5♑29 | M31  |     |

| Day  | ☉     | ☽     | ♀    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂    | ♂    | ♂    | ♂    | ♂     | ♂    | ♂    | ♂    |
|------|-------|-------|------|-------|------|-------|------|-------|------|------|------|------|------|-------|------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl | lat  | decl  | lat  | decl | lat  |
| S 1  | 23s 2 | 13n29 | 3s18 | 20s13 | 2n57 | 13s33 | 1s18 | 23s29 | 0s58 | 0s29 | 1s18 | 3n33 | 2n12 | 18n43 | 0s13 | 4n49 | 1n 9 |
| S 2  | 22 57 | 10 25 | 2 24 | 20 19 | 2 51 | 13 6  | 1 14 | 23 24 | 0 58 | 0 26 | 1 18 | 3 33 | 2 12 | 18 43 | 0 13 | 4 49 | 1 9  |
| M 3  | 22 51 | 6 50  | 1 22 | 20 27 | 2 44 | 12 40 | 1 9  | 23 18 | 0 58 | 0 23 | 1 17 | 3 34 | 2 13 | 18 42 | 0 13 | 4 49 | 1 9  |
| T 4  | 22 45 | 2 51  | 0 14 | 20 36 | 2 37 | 12 13 | 1 5  | 23 12 | 0 59 | 0 20 | 1 17 | 3 34 | 2 13 | 18 42 | 0 13 | 4 50 | 1 9  |
| W 5  | 22 38 | 1s21  | 0n56 | 20 46 | 2 29 | 11 46 | 1 0  | 23 6  | 0 59 | 0 16 | 1 17 | 3 34 | 2 13 | 18 42 | 0 13 | 4 50 | 1 9  |
| T 6  | 22 31 | 5 34  | 2 5  | 20 57 | 2 20 | 11 18 | 0 55 | 23 0  | 0 59 | 0 13 | 1 17 | 3 34 | 2 13 | 18 41 | 0 13 | 4 50 | 1 9  |
| F 7  | 22 24 | 9 36  | 3 8  | 21 8  | 2 11 | 10 51 | 0 50 | 22 53 | 0 59 | 0 10 | 1 16 | 3 35 | 2 14 | 18 41 | 0 13 | 4 50 | 1 9  |
| S 8  | 22 16 | 13 10 | 4 1  | 21 19 | 2 2  | 10 23 | 0 45 | 22 46 | 1 0  | 0 6  | 1 16 | 3 35 | 2 14 | 18 41 | 0 13 | 4 51 | 1 9  |
| S 9  | 22 8  | 16 0  | 4 40 | 21 30 | 1 53 | 9 55  | 0 39 | 22 39 | 1 0  | 0 3  | 1 16 | 3 35 | 2 14 | 18 41 | 0 13 | 4 51 | 1 9  |
| M10  | 21 59 | 17 50 | 5 0  | 21 41 | 1 44 | 9 28  | 0 34 | 22 31 | 1 0  | 0n 1 | 1 16 | 3 36 | 2 15 | 18 40 | 0 13 | 4 51 | 1 10 |
| T 11 | 21 50 | 18 27 | 5 1  | 21 52 | 1 34 | 9 0   | 0 28 | 22 24 | 1 0  | 0 5  | 1 15 | 3 36 | 2 15 | 18 40 | 0 13 | 4 51 | 1 10 |
| W12  | 21 40 | 17 46 | 4 40 | 22 3  | 1 25 | 8 31  | 0 23 | 22 16 | 1 1  | 0 8  | 1 15 | 3 37 | 2 15 | 18 40 | 0 13 | 4 52 | 1 10 |
| T 13 | 21 30 | 15 54 | 4 1  | 22 13 | 1 15 | 8 3   | 0 17 | 22 7  | 1 1  | 0 12 | 1 15 | 3 37 | 2 15 | 18 40 | 0 13 | 4 52 | 1 10 |
| F 14 | 21 20 | 13 3  | 3 7  | 22 22 | 1 6  | 7 35  | 0 11 | 21 59 | 1 1  | 0 16 | 1 15 | 3 38 | 2 16 | 18 39 | 0 13 | 4 52 | 1 10 |
| S 15 | 21 9  | 9 31  | 2 3  | 22 31 | 0 57 | 7 6   | 0 4  | 21 50 | 1 1  | 0 20 | 1 14 | 3 39 | 2 16 | 18 39 | 0 13 | 4 53 | 1 10 |
| S 16 | 20 58 | 5 35  | 0 54 | 22 39 | 0 48 | 6 38  | 0n 2 | 21 41 | 1 2  | 0 24 | 1 14 | 3 39 | 2 16 | 18 39 | 0 13 | 4 53 | 1 10 |
| M17  | 20 46 | 1 30  | 0s16 | 22 46 | 0 39 | 6 10  | 0 9  | 21 32 | 1 2  | 0 28 | 1 14 | 3 40 | 2 17 | 18 39 | 0 13 | 4 53 | 1 10 |
| T 18 | 20 34 | 2n31  | 1 24 | 22 52 | 0 30 | 5 41  | 0 15 | 21 23 | 1 2  | 0 32 | 1 14 | 3 41 | 2 17 | 18 39 | 0 13 | 4 54 | 1 10 |
| W19  | 20 22 | 6 19  | 2 25 | 22 58 | 0 21 | 5 13  | 0 22 | 21 13 | 1 2  | 0 36 | 1 14 | 3 42 | 2 17 | 18 38 | 0 13 | 4 54 | 1 10 |
| T 20 | 20 9  | 9 46  | 3 19 | 23 2  | 0 12 | 4 44  | 0 29 | 21 3  | 1 2  | 0 40 | 1 13 | 3 43 | 2 17 | 18 38 | 0 13 | 4 55 | 1 10 |
| F 21 | 19 56 | 12 46 | 4 3  | 23 5  | 0 4  | 4 16  | 0 36 | 20 53 | 1 3  | 0 44 | 1 13 | 3 44 | 2 18 | 18 38 | 0 13 | 4 55 | 1 10 |
| S 22 | 19 42 | 15 13 | 4 36 | 23 8  | 0s 4 | 3 47  | 0 43 | 20 43 | 1 3  | 0 48 | 1 13 | 3 45 | 2 18 | 18 38 | 0 13 | 4 55 | 1 10 |
| S 23 | 19 28 | 17 1  | 4 58 | 23 9  | 0 12 | 3 19  | 0 51 | 20 32 | 1 3  | 0 52 | 1 13 | 3 46 | 2 18 | 18 38 | 0 13 | 4 56 | 1 10 |
| M24  | 19 14 | 18 6  | 5 6  | 23 9  | 0 20 | 2 50  | 0 58 | 20 21 | 1 3  | 0 57 | 1 12 | 3 47 | 2 18 | 18 38 | 0 13 | 4 56 | 1 10 |
| T 25 | 19 0  | 18 23 | 5 2  | 23 8  | 0 28 | 2 22  | 1 6  | 20 10 | 1 3  | 1 1  | 1 12 | 3 48 | 2 19 | 18 38 | 0 13 | 4 57 | 1 10 |
| W26  | 18 45 | 17 50 | 4 44 | 23 5  | 0 35 | 1 54  | 1 14 | 19 59 | 1 3  | 1 5  | 1 12 | 3 49 | 2 19 | 18 38 | 0 13 | 4 57 | 1 10 |
| T 27 | 18 29 | 16 27 | 4 12 | 23 2  | 0 42 | 1 26  | 1 22 | 19 47 | 1 4  | 1 10 | 1 12 | 3 50 | 2 19 | 18 38 | 0 13 | 4 58 | 1 10 |
| F 28 | 18 14 | 14 16 | 3 28 | 22 57 | 0 49 | 0 58  | 1 30 | 19 35 | 1 4  | 1 14 | 1 12 | 3 51 | 2 19 | 18 38 | 0 13 | 4 58 | 1 10 |
| S 29 | 17 58 | 11 22 | 2 32 | 22 51 | 0 56 | 0 31  | 1 38 | 19 23 | 1 4  | 1 19 | 1 12 | 3 52 | 2 20 | 18 38 | 0 13 | 4 59 | 1 10 |
| S 30 | 17 41 | 7 53  | 1 29 | 22 44 | 1 2  | 0 3   | 1 46 | 19 11 | 1 4  | 1 23 | 1 11 | 3 53 | 2 20 | 18 38 | 0 13 | 4 59 | 1 10 |
| M31  | 17s25 | 3n58  | 0s19 | 22s35 | 1s 8 | 0n24  | 1n55 | 18s59 | 1s 4 | 1n28 | 1s11 | 3n55 | 2n20 | 18n38 | 0s13 | 5n 0 | 1n10 |

Julian Day Number = 2369000.5, Delta T = 21.77 sec  
Ecliptic obliquity = 23°27'57, Nutation = - 0°00'01, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 21°35'06, Lahiri = 20°42'06Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1774

## geocentric

FEBRUARY 1774

00:00 UT

| Day  | Sid.t    | ☉                      | ☽                   | ♂                   | ♀                   | ♂                  | ♂                   | ♂                    | ♂                    | ♂                    | ♂                   | ♂                    | ♂                   | ♂                   | ♂                  | Day  |
|------|----------|------------------------|---------------------|---------------------|---------------------|--------------------|---------------------|----------------------|----------------------|----------------------|---------------------|----------------------|---------------------|---------------------|--------------------|------|
| T 1  | 8 45 0   | 12 <sup>28</sup> 17'15 | 2 <sup>22</sup> 32  | 24 <sup>34</sup> 44 | 27 <sup>12</sup> 24 | 10 <sup>22</sup> 4 | 6 <sup>17</sup> 36  | 25 <sup>50</sup> R31 | 24 <sup>20</sup> D10 | 20 <sup>20</sup> R 6 | 23 <sup>28</sup> 25 | 22 <sup>17</sup> 46  | 24 <sup>17</sup> 27 | 10 <sup>11</sup> 57 | 5 <sup>17</sup> 31 | T 1  |
| W 2  | 8 48 56  | 13 <sup>18</sup> 18'04 | 16 <sup>0</sup> 1   | 26 <sup>14</sup>    | 28 <sup>11</sup>    | 10 <sup>51</sup>   | 6 <sup>48</sup>     | 25 <sup>17</sup> 28  | 24 <sup>18</sup> 10  | 20 <sup>17</sup> 5   | 23 <sup>27</sup>    | 22 <sup>47</sup>     | 24 <sup>24</sup>    | 11 <sup>0</sup> 4   | 5 <sup>34</sup>    | W 2  |
| T 3  | 8 52 53  | 14 <sup>18</sup> 18'52 | 29 <sup>42</sup>    | 27 <sup>46</sup>    | 28 <sup>58</sup>    | 11 <sup>39</sup>   | 6 <sup>59</sup>     | 25 <sup>25</sup>     | 24 <sup>10</sup>     | 20 <sup>4</sup>      | 23 <sup>29</sup>    | 22 <sup>49</sup>     | 24 <sup>21</sup>    | 11 <sup>11</sup>    | 5 <sup>36</sup>    | T 3  |
| F 4  | 8 56 49  | 15 <sup>19</sup> 19'39 | 13 <sup>18</sup> 36 | 29 <sup>18</sup>    | 29 <sup>43</sup>    | 12 <sup>26</sup>   | 7 <sup>11</sup>     | 25 <sup>22</sup>     | 24 <sup>10</sup>     | 20 <sup>3</sup>      | 23 <sup>31</sup>    | 22 <sup>50</sup>     | 24 <sup>18</sup>    | 11 <sup>17</sup>    | 5 <sup>39</sup>    | F 4  |
| S 5  | 9 0 46   | 16 <sup>20</sup> 20'25 | 27 <sup>43</sup>    | 0 <sup>22</sup> 51  | 0 <sup>17</sup> 27  | 13 <sup>13</sup>   | 7 <sup>22</sup>     | 25 <sup>19</sup>     | 24 <sup>11</sup>     | 20 <sup>1</sup>      | 23 <sup>33</sup>    | 22 <sup>49</sup>     | 24 <sup>15</sup>    | 11 <sup>24</sup>    | 5 <sup>41</sup>    | S 5  |
| S 6  | 9 4 42   | 17 <sup>21</sup> 21'10 | 12 <sup>27</sup> 2  | 2 <sup>24</sup>     | 1 <sup>11</sup>     | 14 <sup>1</sup>    | 7 <sup>34</sup>     | 25 <sup>16</sup>     | 24 <sup>11</sup>     | 20 <sup>0</sup>      | 23 <sup>34</sup>    | 22 <sup>47</sup>     | 24 <sup>11</sup>    | 11 <sup>31</sup>    | 5 <sup>44</sup>    | S 6  |
| M 7  | 9 8 39   | 18 <sup>21</sup> 21'54 | 26 <sup>30</sup>    | 3 <sup>59</sup>     | 1 <sup>53</sup>     | 14 <sup>48</sup>   | 7 <sup>46</sup>     | 25 <sup>12</sup>     | 24 <sup>11</sup>     | 19 <sup>59</sup>     | 23 <sup>36</sup>    | 22 <sup>43</sup>     | 24 <sup>8</sup>     | 11 <sup>38</sup>    | 5 <sup>47</sup>    | M 7  |
| T 8  | 9 12 36  | 19 <sup>22</sup> 23'7  | 11 <sup>28</sup> 3  | 5 <sup>34</sup>     | 2 <sup>34</sup>     | 15 <sup>35</sup>   | 7 <sup>58</sup>     | 25 <sup>9</sup>      | 24 <sup>12</sup>     | 19 <sup>57</sup>     | 23 <sup>38</sup>    | 22 <sup>38</sup>     | 24 <sup>5</sup>     | 11 <sup>44</sup>    | 5 <sup>49</sup>    | T 8  |
| W 9  | 9 16 32  | 20 <sup>23</sup> 19    | 25 <sup>34</sup>    | 7 <sup>10</sup>     | 3 <sup>14</sup>     | 16 <sup>23</sup>   | 8 <sup>10</sup>     | 25 <sup>6</sup>      | 24 <sup>12</sup>     | 19 <sup>56</sup>     | 23 <sup>40</sup>    | 22 <sup>33</sup>     | 24 <sup>2</sup>     | 11 <sup>51</sup>    | 5 <sup>52</sup>    | W 9  |
| T 10 | 9 20 29  | 21 <sup>24</sup> 00    | 9 <sup>22</sup> 57  | 8 <sup>47</sup>     | 3 <sup>53</sup>     | 17 <sup>10</sup>   | 8 <sup>22</sup>     | 25 <sup>2</sup>      | 24 <sup>12</sup>     | 19 <sup>55</sup>     | 23 <sup>42</sup>    | 22 <sup>28</sup>     | 23 <sup>59</sup>    | 11 <sup>58</sup>    | 5 <sup>55</sup>    | T 10 |
| F 11 | 9 24 25  | 22 <sup>24</sup> 39    | 24 <sup>0</sup> 7   | 10 <sup>25</sup>    | 4 <sup>30</sup>     | 17 <sup>57</sup>   | 8 <sup>34</sup>     | 24 <sup>59</sup>     | 24 <sup>13</sup>     | 19 <sup>53</sup>     | 23 <sup>44</sup>    | 22 <sup>25</sup>     | 23 <sup>56</sup>    | 12 <sup>0</sup> 4   | 5 <sup>58</sup>    | F 11 |
| S 12 | 9 28 22  | 23 <sup>25</sup> 16    | 7 <sup>12</sup> 58  | 12 <sup>0</sup> 4   | 5 <sup>0</sup> 6    | 18 <sup>45</sup>   | 8 <sup>46</sup>     | 24 <sup>55</sup>     | 24 <sup>13</sup>     | 19 <sup>52</sup>     | 23 <sup>45</sup>    | 22 <sup>22</sup>     | 23 <sup>52</sup>    | 12 <sup>11</sup>    | 6 <sup>0</sup> 0   | S 12 |
| S 13 | 9 32 18  | 24 <sup>25</sup> 52    | 21 <sup>27</sup>    | 13 <sup>44</sup>    | 5 <sup>41</sup>     | 19 <sup>32</sup>   | 8 <sup>58</sup>     | 24 <sup>51</sup>     | 24 <sup>14</sup>     | 19 <sup>50</sup>     | 23 <sup>47</sup>    | 22 <sup>20</sup> D21 | 23 <sup>49</sup>    | 12 <sup>18</sup>    | 6 <sup>0</sup> 3   | S 13 |
| M14  | 9 36 15  | 25 <sup>26</sup> 27    | 4 <sup>17</sup> 34  | 15 <sup>24</sup>    | 6 <sup>14</sup>     | 20 <sup>19</sup>   | 9 <sup>11</sup>     | 24 <sup>48</sup>     | 24 <sup>15</sup>     | 19 <sup>49</sup>     | 23 <sup>49</sup>    | 22 <sup>22</sup>     | 23 <sup>46</sup>    | 12 <sup>25</sup>    | 6 <sup>0</sup> 6   | M14  |
| T 15 | 9 40 11  | 26 <sup>27</sup> 00    | 17 <sup>20</sup>    | 17 <sup>0</sup> 5   | 6 <sup>46</sup>     | 21 <sup>0</sup> 7  | 9 <sup>23</sup>     | 24 <sup>44</sup>     | 24 <sup>16</sup>     | 19 <sup>47</sup>     | 23 <sup>51</sup>    | 22 <sup>23</sup>     | 23 <sup>43</sup>    | 12 <sup>31</sup>    | 6 <sup>0</sup> 9   | T 15 |
| W16  | 9 44 8   | 27 <sup>27</sup> 30    | 29 <sup>46</sup>    | 18 <sup>48</sup>    | 7 <sup>16</sup>     | 21 <sup>54</sup>   | 9 <sup>36</sup>     | 24 <sup>40</sup>     | 24 <sup>16</sup>     | 19 <sup>46</sup>     | 23 <sup>52</sup>    | 22 <sup>25</sup>     | 23 <sup>40</sup>    | 12 <sup>38</sup>    | 6 <sup>12</sup>    | W16  |
| T 17 | 9 48 5   | 28 <sup>28</sup> 00    | 11 <sup>28</sup> 57 | 20 <sup>31</sup>    | 7 <sup>45</sup>     | 22 <sup>41</sup>   | 9 <sup>48</sup>     | 24 <sup>36</sup>     | 24 <sup>17</sup>     | 19 <sup>44</sup>     | 23 <sup>54</sup>    | 22 <sup>27</sup>     | 23 <sup>36</sup>    | 12 <sup>45</sup>    | 6 <sup>15</sup>    | T 17 |
| F 18 | 9 52 1   | 29 <sup>28</sup> 27    | 23 <sup>57</sup>    | 22 <sup>15</sup>    | 8 <sup>12</sup>     | 23 <sup>29</sup>   | 10 <sup>1</sup>     | 24 <sup>32</sup>     | 24 <sup>18</sup>     | 19 <sup>43</sup>     | 23 <sup>56</sup>    | 22 <sup>28</sup> R28 | 23 <sup>33</sup>    | 12 <sup>51</sup>    | 6 <sup>18</sup>    | F 18 |
| S 19 | 9 55 58  | 0 <sup>28</sup> 52     | 5 <sup>11</sup> 50  | 24 <sup>0</sup> 0   | 8 <sup>37</sup>     | 24 <sup>16</sup>   | 10 <sup>14</sup>    | 24 <sup>28</sup>     | 24 <sup>19</sup>     | 19 <sup>41</sup>     | 23 <sup>57</sup>    | 22 <sup>28</sup>     | 23 <sup>30</sup>    | 12 <sup>58</sup>    | 6 <sup>21</sup>    | S 19 |
| S 20 | 9 59 54  | 1 <sup>29</sup> 16     | 17 <sup>43</sup>    | 25 <sup>46</sup>    | 9 <sup>0</sup>      | 25 <sup>3</sup>    | 10 <sup>26</sup>    | 24 <sup>24</sup>     | 24 <sup>20</sup>     | 19 <sup>40</sup>     | 23 <sup>59</sup>    | 22 <sup>27</sup>     | 23 <sup>27</sup>    | 13 <sup>0</sup> 5   | 6 <sup>24</sup>    | S 20 |
| M21  | 10 3 51  | 2 <sup>29</sup> 37     | 29 <sup>38</sup>    | 27 <sup>33</sup>    | 9 <sup>22</sup>     | 25 <sup>51</sup>   | 10 <sup>39</sup>    | 24 <sup>19</sup>     | 24 <sup>21</sup>     | 19 <sup>38</sup>     | 24 <sup>0</sup> 1   | 22 <sup>25</sup>     | 23 <sup>24</sup>    | 13 <sup>12</sup>    | 6 <sup>28</sup>    | M21  |
| T 22 | 10 7 47  | 3 <sup>29</sup> 57     | 11 <sup>28</sup> 41 | 29 <sup>21</sup>    | 9 <sup>42</sup>     | 26 <sup>38</sup>   | 10 <sup>52</sup>    | 24 <sup>15</sup>     | 24 <sup>22</sup>     | 19 <sup>36</sup>     | 24 <sup>0</sup> 2   | 22 <sup>22</sup>     | 23 <sup>21</sup>    | 13 <sup>18</sup>    | 6 <sup>31</sup>    | T 22 |
| W23  | 10 11 44 | 4 <sup>30</sup> 15     | 23 <sup>55</sup>    | 1 <sup>10</sup> 10  | 9 <sup>59</sup>     | 27 <sup>25</sup>   | 11 <sup>0</sup> 5   | 24 <sup>11</sup>     | 24 <sup>23</sup>     | 19 <sup>35</sup>     | 24 <sup>0</sup> 4   | 22 <sup>19</sup>     | 23 <sup>17</sup>    | 13 <sup>25</sup>    | 6 <sup>34</sup>    | W23  |
| T 24 | 10 15 40 | 5 <sup>30</sup> 30     | 6 <sup>12</sup> 22  | 3 <sup>0</sup>      | 10 <sup>15</sup>    | 28 <sup>13</sup>   | 11 <sup>18</sup>    | 24 <sup>0</sup> 7    | 24 <sup>24</sup>     | 19 <sup>33</sup>     | 24 <sup>0</sup> 5   | 22 <sup>17</sup>     | 23 <sup>14</sup>    | 13 <sup>32</sup>    | 6 <sup>37</sup>    | T 24 |
| F 25 | 10 19 37 | 6 <sup>30</sup> 44     | 19 <sup>0</sup> 5   | 4 <sup>51</sup>     | 10 <sup>28</sup>    | 29 <sup>0</sup>    | 11 <sup>32</sup>    | 24 <sup>0</sup> 2    | 24 <sup>26</sup>     | 19 <sup>32</sup>     | 24 <sup>0</sup> 7   | 22 <sup>14</sup>     | 23 <sup>11</sup>    | 13 <sup>39</sup>    | 6 <sup>40</sup>    | F 25 |
| S 26 | 10 23 34 | 7 <sup>30</sup> 56     | 2 <sup>17</sup> 4   | 6 <sup>43</sup>     | 10 <sup>39</sup>    | 29 <sup>47</sup>   | 11 <sup>45</sup>    | 23 <sup>58</sup>     | 24 <sup>27</sup>     | 19 <sup>30</sup>     | 24 <sup>0</sup> 9   | 22 <sup>13</sup>     | 23 <sup>0</sup> 8   | 13 <sup>45</sup>    | 6 <sup>44</sup>    | S 26 |
| S 27 | 10 27 30 | 8 <sup>31</sup> 06     | 15 <sup>19</sup>    | 8 <sup>36</sup>     | 10 <sup>48</sup>    | 0 <sup>12</sup> 35 | 11 <sup>58</sup>    | 23 <sup>53</sup>     | 24 <sup>28</sup>     | 19 <sup>28</sup>     | 24 <sup>10</sup>    | 22 <sup>12</sup>     | 23 <sup>0</sup> 5   | 13 <sup>52</sup>    | 6 <sup>47</sup>    | S 27 |
| M28  | 10 31 27 | 9 <sup>31</sup> 15     | 28 <sup>17</sup> 49 | 10 <sup>12</sup> 29 | 10 <sup>17</sup> 55 | 1 <sup>12</sup> 22 | 12 <sup>17</sup> 11 | 23 <sup>17</sup> 49  | 24 <sup>28</sup> 30  | 19 <sup>17</sup> 27  | 24 <sup>12</sup> 12 | 22 <sup>20</sup> D12 | 23 <sup>17</sup> 2  | 13 <sup>11</sup> 59 | 6 <sup>17</sup> 50 | M28  |

| Day  | ☉     | ☽     | ♂    | ♀     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂    | ♂    | ♂    | ♂    | ♂     | ♂    | ♂    | Day  |
|------|-------|-------|------|-------|------|-------|------|-------|------|------|------|------|------|-------|------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl | lat  | decl  | lat  | decl | lat  |
| T 1  | 17s 8 | 0s12  | 0n53 | 22s25 | 1s14 | 0n51  | 2n 4 | 18s46 | 1s 4 | 1n32 | 1s11 | 3n56 | 2n20 | 18n38 | 0s13 | 5n 0 | 1n10 |
| W 2  | 16 51 | 4 25  | 2 3  | 22 14 | 1 20 | 1 18  | 2 12 | 18 34 | 1 4  | 1 37 | 1 11 | 3 57 | 2 21 | 18 38 | 0 13 | 5 1  | 1 10 |
| T 3  | 16 33 | 8 27  | 3 7  | 22 2  | 1 25 | 1 45  | 2 21 | 18 21 | 1 4  | 1 42 | 1 11 | 3 59 | 2 21 | 18 38 | 0 13 | 5 1  | 1 10 |
| F 4  | 16 15 | 12 6  | 4 2  | 21 48 | 1 30 | 2 11  | 2 30 | 18 7  | 1 4  | 1 46 | 1 10 | 4 0  | 2 21 | 18 38 | 0 13 | 5 2  | 1 11 |
| S 5  | 15 57 | 15 5  | 4 42 | 21 32 | 1 35 | 2 37  | 2 40 | 17 54 | 1 5  | 1 51 | 1 10 | 4 2  | 2 21 | 18 38 | 0 13 | 5 2  | 1 11 |
| S 6  | 15 39 | 17 12 | 5 6  | 21 16 | 1 40 | 3 3   | 2 49 | 17 40 | 1 5  | 1 56 | 1 10 | 4 3  | 2 22 | 18 38 | 0 13 | 5 3  | 1 11 |
| M 7  | 15 20 | 18 15 | 5 11 | 20 58 | 1 44 | 3 29  | 2 58 | 17 27 | 1 5  | 2 1  | 1 10 | 4 4  | 2 22 | 18 38 | 0 13 | 5 3  | 1 11 |
| T 8  | 15 2  | 18 6  | 4 56 | 20 38 | 1 48 | 3 54  | 3 8  | 17 13 | 1 5  | 2 6  | 1 10 | 4 6  | 2 22 | 18 38 | 0 13 | 5 4  | 1 11 |
| W 9  | 14 42 | 16 46 | 4 22 | 20 17 | 1 51 | 4 18  | 3 17 | 16 59 | 1 5  | 2 10 | 1 10 | 4 8  | 2 22 | 18 38 | 0 13 | 5 4  | 1 11 |
| T 10 | 14 23 | 14 23 | 3 31 | 19 55 | 1 54 | 4 43  | 3 27 | 16 44 | 1 5  | 2 15 | 1 9  | 4 9  | 2 22 | 18 38 | 0 13 | 5 5  | 1 11 |
| F 11 | 14 3  | 11 10 | 2 28 | 19 32 | 1 57 | 5 7   | 3 37 | 16 30 | 1 5  | 2 20 | 1 9  | 4 11 | 2 23 | 18 39 | 0 13 | 5 6  | 1 11 |
| S 12 | 13 44 | 7 23  | 1 18 | 19 7  | 2 0  | 5 30  | 3 47 | 16 15 | 1 5  | 2 25 | 1 9  | 4 12 | 2 23 | 18 39 | 0 13 | 5 6  | 1 11 |
| S 13 | 13 24 | 3 19  | 0 5  | 18 40 | 2 2  | 5 53  | 3 57 | 16 0  | 1 5  | 2 30 | 1 9  | 4 14 | 2 23 | 18 39 | 0 13 | 5 7  | 1 11 |
| M14  | 13 3  | 0n48  | 1s 7 | 18 12 | 2 4  | 6 16  | 4 7  | 15 45 | 1 5  | 2 35 | 1 9  | 4 16 | 2 23 | 18 39 | 0 13 | 5 7  | 1 11 |
| T 15 | 12 43 | 4 46  | 2 13 | 17 43 | 2 5  | 6 38  | 4 18 | 15 30 | 1 5  | 2 40 | 1 9  | 4 17 | 2 23 | 18 39 | 0 13 | 5 8  | 1 11 |
| W16  | 12 22 | 8 25  | 3 11 | 17 12 | 2 6  | 6 59  | 4 28 | 15 15 | 1 5  | 2 45 | 1 8  | 4 19 | 2 24 | 18 39 | 0 13 | 5 9  | 1 11 |
| T 17 | 12 1  | 11 38 | 4 0  | 16 40 | 2 6  | 7 20  | 4 38 | 15 0  | 1 5  | 2 50 | 1 8  | 4 21 | 2 24 | 18 40 | 0 12 | 5 9  | 1 11 |
| F 18 | 11 40 | 14 18 | 4 37 | 16 6  | 2 7  | 7 41  | 4 49 | 14 44 | 1 5  | 2 56 | 1 8  | 4 23 | 2 24 | 18 40 | 0 12 | 5 10 | 1 11 |
| S 19 | 11 19 | 16 21 | 5 2  | 15 31 | 2 6  | 8 0   | 4 59 | 14 28 | 1 5  | 3 1  | 1 8  | 4 24 | 2 24 | 18 40 | 0 12 | 5 11 | 1 11 |
| S 20 | 10 57 | 17 41 | 5 14 | 14 55 | 2 5  | 8 19  | 5 10 | 14 12 | 1 5  | 3 6  | 1 8  | 4 26 | 2 24 | 18 40 | 0 12 | 5 11 | 1 11 |
| M21  | 10 36 | 18 16 | 5 12 | 14 17 | 2 4  | 8 37  | 5 20 | 13 56 | 1 5  | 3 11 | 1 8  | 4 28 | 2 24 | 18 41 | 0 12 | 5 12 | 1 11 |
| T 22 | 10 14 | 18 1  | 4 57 | 13 37 | 2 3  | 8 55  | 5 31 | 13 40 | 1 5  | 3 16 | 1 8  | 4 30 | 2 25 | 18 41 | 0 12 | 5 12 | 1 11 |
| W23  | 9 52  | 16 56 | 4 29 | 12 57 | 2 0  | 9 11  | 5 42 | 13 24 | 1 5  | 3 21 | 1 7  | 4 32 | 2 25 | 18 41 | 0 12 | 5 13 | 1 11 |
| T 24 | 9 30  | 15 2  | 3 47 | 12 15 | 1 58 | 9 27  | 5 52 | 13 7  | 1 5  | 3 27 | 1 7  | 4 33 | 2 25 | 18 42 | 0 12 | 5 14 | 1 11 |
| F 25 | 9 8   | 12 23 | 2 53 | 11 31 | 1 55 | 9 42  | 6 2  | 12 51 | 1 5  | 3 32 | 1 7  | 4 35 | 2 25 | 18 42 | 0 12 | 5 14 | 1 11 |
| S 26 | 8 46  | 9 3   | 1 49 | 10 46 | 1 51 | 9 56  | 6 13 | 12 34 | 1 5  | 3 37 | 1 7  | 4 37 | 2 25 | 18 42 | 0 12 | 5 15 | 1 11 |
| S 27 | 8 23  | 5 13  | 0 38 | 10 0  | 1 47 | 10 9  | 6 23 | 12 17 | 1 5  | 3 43 | 1 7  | 4 39 | 2 25 | 18 43 | 0 12 | 5 16 | 1 11 |
| M28  | 8s 1  | 1n 2  | 0n37 | 9s13  | 1s42 | 10n21 | 6n33 | 12s 0 | 1s 5 | 3n48 | 1s 7 | 4n41 | 2n25 | 18n43 | 0s12 | 5n16 | 1n11 |

Julian Day Number = 2369031.5, Delta T = 21.78 sec  
 Ecliptic obliquity = 23°27'58", Nutation = - 0°00'00", out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 21°35'10", Lahiri = 20°42'11"Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1774

## geocentric

MARCH 1774

00:00 UT

| Day  | Sid.t    | ☉                      | ☽                      | ♂                      | ♀                      | ♂                      | ♂                      | ♂                      | ♂                      | ♂                      | ♂                      | ♂                      | ♂                      | ♂                      | ♂                     | Day  |
|------|----------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-----------------------|------|
| T 1  | 10 35 23 | 10 <sup>h</sup> 31'21" | 12 <sup>h</sup> 23'31" | 12 <sup>h</sup> 24'31" | 10 <sup>h</sup> 57'59" | 2 <sup>h</sup> 24'09"  | 12 <sup>h</sup> 25'25" | 23 <sup>h</sup> 44'44" | 24 <sup>h</sup> 31'31" | 19 <sup>h</sup> 25'25" | 24 <sup>h</sup> 31'31" | 22 <sup>h</sup> 12'12" | 22 <sup>h</sup> 58'58" | 14 <sup>h</sup> 11'55" | 6 <sup>h</sup> 57'53" | T 1  |
| W 2  | 10 39 20 | 11 <sup>h</sup> 31'26" | 26 <sup>h</sup> 24'24" | 14 <sup>h</sup> 19'19" | 11 <sup>h</sup> 18'01" | 2 <sup>h</sup> 57'57"  | 12 <sup>h</sup> 38'38" | 23 <sup>h</sup> 40'40" | 24 <sup>h</sup> 33'33" | 19 <sup>h</sup> 23'23" | 24 <sup>h</sup> 15'15" | 22 <sup>h</sup> 13'13" | 22 <sup>h</sup> 55'55" | 14 <sup>h</sup> 12'12" | 6 <sup>h</sup> 57'57" | W 2  |
| T 3  | 10 43 16 | 12 <sup>h</sup> 31'29" | 10 <sup>h</sup> 26'26" | 16 <sup>h</sup> 15'15" | 11 <sup>h</sup> 00'00" | 3 <sup>h</sup> 44'44"  | 12 <sup>h</sup> 52'52" | 23 <sup>h</sup> 35'35" | 24 <sup>h</sup> 34'34" | 19 <sup>h</sup> 22'22" | 24 <sup>h</sup> 16'16" | 22 <sup>h</sup> 14'14" | 22 <sup>h</sup> 52'52" | 14 <sup>h</sup> 19'19" | 7 <sup>h</sup> 00'00" | T 3  |
| F 4  | 10 47 13 | 13 <sup>h</sup> 31'31" | 24 <sup>h</sup> 33'33" | 18 <sup>h</sup> 11'11" | 10 <sup>h</sup> 57'57" | 4 <sup>h</sup> 31'31"  | 13 <sup>h</sup> 05'05" | 23 <sup>h</sup> 31'31" | 24 <sup>h</sup> 36'36" | 19 <sup>h</sup> 20'20" | 24 <sup>h</sup> 17'17" | 22 <sup>h</sup> 15'15" | 22 <sup>h</sup> 49'49" | 14 <sup>h</sup> 26'26" | 7 <sup>h</sup> 04'04" | F 4  |
| S 5  | 10 51 09 | 14 <sup>h</sup> 31'31" | 8 <sup>h</sup> 24'44"  | 20 <sup>h</sup> 08'08" | 10 <sup>h</sup> 52'52" | 5 <sup>h</sup> 19'19"  | 13 <sup>h</sup> 19'19" | 23 <sup>h</sup> 26'26" | 24 <sup>h</sup> 37'37" | 19 <sup>h</sup> 19'19" | 24 <sup>h</sup> 19'19" | 22 <sup>h</sup> 15'15" | 22 <sup>h</sup> 46'46" | 14 <sup>h</sup> 32'32" | 7 <sup>h</sup> 07'07" | S 5  |
| S 6  | 10 55 06 | 15 <sup>h</sup> 31'30" | 22 <sup>h</sup> 57'57" | 22 <sup>h</sup> 05'05" | 10 <sup>h</sup> 44'44" | 6 <sup>h</sup> 06'06"  | 13 <sup>h</sup> 32'32" | 23 <sup>h</sup> 21'21" | 24 <sup>h</sup> 39'39" | 19 <sup>h</sup> 17'17" | 24 <sup>h</sup> 20'20" | 22 <sup>h</sup> 15'15" | 22 <sup>h</sup> 42'42" | 14 <sup>h</sup> 39'39" | 7 <sup>h</sup> 10'10" | S 6  |
| M 7  | 10 59 03 | 16 <sup>h</sup> 31'27" | 7 <sup>h</sup> 23'08"  | 24 <sup>h</sup> 03'03" | 10 <sup>h</sup> 33'33" | 6 <sup>h</sup> 53'53"  | 13 <sup>h</sup> 46'46" | 23 <sup>h</sup> 16'16" | 24 <sup>h</sup> 41'41" | 19 <sup>h</sup> 15'15" | 24 <sup>h</sup> 22'22" | 22 <sup>h</sup> 15'15" | 22 <sup>h</sup> 39'39" | 14 <sup>h</sup> 46'46" | 7 <sup>h</sup> 14'14" | M 7  |
| T 8  | 11 02 59 | 17 <sup>h</sup> 31'22" | 21 <sup>h</sup> 16'16" | 26 <sup>h</sup> 00'00" | 10 <sup>h</sup> 20'20" | 7 <sup>h</sup> 40'40"  | 14 <sup>h</sup> 00'00" | 23 <sup>h</sup> 12'12" | 24 <sup>h</sup> 43'43" | 19 <sup>h</sup> 14'14" | 24 <sup>h</sup> 23'23" | 22 <sup>h</sup> 14'14" | 22 <sup>h</sup> 36'36" | 14 <sup>h</sup> 52'52" | 7 <sup>h</sup> 17'17" | T 8  |
| W 9  | 11 06 56 | 18 <sup>h</sup> 31'16" | 5 <sup>h</sup> 28'18"  | 27 <sup>h</sup> 57'57" | 10 <sup>h</sup> 05'05" | 8 <sup>h</sup> 28'28"  | 14 <sup>h</sup> 13'13" | 23 <sup>h</sup> 07'07" | 24 <sup>h</sup> 44'44" | 19 <sup>h</sup> 12'12" | 24 <sup>h</sup> 24'24" | 22 <sup>h</sup> 14'14" | 22 <sup>h</sup> 33'33" | 14 <sup>h</sup> 59'59" | 7 <sup>h</sup> 21'21" | W 9  |
| T 10 | 11 10 52 | 19 <sup>h</sup> 31'08" | 19 <sup>h</sup> 12'12" | 29 <sup>h</sup> 53'53" | 9 <sup>h</sup> 47'47"  | 9 <sup>h</sup> 15'15"  | 14 <sup>h</sup> 27'27" | 23 <sup>h</sup> 02'02" | 24 <sup>h</sup> 46'46" | 19 <sup>h</sup> 10'10" | 24 <sup>h</sup> 26'26" | 22 <sup>h</sup> 14'14" | 22 <sup>h</sup> 30'30" | 15 <sup>h</sup> 06'06" | 7 <sup>h</sup> 24'24" | T 10 |
| F 11 | 11 14 49 | 20 <sup>h</sup> 30'58" | 2 <sup>h</sup> 24'53"  | 1 <sup>h</sup> 48'48"  | 9 <sup>h</sup> 27'27"  | 10 <sup>h</sup> 02'02" | 14 <sup>h</sup> 41'41" | 22 <sup>h</sup> 58'58" | 24 <sup>h</sup> 48'48" | 19 <sup>h</sup> 09'09" | 24 <sup>h</sup> 27'27" | 22 <sup>h</sup> 13'13" | 22 <sup>h</sup> 27'27" | 15 <sup>h</sup> 13'13" | 7 <sup>h</sup> 28'28" | F 11 |
| S 12 | 11 18 45 | 21 <sup>h</sup> 30'46" | 16 <sup>h</sup> 21'21" | 3 <sup>h</sup> 42'42"  | 9 <sup>h</sup> 04'04"  | 10 <sup>h</sup> 49'49" | 14 <sup>h</sup> 55'55" | 22 <sup>h</sup> 53'53" | 24 <sup>h</sup> 50'50" | 19 <sup>h</sup> 07'07" | 24 <sup>h</sup> 28'28" | 22 <sup>h</sup> 13'13" | 22 <sup>h</sup> 23'23" | 15 <sup>h</sup> 19'19" | 7 <sup>h</sup> 31'31" | S 12 |
| S 13 | 11 22 42 | 22 <sup>h</sup> 30'32" | 29 <sup>h</sup> 34'34" | 5 <sup>h</sup> 34'34"  | 8 <sup>h</sup> 39'39"  | 11 <sup>h</sup> 37'37" | 15 <sup>h</sup> 09'09" | 22 <sup>h</sup> 48'48" | 24 <sup>h</sup> 52'52" | 19 <sup>h</sup> 05'05" | 24 <sup>h</sup> 29'29" | 22 <sup>h</sup> 13'13" | 22 <sup>h</sup> 20'20" | 15 <sup>h</sup> 26'26" | 7 <sup>h</sup> 35'35" | S 13 |
| M14  | 11 26 38 | 23 <sup>h</sup> 30'16" | 12 <sup>h</sup> 29'29" | 7 <sup>h</sup> 24'24"  | 8 <sup>h</sup> 12'12"  | 12 <sup>h</sup> 24'24" | 15 <sup>h</sup> 23'23" | 22 <sup>h</sup> 43'43" | 24 <sup>h</sup> 54'54" | 19 <sup>h</sup> 04'04" | 24 <sup>h</sup> 31'31" | 22 <sup>h</sup> 13'13" | 22 <sup>h</sup> 17'17" | 15 <sup>h</sup> 33'33" | 7 <sup>h</sup> 38'38" | M14  |
| T 15 | 11 30 35 | 24 <sup>h</sup> 29'58" | 25 <sup>h</sup> 09'09" | 9 <sup>h</sup> 11'11"  | 7 <sup>h</sup> 44'44"  | 13 <sup>h</sup> 11'11" | 15 <sup>h</sup> 37'37" | 22 <sup>h</sup> 39'39" | 24 <sup>h</sup> 56'56" | 19 <sup>h</sup> 02'02" | 24 <sup>h</sup> 32'32" | 22 <sup>h</sup> 13'13" | 22 <sup>h</sup> 14'14" | 15 <sup>h</sup> 40'40" | 7 <sup>h</sup> 42'42" | T 15 |
| W16  | 11 34 31 | 25 <sup>h</sup> 29'38" | 7 <sup>h</sup> 23'33"  | 10 <sup>h</sup> 55'55" | 7 <sup>h</sup> 13'13"  | 13 <sup>h</sup> 58'58" | 15 <sup>h</sup> 51'51" | 22 <sup>h</sup> 34'34" | 24 <sup>h</sup> 58'58" | 19 <sup>h</sup> 00'00" | 24 <sup>h</sup> 33'33" | 22 <sup>h</sup> 13'13" | 22 <sup>h</sup> 11'11" | 15 <sup>h</sup> 46'46" | 7 <sup>h</sup> 46'46" | W16  |
| T 17 | 11 38 28 | 26 <sup>h</sup> 29'16" | 19 <sup>h</sup> 44'44" | 12 <sup>h</sup> 36'36" | 6 <sup>h</sup> 41'41"  | 14 <sup>h</sup> 45'45" | 16 <sup>h</sup> 05'05" | 22 <sup>h</sup> 29'29" | 25 <sup>h</sup> 00'00" | 18 <sup>h</sup> 59'59" | 24 <sup>h</sup> 34'34" | 22 <sup>h</sup> 12'12" | 22 <sup>h</sup> 08'08" | 15 <sup>h</sup> 53'53" | 7 <sup>h</sup> 49'49" | T 17 |
| F 18 | 11 42 25 | 27 <sup>h</sup> 28'51" | 1 <sup>h</sup> 24'45"  | 14 <sup>h</sup> 13'13" | 6 <sup>h</sup> 07'07"  | 15 <sup>h</sup> 32'32" | 16 <sup>h</sup> 19'19" | 22 <sup>h</sup> 24'24" | 25 <sup>h</sup> 03'03" | 18 <sup>h</sup> 57'57" | 24 <sup>h</sup> 35'35" | 22 <sup>h</sup> 12'12" | 22 <sup>h</sup> 04'04" | 16 <sup>h</sup> 00'00" | 7 <sup>h</sup> 53'53" | F 18 |
| S 19 | 11 46 21 | 28 <sup>h</sup> 28'25" | 13 <sup>h</sup> 40'40" | 15 <sup>h</sup> 45'45" | 5 <sup>h</sup> 32'32"  | 16 <sup>h</sup> 19'19" | 16 <sup>h</sup> 33'33" | 22 <sup>h</sup> 20'20" | 25 <sup>h</sup> 05'05" | 18 <sup>h</sup> 55'55" | 24 <sup>h</sup> 36'36" | 22 <sup>h</sup> 11'11" | 22 <sup>h</sup> 01'01" | 16 <sup>h</sup> 06'06" | 7 <sup>h</sup> 56'56" | S 19 |
| S 20 | 11 50 18 | 29 <sup>h</sup> 27'55" | 25 <sup>h</sup> 32'32" | 17 <sup>h</sup> 12'12" | 4 <sup>h</sup> 56'56"  | 17 <sup>h</sup> 06'06" | 16 <sup>h</sup> 47'47" | 22 <sup>h</sup> 15'15" | 25 <sup>h</sup> 07'07" | 18 <sup>h</sup> 54'54" | 24 <sup>h</sup> 37'37" | 22 <sup>h</sup> 11'11" | 21 <sup>h</sup> 58'58" | 16 <sup>h</sup> 13'13" | 8 <sup>h</sup> 00'00" | S 20 |
| M21  | 11 54 14 | 0 <sup>h</sup> 27'24"  | 7 <sup>h</sup> 23'28"  | 18 <sup>h</sup> 34'34" | 4 <sup>h</sup> 19'19"  | 17 <sup>h</sup> 53'53" | 17 <sup>h</sup> 02'02" | 22 <sup>h</sup> 10'10" | 25 <sup>h</sup> 09'09" | 18 <sup>h</sup> 52'52" | 24 <sup>h</sup> 38'38" | 22 <sup>h</sup> 11'11" | 21 <sup>h</sup> 55'55" | 16 <sup>h</sup> 20'20" | 8 <sup>h</sup> 03'03" | M21  |
| T 22 | 11 58 11 | 1 <sup>h</sup> 26'51"  | 19 <sup>h</sup> 30'30" | 19 <sup>h</sup> 51'51" | 3 <sup>h</sup> 41'41"  | 18 <sup>h</sup> 40'40" | 17 <sup>h</sup> 16'16" | 22 <sup>h</sup> 06'06" | 25 <sup>h</sup> 12'12" | 18 <sup>h</sup> 50'50" | 24 <sup>h</sup> 39'39" | 22 <sup>h</sup> 11'11" | 21 <sup>h</sup> 52'52" | 16 <sup>h</sup> 27'27" | 8 <sup>h</sup> 07'07" | T 22 |
| W23  | 12 02 07 | 2 <sup>h</sup> 26'15"  | 1 <sup>h</sup> 24'44"  | 21 <sup>h</sup> 01'01" | 3 <sup>h</sup> 04'04"  | 19 <sup>h</sup> 27'27" | 17 <sup>h</sup> 30'30" | 22 <sup>h</sup> 01'01" | 25 <sup>h</sup> 14'14" | 18 <sup>h</sup> 49'49" | 24 <sup>h</sup> 40'40" | 22 <sup>h</sup> 12'12" | 21 <sup>h</sup> 48'48" | 16 <sup>h</sup> 33'33" | 8 <sup>h</sup> 11'11" | W23  |
| T 24 | 12 06 04 | 3 <sup>h</sup> 25'36"  | 14 <sup>h</sup> 14'14" | 22 <sup>h</sup> 05'05" | 2 <sup>h</sup> 26'26"  | 20 <sup>h</sup> 14'14" | 17 <sup>h</sup> 44'44" | 21 <sup>h</sup> 56'56" | 25 <sup>h</sup> 17'17" | 18 <sup>h</sup> 47'47" | 24 <sup>h</sup> 41'41" | 22 <sup>h</sup> 13'13" | 21 <sup>h</sup> 45'45" | 16 <sup>h</sup> 40'40" | 8 <sup>h</sup> 14'14" | T 24 |
| F 25 | 12 10 00 | 4 <sup>h</sup> 24'56"  | 27 <sup>h</sup> 03'03" | 23 <sup>h</sup> 02'02" | 1 <sup>h</sup> 48'48"  | 21 <sup>h</sup> 01'01" | 17 <sup>h</sup> 59'59" | 21 <sup>h</sup> 52'52" | 25 <sup>h</sup> 19'19" | 18 <sup>h</sup> 46'46" | 24 <sup>h</sup> 42'42" | 22 <sup>h</sup> 14'14" | 21 <sup>h</sup> 42'42" | 16 <sup>h</sup> 47'47" | 8 <sup>h</sup> 18'18" | F 25 |
| S 26 | 12 13 57 | 5 <sup>h</sup> 24'13"  | 10 <sup>h</sup> 14'14" | 23 <sup>h</sup> 53'53" | 1 <sup>h</sup> 11'11"  | 21 <sup>h</sup> 48'48" | 18 <sup>h</sup> 13'13" | 21 <sup>h</sup> 47'47" | 25 <sup>h</sup> 22'22" | 18 <sup>h</sup> 44'44" | 24 <sup>h</sup> 43'43" | 22 <sup>h</sup> 15'15" | 21 <sup>h</sup> 39'39" | 16 <sup>h</sup> 53'53" | 8 <sup>h</sup> 22'22" | S 26 |
| S 27 | 12 17 54 | 6 <sup>h</sup> 23'28"  | 23 <sup>h</sup> 45'45" | 24 <sup>h</sup> 37'37" | 0 <sup>h</sup> 34'34"  | 22 <sup>h</sup> 35'35" | 18 <sup>h</sup> 27'27" | 21 <sup>h</sup> 43'43" | 25 <sup>h</sup> 24'24" | 18 <sup>h</sup> 42'42" | 24 <sup>h</sup> 44'44" | 22 <sup>h</sup> 15'15" | 21 <sup>h</sup> 36'36" | 17 <sup>h</sup> 00'00" | 8 <sup>h</sup> 25'25" | S 27 |
| M28  | 12 21 50 | 7 <sup>h</sup> 22'41"  | 7 <sup>h</sup> 23'47"  | 25 <sup>h</sup> 13'13" | 29 <sup>h</sup> 24'24" | 23 <sup>h</sup> 22'22" | 18 <sup>h</sup> 41'41" | 21 <sup>h</sup> 38'38" | 25 <sup>h</sup> 27'27" | 18 <sup>h</sup> 41'41" | 24 <sup>h</sup> 45'45" | 22 <sup>h</sup> 15'15" | 21 <sup>h</sup> 33'33" | 17 <sup>h</sup> 07'07" | 8 <sup>h</sup> 29'29" | M28  |
| T 29 | 12 25 47 | 8 <sup>h</sup> 21'52"  | 21 <sup>h</sup> 47'47" | 25 <sup>h</sup> 42'42" | 29 <sup>h</sup> 24'24" | 24 <sup>h</sup> 09'09" | 18 <sup>h</sup> 56'56" | 21 <sup>h</sup> 34'34" | 25 <sup>h</sup> 29'29" | 18 <sup>h</sup> 39'39" | 24 <sup>h</sup> 46'46" | 22 <sup>h</sup> 14'14" | 21 <sup>h</sup> 29'29" | 17 <sup>h</sup> 14'14" | 8 <sup>h</sup> 33'33" | T 29 |
| W30  | 12 29 43 | 9 <sup>h</sup> 21'01"  | 6 <sup>h</sup> 24'06"  | 26 <sup>h</sup> 04'04" | 28 <sup>h</sup> 51'51" | 24 <sup>h</sup> 55'55" | 19 <sup>h</sup> 10'10" | 21 <sup>h</sup> 29'29" | 25 <sup>h</sup> 32'32" | 18 <sup>h</sup> 38'38" | 24 <sup>h</sup> 46'46" | 22 <sup>h</sup> 12'12" | 21 <sup>h</sup> 26'26" | 17 <sup>h</sup> 20'20" | 8 <sup>h</sup> 36'36" | W30  |
| T 31 | 12 33 40 | 10 <sup>h</sup> 20'08" | 20 <sup>h</sup> 13'39" | 26 <sup>h</sup> 19'19" | 28 <sup>h</sup> 24'24" | 25 <sup>h</sup> 24'24" | 19 <sup>h</sup> 25'25" | 21 <sup>h</sup> 25'25" | 25 <sup>h</sup> 35'35" | 18 <sup>h</sup> 36'36" | 24 <sup>h</sup> 47'47" | 22 <sup>h</sup> 12'12" | 21 <sup>h</sup> 23'23" | 17 <sup>h</sup> 22'22" | 8 <sup>h</sup> 40'40" | T 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 |
| T 1  | 7s38 | 3s16  | 1n50 | 8s24  | 1s36 | 10n32 | 6n43 | 11s43 | 1s 4 | 3n53 | 1s 7 | 4n43 | 2n26 | 18n43 | 0s12 | 5n17 | 1n11 | 23s 1 | 1s45 | 3n 6 | 2n48 | 17n28 | 4n46 | 2n13 |     |      |     |      |     |
| W 2  | 7 15 | 7 26  | 2 58 | 7 34  | 1 31 | 10 41 | 6 53 | 11 26 | 1 4  | 3 58 | 1 7  | 4 45 | 2 26 | 18 44 | 0 12 | 5 18 | 1 11 | 23 0  | 1 45 | 3 5  | 2 49 | 17 29 | 4 48 | 2 13 |     |      |     |      |     |
| T 3  | 6 52 | 11 13 | 3 56 | 6 43  | 1 24 | 10 50 | 7 3  | 11 9  | 1 4  | 4 4  | 1 6  | 4 47 | 2 26 | 18 44 | 0 12 | 5 18 | 1 11 | 23 0  | 1 45 | 3 5  | 2 50 | 17 29 | 4 49 | 2 13 |     |      |     |      |     |
| F 4  | 6 29 | 14 23 | 4 41 | 5 51  | 1 17 | 10 57 | 7 12 | 10 52 | 1 4  | 4 9  | 1 6  | 4 49 | 2 26 | 18 45 | 0 12 | 5 19 | 1 11 | 23 0  | 1 45 | 3 5  | 2 51 | 17 30 | 4 50 | 2 12 |     |      |     |      |     |
| S 5  | 6 6  | 16 42 | 5 8  | 4 58  | 1 9  | 11 3  | 7 21 | 10 34 | 1 4  | 4 15 | 1 6  | 4 51 | 2 26 | 18 45 | 0 12 | 5 20 | 1 11 | 23 0  | 1 45 | 3 5  | 2 53 | 17 31 | 4 51 | 2 12 |     |      |     |      |     |
| S 6  | 5 43 | 18 0  | 5 17 | 4 4   | 1 1  | 11 8  | 7 29 | 10 16 | 1 4  | 4 20 | 1 6  | 4 53 | 2 26 | 18 45 | 0 12 | 5 20 | 1 11 | 23 0  | 1 45 | 3 5  | 2 54 | 17 31 | 4 52 | 2 12 |     |      |     |      |     |
| M 7  | 5 19 | 18 10 | 5 6  | 3 10  | 0 52 | 11 11 | 7 37 | 9 59  | 1 4  | 4 25 | 1 6  | 4 55 | 2 26 | 18 46 | 0 12 | 5 21 | 1 11 | 23 0  | 1 45 | 3 5  | 2 55 | 17 32 | 4 54 | 2 12 |     |      |     |      |     |
| T 8  | 4 56 | 17 13 | 4 37 | 2 15  | 0 43 | 11 13 | 7 45 | 9 41  | 1 4  | 4 31 | 1 6  | 4 56 | 2 26 | 18 46 | 0 12 | 5 22 | 1 11 | 23 0  | 1 45 | 3 5  | 2 56 | 17 32 | 4 55 | 2 12 |     |      |     |      |     |
| W 9  | 4 33 | 15 13 | 3 52 | 1 19  | 0 33 | 11 14 | 7 53 | 9 23  | 1 4  | 4 36 | 1 6  | 4 58 | 2 26 | 18 47 | 0 12 | 5 22 | 1 11 | 23 0  | 1 46 | 3 5  | 2 58 | 17 33 | 4 56 | 2 12 |     |      |     |      |     |
| T 10 | 4 9  | 12 20 | 2 53 | 0 23  | 0 22 | 11 13 | 7 59 | 9 5   | 1 3  | 4 42 | 1 6  | 5 0  | 2 26 | 18 47 | 0 12 | 5 23 | 1 11 | 22 59 | 1 46 | 3 5  | 2 59 | 17 34 | 4 58 | 2 12 |     |      |     |      |     |
| F 11 | 3 46 | 8 49  | 1 45 | 0n33  | 0 11 | 11 10 | 8 5  | 8 47  | 1 3  | 4 47 | 1 6  | 5 2  | 2 26 | 18 48 | 0 12 | 5 24 | 1 11 | 22 59 | 1 46 | 3 5  | 3 0  | 17 34 | 4 59 | 2 12 |     |      |     |      |     |
| S 12 | 3 22 | 4 53  | 0 33 | 1 28  | 0n 0 | 11 6  | 8 11 | 8 29  | 1 3  | 4 53 | 1 6  | 5 4  | 2 26 | 18 48 | 0 12 | 5 24 | 1 11 | 22 59 | 1 46 | 3 5  | 3 1  | 17 35 | 5 0  | 2 12 |     |      |     |      |     |
| S 13 | 2 59 | 0 48  | 0s41 | 2 24  | 0 12 | 11 1  | 8 16 | 8 11  | 1 3  | 4 58 | 1 5  | 5 6  | 2 27 | 18 49 | 0 12 | 5 25 | 1 11 | 22 59 | 1 46 | 3 5  | 3 3  | 17 35 | 5 1  | 2 12 |     |      |     |      |     |
| M14  | 2 35 | 3n15  | 1 50 | 3 18  | 0 24 | 10 54 | 8 20 | 7 53  | 1 3  | 5 3  | 1 5  | 5 8  | 2 27 | 18 49 | 0 12 | 5 26 | 1 11 | 22 59 | 1 46 | 3 5  | 3 4  | 17 36 | 5 3  | 2 11 |     |      |     |      |     |
| T 15 | 2 11 | 7 4   | 2 53 | 4 12  | 0 36 | 10 46 | 8 23 | 7 35  | 1 3  | 5 9  | 1 5  | 5 10 | 2 27 | 18 50 | 0 12 | 5 26 | 1 11 | 22 59 | 1 46 | 3 5  | 3 5  | 17 37 | 5 4  | 2 11 |     |      |     |      |     |
| W16  | 1 48 | 10 29 | 3 46 | 5 5   | 0 49 | 10 36 | 8 26 | 7 16  | 1 2  | 5 14 | 1 5  | 5 12 | 2 27 | 18 50 | 0 12 | 5 27 | 1 11 | 22 59 | 1 46 | 3 6  | 3 6  | 17 37 | 5 5  | 2 11 |     |      |     |      |     |
| T 17 | 1 24 | 13 23 | 4 28 | 5 56  | 1 2  | 10 25 | 8 27 | 6 58  | 1 2  | 5 20 | 1 5  | 5 14 | 2 27 | 18 51 | 0 12 | 5 28 | 1 11 | 22 59 | 1 47 | 3 6  | 3 8  | 17 38 | 5 7  | 2 11 |     |      |     |      |     |
| F 18 | 1 0  | 15 41 | 4 57 | 6 45  | 1 14 | 10 12 | 8 28 | 6 40  | 1 2  | 5 25 | 1 5  | 5 16 | 2 27 | 18 51 | 0 12 | 5 28 | 1 11 | 22 59 | 1 47 | 3 6  | 3 9  | 17 38 | 5 8  | 2 11 |     |      |     |      |     |
| S 19 | 0 36 | 17 17 | 5 13 | 7 32  | 1 27 | 9 58  | 8 28 | 6 21  | 1 2  | 5 31 | 1 5  | 5 18 | 2 27 | 18 52 | 0 12 | 5 29 | 1 11 | 22 59 | 1 47 | 3 6  | 3 10 | 17 39 | 5 9  | 2 11 |     |      |     |      |     |
| S 20 | 0 13 | 18 7  | 5 16 | 8 17  | 1 39 | 9 42  | 8 27 | 6 3   | 1 2  | 5 36 | 1 5  | 5 20 | 2 27 | 18 52 | 0 12 | 5 30 | 1 11 | 22 59 | 1 47 | 3 6  | 3 11 | 17 40 | 5 11 | 2 11 |     |      |     |      |     |
| M21  | 0n11 | 18 10 | 5 6  | 9 0   | 1 51 | 9 26  | 8 25 | 5 44  | 1 1  | 5 42 | 1 5  | 5 21 | 2 27 | 18 53 | 0 12 | 5 30 | 1 11 | 22 59 | 1 47 | 3 6  | 3 13 | 17 40 | 5 12 | 2 11 |     |      |     |      |     |
| T 22 | 0 35 | 17 24 | 4 42 | 9 40  | 2 3  | 9 8   | 8 22 | 5 25  | 1 1  | 5 47 | 1 5  | 5 23 | 2 27 | 18 54 | 0 12 | 5 31 | 1 11 | 22 59 | 1 47 | 3 6  | 3 14 | 17 41 | 5 14 | 2 11 |     |      |     |      |     |
| W23  | 0 58 | 15 49 | 4 5  | 10 17 | 2 14 | 8 50  | 8 18 | 5 7   | 1 1  | 5 53 | 1 5  | 5 25 | 2 27 | 18 54 | 0 12 | 5 31 | 1 11 | 22 59 | 1 47 | 3 6  | 3 15 | 17 41 | 5 15 | 2 11 |     |      |     |      |     |
| T 24 | 1 22 | 13 28 | 3 15 | 10 51 | 2 25 | 8 30  | 8 13 | 4 48  | 1 1  | 5 58 | 1 5  | 5 27 | 2 27 | 18 55 | 0 12 | 5 32 | 1 11 | 22 58 | 1 48 | 3 5  | 3 16 | 17 42 | 5 16 | 2 11 |     |      |     |      |     |
| F 25 | 1 45 | 10 23 | 2 15 | 11 21 | 2 34 | 8 10  | 8 8  | 4 29  | 1 0  | 6 4  | 1 5  | 5 29 | 2 27 | 18 55 | 0 12 | 5 33 | 1 11 | 22 58 | 1 48 | 3 5  | 3 18 | 17 42 | 5 18 | 2 10 |     |      |     |      |     |
| S 26 | 2 9  | 6 43  | 1 6  | 11 49 | 2 44 | 7 49  | 8 1  | 4 11  | 1 0  | 6 9  | 1 4  | 5 31 | 2 27 | 18 56 | 0 12 | 5 33 | 1 11 | 22 58 | 1 48 | 3 5  | 3 19 | 17 43 | 5 19 | 2 10 |     |      |     |      |     |
| S 27 | 2 32 | 2 37  | 0n 8 | 12 12 | 2 52 | 7 28  | 7 53 | 3 52  | 1 0  | 6 15 | 1 4  | 5 32 | 2 27 | 18 57 | 0 12 | 5 34 | 1 11 | 22 58 | 1 48 | 3 5  | 3 20 | 17 44 | 5 20 | 2 10 |     |      |     |      |     |
| M28  | 2 56 | 1s45  | 1 24 | 12 32 | 2 59 | 7 6   | 7 45 | 3 33  | 1 0  | 6 20 | 1 4  | 5 34 | 2 27 | 18 57 | 0 12 | 5 35 | 1 11 | 22 58 | 1 48 | 3 5  | 3 21 | 17 44 | 5 22 | 2 10 |     |      |     |      |     |
| T 29 | 3 19 | 6 5   | 2 36 | 12 49 | 3 5  | 6 44  | 7 36 | 3 14  | 0 59 | 6 26 | 1 4  | 5 36 | 2 27 | 18 58 | 0 12 | 5 35 | 1 11 | 22 58 | 1 48 | 3 5  | 3 23 | 17 45 | 5 23 | 2 10 |     |      |     |      |     |
| W30  | 3 43 | 10 8  | 3 39 | 13 1  | 3 10 | 6 22  | 7 27 | 2 55  | 0 59 | 6 31 | 1 4  | 5 37 | 2 27 | 18 59 | 0 12 | 5 36 | 1 11 | 22 58 | 1 48 | 3 6  | 3 24 | 17 45 | 5 24 | 2 10 |     |      |     |      |     |
| T 31 | 4n 6 | 13s37 | 4n29 | 13n10 | 3n13 | 6n 0  | 7n16 | 2s36  | 0s59 | 6n37 | 1s 4 | 5n39 | 2n27 | 18n59 | 0s12 | 5n36 | 1n11 | 22s58 | 1s49 | 3n 7 | 3n25 | 17n46 | 5n26 | 2n10 |     |      |     |      |     |

# ASTRODIENST EPHEMERIS for the year 1774

## geocentric

APRIL 1774

00:00 UT

| Day  | Sid.t    | ☉        | ☽     | ♂      | ♀      | ♂     | ♂     | ♂      | ♂     | ♂      | ♂      | ♂      | ♂     | ♂     | ♂     | Day  |
|------|----------|----------|-------|--------|--------|-------|-------|--------|-------|--------|--------|--------|-------|-------|-------|------|
| F 1  | 12 37 36 | 11°19'13 | 5°10  | 26°27  | 27°R50 | 26°29 | 19°39 | 21°R21 | 25°37 | 18°R35 | 24°48  | 22°R 7 | 21°20 | 17°34 | 8°43  | F 1  |
| S 2  | 12 41 33 | 12°18'16 | 19°38 | 26°R27 | 27°22  | 27°16 | 19°53 | 21°16  | 25°40 | 18°33  | 24°49  | 22°5   | 21°17 | 17°41 | 8°47  | S 2  |
| S 3  | 12 45 29 | 13°17'18 | 3°57  | 26°21  | 26°56  | 28° 2 | 20° 8 | 21°12  | 25°43 | 18°32  | 24°49  | 22° 4  | 21°13 | 17°47 | 8°51  | S 3  |
| M 4  | 12 49 26 | 14°16'18 | 18° 6 | 26° 9  | 26°32  | 28°49 | 20°22 | 21° 8  | 25°46 | 18°30  | 24°50  | 22°D 4 | 21°10 | 17°54 | 8°54  | M 4  |
| T 5  | 12 53 23 | 15°15'16 | 2°1   | 25°50  | 26°11  | 29°35 | 20°37 | 21° 4  | 25°48 | 18°29  | 24°51  | 22° 4  | 21° 7 | 18° 1 | 8°58  | T 5  |
| W 6  | 12 57 19 | 16°14'13 | 15°43 | 25°26  | 25°52  | 0°22  | 20°51 | 21° 0  | 25°51 | 18°27  | 24°51  | 22° 6  | 21° 4 | 18° 7 | 9° 2  | W 6  |
| T 7  | 13 1 16  | 17°13'08 | 29°12 | 24°57  | 25°35  | 1° 9  | 21° 6 | 20°56  | 25°54 | 18°26  | 24°52  | 22° 7  | 21° 1 | 18°14 | 9° 5  | T 7  |
| F 8  | 13 5 12  | 18°12'00 | 12°28 | 24°23  | 25°21  | 1°55  | 21°20 | 20°52  | 25°57 | 18°24  | 24°52  | 22° 8  | 20°58 | 18°21 | 9° 9  | F 8  |
| S 9  | 13 9 9   | 19°10'52 | 25°30 | 23°46  | 25° 9  | 2°42  | 21°34 | 20°48  | 26° 0 | 18°23  | 24°53  | 22°R 9 | 20°54 | 18°28 | 9°12  | S 9  |
| S 10 | 13 13 5  | 20° 9'41 | 8°21  | 23° 6  | 24°59  | 3°28  | 21°49 | 20°44  | 26° 3 | 18°22  | 24°53  | 22° 8  | 20°51 | 18°34 | 9°16  | S 10 |
| M 11 | 13 17 2  | 21° 8'28 | 20°59 | 22°23  | 24°52  | 4°14  | 22° 3 | 20°40  | 26° 6 | 18°20  | 24°54  | 22° 5  | 20°48 | 18°41 | 9°20  | M 11 |
| T 12 | 13 20 58 | 22° 7'13 | 3°26  | 21°40  | 24°48  | 5° 1  | 22°18 | 20°37  | 26° 9 | 18°19  | 24°54  | 22° 1  | 20°45 | 18°48 | 9°23  | T 12 |
| W 13 | 13 24 55 | 23° 5'56 | 15°42 | 20°56  | 24°D46 | 5°47  | 22°32 | 20°33  | 26°12 | 18°18  | 24°54  | 21°56  | 20°42 | 18°54 | 9°27  | W 13 |
| T 14 | 13 28 51 | 24° 4'38 | 27°49 | 20°12  | 24°46  | 6°33  | 22°47 | 20°29  | 26°15 | 18°16  | 24°55  | 21°50  | 20°39 | 19° 1 | 9°30  | T 14 |
| F 15 | 13 32 48 | 25° 3'17 | 9°48  | 19°29  | 24°49  | 7°20  | 23° 1 | 20°26  | 26°18 | 18°15  | 24°55  | 21°45  | 20°35 | 19° 8 | 9°34  | F 15 |
| S 16 | 13 36 45 | 26° 1'54 | 21°42 | 18°49  | 24°54  | 8° 6  | 23°16 | 20°22  | 26°21 | 18°14  | 24°55  | 21°40  | 20°32 | 19°15 | 9°37  | S 16 |
| S 17 | 13 40 41 | 27° 0'29 | 3°33  | 18°11  | 25° 1  | 8°52  | 23°30 | 20°19  | 26°24 | 18°13  | 24°56  | 21°36  | 20°29 | 19°21 | 9°41  | S 17 |
| M 18 | 13 44 38 | 27°59'01 | 15°27 | 17°36  | 25°10  | 9°38  | 23°45 | 20°16  | 26°28 | 18°11  | 24°56  | 21°33  | 20°26 | 19°28 | 9°44  | M 18 |
| T 19 | 13 48 34 | 28°57'32 | 27°28 | 17° 4  | 25°22  | 10°24 | 23°59 | 20°13  | 26°31 | 18°10  | 24°56  | 21°D32 | 20°23 | 19°35 | 9°48  | T 19 |
| W 20 | 13 52 31 | 29°56'00 | 9°39  | 16°37  | 25°35  | 11°10 | 24°13 | 20°10  | 26°34 | 18° 9  | 24°56  | 21°33  | 20°19 | 19°42 | 9°51  | W 20 |
| T 21 | 13 56 27 | 0°54'26  | 22° 7 | 16°14  | 25°51  | 11°56 | 24°28 | 20° 7  | 26°37 | 18° 8  | 24°57  | 21°34  | 20°16 | 19°48 | 9°55  | T 21 |
| F 22 | 14 0 24  | 1°52'50  | 4°55  | 15°56  | 26° 8  | 12°42 | 24°42 | 20° 4  | 26°41 | 18° 7  | 24°57  | 21°36  | 20°13 | 19°55 | 9°58  | F 22 |
| S 23 | 14 4 20  | 2°51'12  | 18° 8 | 15°42  | 26°27  | 13°28 | 24°57 | 20° 1  | 26°44 | 18° 6  | 24°57  | 21°R36 | 20°10 | 20° 2 | 10° 2 | S 23 |
| S 24 | 14 8 17  | 3°49'32  | 1°46  | 15°33  | 26°49  | 14°14 | 25°11 | 19°58  | 26°47 | 18° 5  | 24°57  | 21°36  | 20° 7 | 20° 8 | 10° 5 | S 24 |
| M 25 | 14 12 14 | 4°47'50  | 15°51 | 15°D30 | 27°12  | 15° 0 | 25°25 | 19°55  | 26°50 | 18° 4  | 24°57  | 21°34  | 20° 4 | 20°15 | 10° 8 | M 25 |
| T 26 | 14 16 10 | 5°46'06  | 0°19  | 15°31  | 27°36  | 15°46 | 25°40 | 19°53  | 26°54 | 18° 3  | 24°R57 | 21°30  | 20° 0 | 20°22 | 10°12 | T 26 |
| W 27 | 14 20 7  | 6°44'20  | 15° 5 | 15°37  | 28° 3  | 16°32 | 25°54 | 19°50  | 26°57 | 18° 2  | 24°57  | 21°24  | 19°57 | 20°29 | 10°15 | W 27 |
| T 28 | 14 24 3  | 7°42'33  | 0°2   | 15°48  | 28°31  | 17°17 | 26° 8 | 19°48  | 27° 0 | 18° 1  | 24°57  | 21°17  | 19°54 | 20°35 | 10°18 | T 28 |
| F 29 | 14 28 0  | 8°40'44  | 15° 0 | 16° 3  | 29° 0  | 18° 3 | 26°23 | 19°45  | 27° 4 | 18° 0  | 24°57  | 21°10  | 19°51 | 20°42 | 10°22 | F 29 |
| S 30 | 14 31 56 | 9°38'53  | 29°50 | 16°23  | 29°31  | 18°49 | 26°37 | 19°43  | 27° 8 | 17°59  | 24°57  | 21° 4  | 19°48 | 20°49 | 10°25 | S 30 |

| Day  | ☉     | ☽     | ♂    | ♀     | ♂    | ♂    | ♂    | ♂    | ♂    | ♂    | ♂    | ♂    | ♂    | ♂     | ♂    | ♂    |
|------|-------|-------|------|-------|------|------|------|------|------|------|------|------|------|-------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl | lat  | decl | lat  | decl | lat  | decl | lat  | decl  | lat  | lat  |
| F 1  | 4n29  | 16s14 | 5n 1 | 13n15 | 3n15 | 5n38 | 7n 5 | 2s18 | 0s58 | 6n42 | 1s 4 | 5n41 | 2n27 | 19n 0 | 0s12 | 5n37 |
| S 2  | 4 52  | 17 50 | 5 15 | 13 16 | 3 16 | 5 16 | 6 54 | 1 59 | 0 58 | 6 48 | 1 4  | 5 42 | 2 27 | 19 1  | 0 12 | 5 38 |
| S 3  | 5 15  | 18 16 | 5 8  | 13 13 | 3 15 | 4 55 | 6 42 | 1 40 | 0 58 | 6 53 | 1 4  | 5 44 | 2 27 | 19 1  | 0 12 | 5 38 |
| M 4  | 5 38  | 17 34 | 4 43 | 13 6  | 3 13 | 4 35 | 6 29 | 1 21 | 0 57 | 6 59 | 1 4  | 5 46 | 2 26 | 19 2  | 0 12 | 5 39 |
| T 5  | 6 1   | 15 48 | 4 2  | 12 56 | 3 9  | 4 14 | 6 17 | 1 2  | 0 57 | 7 4  | 1 4  | 5 47 | 2 26 | 19 3  | 0 12 | 5 39 |
| W 6  | 6 24  | 13 10 | 3 7  | 12 42 | 3 4  | 3 55 | 6 4  | 0 43 | 0 57 | 7 10 | 1 4  | 5 49 | 2 26 | 19 3  | 0 12 | 5 40 |
| T 7  | 6 46  | 9 51  | 2 3  | 12 25 | 2 57 | 3 36 | 5 51 | 0 24 | 0 56 | 7 15 | 1 4  | 5 50 | 2 26 | 19 4  | 0 12 | 5 40 |
| F 8  | 7 9   | 6 5   | 0 53 | 12 4  | 2 48 | 3 18 | 5 37 | 0 6  | 0 56 | 7 21 | 1 4  | 5 52 | 2 26 | 19 5  | 0 12 | 5 41 |
| S 9  | 7 31  | 2 4   | 0s18 | 11 41 | 2 38 | 3 1  | 5 24 | 0n13 | 0 56 | 7 26 | 1 4  | 5 53 | 2 26 | 19 5  | 0 12 | 5 41 |
| S 10 | 7 53  | 1n58  | 1 28 | 11 16 | 2 27 | 2 45 | 5 10 | 0 32 | 0 55 | 7 31 | 1 4  | 5 55 | 2 26 | 19 6  | 0 12 | 5 42 |
| M 11 | 8 15  | 5 52  | 2 31 | 10 48 | 2 14 | 2 30 | 4 57 | 0 51 | 0 55 | 7 37 | 1 4  | 5 56 | 2 26 | 19 7  | 0 12 | 5 42 |
| T 12 | 8 37  | 9 26  | 3 27 | 10 19 | 2 1  | 2 16 | 4 43 | 1 10 | 0 55 | 7 42 | 1 4  | 5 58 | 2 26 | 19 7  | 0 12 | 5 43 |
| W 13 | 8 59  | 12 33 | 4 12 | 9 49  | 1 46 | 2 2  | 4 29 | 1 28 | 0 54 | 7 48 | 1 4  | 5 59 | 2 26 | 19 8  | 0 12 | 5 43 |
| T 14 | 9 21  | 15 4  | 4 45 | 9 18  | 1 30 | 1 50 | 4 16 | 1 47 | 0 54 | 7 53 | 1 4  | 6 0  | 2 26 | 19 9  | 0 12 | 5 44 |
| F 15 | 9 42  | 16 55 | 5 5  | 8 47  | 1 14 | 1 39 | 4 3  | 2 6  | 0 53 | 7 58 | 1 4  | 6 1  | 2 25 | 19 10 | 0 12 | 5 44 |
| S 16 | 10 4  | 18 2  | 5 11 | 8 16  | 0 58 | 1 29 | 3 49 | 2 24 | 0 53 | 8 4  | 1 4  | 6 3  | 2 25 | 19 10 | 0 11 | 5 45 |
| S 17 | 10 25 | 18 21 | 5 5  | 7 46  | 0 41 | 1 20 | 3 36 | 2 43 | 0 53 | 8 9  | 1 4  | 6 4  | 2 25 | 19 11 | 0 11 | 5 45 |
| M 18 | 10 46 | 17 51 | 4 45 | 7 17  | 0 24 | 1 11 | 3 23 | 3 1  | 0 52 | 8 15 | 1 4  | 6 5  | 2 25 | 19 12 | 0 11 | 5 46 |
| T 19 | 11 7  | 16 34 | 4 12 | 6 49  | 0 7  | 1 4  | 3 11 | 3 20 | 0 52 | 8 20 | 1 4  | 6 6  | 2 25 | 19 13 | 0 11 | 5 46 |
| W 20 | 11 28 | 14 30 | 3 28 | 6 24  | 0s 9 | 0 58 | 2 58 | 3 38 | 0 51 | 8 25 | 1 3  | 6 7  | 2 25 | 19 13 | 0 11 | 5 47 |
| T 21 | 11 48 | 11 44 | 2 33 | 6 0   | 0 26 | 0 53 | 2 46 | 3 57 | 0 51 | 8 30 | 1 3  | 6 8  | 2 25 | 19 14 | 0 11 | 5 47 |
| F 22 | 12 8  | 8 20  | 1 29 | 5 38  | 0 41 | 0 49 | 2 34 | 4 15 | 0 51 | 8 36 | 1 3  | 6 9  | 2 25 | 19 15 | 0 11 | 5 48 |
| S 23 | 12 29 | 4 25  | 0 19 | 5 19  | 0 56 | 0 46 | 2 22 | 4 33 | 0 50 | 8 41 | 1 3  | 6 10 | 2 24 | 19 16 | 0 11 | 5 48 |
| S 24 | 12 48 | 0 8   | 0n55 | 5 2   | 1 11 | 0 43 | 2 10 | 4 51 | 0 50 | 8 46 | 1 3  | 6 11 | 2 24 | 19 17 | 0 11 | 5 48 |
| M 25 | 13 8  | 4s17  | 2 7  | 4 48  | 1 25 | 0 42 | 1 59 | 5 10 | 0 49 | 8 51 | 1 3  | 6 12 | 2 24 | 19 17 | 0 11 | 5 49 |
| T 26 | 13 28 | 8 34  | 3 14 | 4 37  | 1 38 | 0 42 | 1 48 | 5 28 | 0 49 | 8 57 | 1 3  | 6 13 | 2 24 | 19 18 | 0 11 | 5 49 |
| W 27 | 13 47 | 12 25 | 4 9  | 4 28  | 1 50 | 0 42 | 1 37 | 5 46 | 0 48 | 9 2  | 1 3  | 6 14 | 2 24 | 19 19 | 0 11 | 5 50 |
| T 28 | 14 6  | 15 30 | 4 47 | 4 22  | 2 1  | 0 43 | 1 26 | 6 4  | 0 48 | 9 7  | 1 3  | 6 15 | 2 24 | 19 20 | 0 11 | 5 50 |
| F 29 | 14 25 | 17 33 | 5 6  | 4 18  | 2 12 | 0 46 | 1 16 | 6 21 | 0 47 | 9 12 | 1 3  | 6 16 | 2 24 | 19 20 | 0 11 | 5 50 |
| S 30 | 14n43 | 18s24 | 5n 4 | 4n16  | 2s21 | 0n49 | 1n 6 | 6n39 | 0s47 | 9n17 | 1s 3 | 6n16 | 2n23 | 19n21 | 0s11 | 5n51 |

Julian Day Number = 2369090.5, Delta T = 21.80 sec

Ecliptic obliquity = 23°27'58, Nutation = - 0°00'03, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 21°35'18, Lahiri = 20°42'19Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1774

## geocentric

MAY 1774

00:00 UT

| Day  | Sid.t    | ☉         | ☽      | ♂     | ♀      | ♂     | ♂     | ♂      | ♂     | ♂      | ♂      | ♂      | ♂     | ♂       | ♂      | Day  |
|------|----------|-----------|--------|-------|--------|-------|-------|--------|-------|--------|--------|--------|-------|---------|--------|------|
| S 1  | 14 35 53 | 10♈37'01  | 14♈26  | 16♈47 | 0♈ 3   | 19♈34 | 26♈51 | 19♈R41 | 27♈10 | 17♈R58 | 24♈R57 | 20♈R59 | 19♈44 | 20♈II56 | 10♈Y28 | S 1  |
| M 2  | 14 39 49 | 11°35'08  | 28°42  | 17°16 | 0°37   | 20°20 | 27° 5 | 19♈39  | 27°14 | 17♈57  | 24♈56  | 20♈57  | 19°41 | 21° 2   | 10°31  | M 2  |
| T 3  | 14 43 46 | 12°33'13  | 12°37  | 17°49 | 1°12   | 21° 5 | 27°19 | 19°37  | 27°17 | 17°56  | 24°56  | 20°D56 | 19°38 | 21° 9   | 10°35  | T 3  |
| W 4  | 14 47 43 | 13°31'16  | 26°12  | 18°26 | 1°49   | 21°51 | 27°34 | 19°35  | 27°21 | 17°56  | 24°56  | 20°56  | 19°35 | 21°16   | 10°38  | W 4  |
| T 5  | 14 51 39 | 14°29'19  | 9♈27   | 19° 7 | 2°26   | 22°36 | 27°48 | 19°34  | 27°24 | 17°55  | 24°56  | 20°57  | 19°32 | 21°22   | 10°41  | T 5  |
| F 6  | 14 55 36 | 15°27'20  | 22°25  | 19°51 | 3° 5   | 23°21 | 28° 2 | 19°32  | 27°28 | 17°54  | 24°55  | 20°R58 | 19°29 | 21°29   | 10°44  | F 6  |
| S 7  | 14 59 32 | 16°25'19  | 5♈ 9   | 20°39 | 3°45   | 24° 7 | 28°16 | 19°30  | 27°31 | 17°53  | 24°55  | 20°57  | 19°25 | 21°36   | 10°47  | S 7  |
| S 8  | 15 3 29  | 17°23'17  | 17°40  | 21°30 | 4°25   | 24°52 | 28°30 | 19°29  | 27°35 | 17°53  | 24°55  | 20°54  | 19°22 | 21°43   | 10°50  | S 8  |
| M 9  | 15 7 25  | 18°21'14  | 0♈ 2   | 22°25 | 5° 7   | 25°37 | 28°44 | 19°27  | 27°38 | 17°52  | 24°54  | 20°48  | 19°19 | 21°49   | 10°53  | M 9  |
| T 10 | 15 11 22 | 19°19'09  | 12°15  | 23°23 | 5°50   | 26°22 | 28°58 | 19°26  | 27°41 | 17°51  | 24°54  | 20°40  | 19°16 | 21°56   | 10°56  | T 10 |
| W11  | 15 15 18 | 20°17'03  | 24°21  | 24°23 | 6°34   | 27° 7 | 29°12 | 19°25  | 27°45 | 17°51  | 24°54  | 20°29  | 19°13 | 22° 3   | 10°59  | W11  |
| T 12 | 15 19 15 | 21°14'56  | 6♈II21 | 25°27 | 7°19   | 27°53 | 29°26 | 19°24  | 27°48 | 17°50  | 24°53  | 20°18  | 19°10 | 22° 9   | 11° 2  | T 12 |
| F 13 | 15 23 12 | 22°12'46  | 18°16  | 26°34 | 8° 4   | 28°38 | 29°40 | 19°23  | 27°52 | 17°50  | 24°53  | 20° 6  | 19° 6 | 22°16   | 11° 5  | F 13 |
| S 14 | 15 27 8  | 23°10'36  | 0♈ 8   | 27°43 | 8°51   | 29°22 | 29°53 | 19°22  | 27°55 | 17°49  | 24°52  | 19°56  | 19° 3 | 22°23   | 11° 8  | S 14 |
| S 15 | 15 31 5  | 24° 8'24  | 12° 0  | 28°56 | 9°38   | 0♈ 7  | 0♈ 7  | 19°21  | 27°59 | 17°49  | 24°52  | 19°47  | 19° 0 | 22°30   | 11°11  | S 15 |
| M16  | 15 35 1  | 25° 6'10  | 23°53  | 0♈10  | 10°26  | 0°52  | 0°21  | 19°21  | 28° 2 | 17°48  | 24°51  | 19°40  | 18°57 | 22°36   | 11°14  | M16  |
| T 17 | 15 38 58 | 26° 3'54  | 5♈52   | 1°28  | 11°15  | 1°37  | 0°35  | 19°20  | 28° 6 | 17°48  | 24°51  | 19°36  | 18°54 | 22°43   | 11°17  | T 17 |
| W18  | 15 42 54 | 27° 1'37  | 18° 1  | 2°48  | 12° 4  | 2°22  | 0°48  | 19°20  | 28° 9 | 17°48  | 24°50  | 19°34  | 18°50 | 22°50   | 11°20  | W18  |
| T 19 | 15 46 51 | 27°59'18  | 0♈25   | 4°10  | 12°54  | 3° 6  | 1° 2  | 19°19  | 28°13 | 17°47  | 24°50  | 19°D33 | 18°47 | 22°57   | 11°22  | T 19 |
| F 20 | 15 50 47 | 28°56'58  | 13° 9  | 5°35  | 13°45  | 3°51  | 1°16  | 19°19  | 28°16 | 17°47  | 24°49  | 19°R34 | 18°44 | 23° 3   | 11°25  | F 20 |
| S 21 | 15 54 44 | 29°54'36  | 26°18  | 7° 3  | 14°36  | 4°36  | 1°29  | 19°19  | 28°20 | 17°47  | 24°48  | 19°34  | 18°41 | 23°10   | 11°28  | S 21 |
| S 22 | 15 58 41 | 0♈52'13   | 9♈54   | 8°33  | 15°28  | 5°20  | 1°43  | 19°D19 | 28°23 | 17°46  | 24°48  | 19°32  | 18°38 | 23°17   | 11°30  | S 22 |
| M23  | 16 2 37  | 1°49'48   | 23°59  | 10° 5 | 16°21  | 6° 5  | 1°56  | 19°19  | 28°27 | 17°46  | 24°47  | 19°28  | 18°35 | 23°23   | 11°33  | M23  |
| T 24 | 16 6 34  | 2°47'22   | 8♈33   | 11°40 | 17°14  | 6°49  | 2° 9  | 19°19  | 28°30 | 17°46  | 24°46  | 19°22  | 18°31 | 23°30   | 11°36  | T 24 |
| W25  | 16 10 30 | 3°44'54   | 23°30  | 13°17 | 18° 8  | 7°33  | 2°23  | 19°20  | 28°34 | 17°46  | 24°45  | 19°14  | 18°28 | 23°37   | 11°38  | W25  |
| T 26 | 16 14 27 | 4°42'26   | 8♈42   | 14°56 | 19° 2  | 8°18  | 2°36  | 19°20  | 28°37 | 17°46  | 24°45  | 19° 4  | 18°25 | 23°44   | 11°41  | T 26 |
| F 27 | 16 18 23 | 5°39'56   | 23°58  | 16°38 | 19°57  | 9° 2  | 2°49  | 19°20  | 28°41 | 17°46  | 24°44  | 18°53  | 18°22 | 23°50   | 11°43  | F 27 |
| S 28 | 16 22 20 | 6°37'25   | 9♈ 7   | 18°22 | 20°53  | 9°46  | 3° 2  | 19°21  | 28°44 | 17°46  | 24°43  | 18°44  | 18°19 | 23°57   | 11°45  | S 28 |
| S 29 | 16 26 16 | 7°34'54   | 24° 1  | 20° 9 | 21°48  | 10°30 | 3°16  | 19°22  | 28°48 | 17°D46 | 24°42  | 18°36  | 18°16 | 24° 4   | 11°48  | S 29 |
| M30  | 16 30 13 | 8°32'22   | 8♈31   | 21°58 | 22°45  | 11°14 | 3°29  | 19°23  | 28°51 | 17°46  | 24°41  | 18°31  | 18°12 | 24°10   | 11°50  | M30  |
| T 31 | 16 34 10 | 9♈II29'48 | 22°34  | 23♈49 | 23♈Y41 | 11♈58 | 3♈42  | 19♈23  | 28♈55 | 17♈46  | 24♈40  | 18♈29  | 18♈ 9 | 24♈II17 | 11♈Y52 | T 31 |

| Day  | ☉     | ☽     | ♂    | ♀     | ♂    | ♂    | ♂    | ♂     | ♂    | ♂     | ♂    | ♂    | ♂    | ♂     | ♂    | ♂    |
|------|-------|-------|------|-------|------|------|------|-------|------|-------|------|------|------|-------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | lat  |
| S 1  | 15n 1 | 18s 0 | 4n42 | 4n18  | 2s30 | 0n52 | 0n56 | 6n57  | 0s46 | 9n22  | 1s 3 | 6n17 | 2n23 | 19n22 | 0s11 | 5n51 |
| M 2  | 15 20 | 16 28 | 4 4  | 4 21  | 2 38 | 0 57 | 0 46 | 7 15  | 0 46 | 9 28  | 1 3  | 6 18 | 2 23 | 19 23 | 0 11 | 5 51 |
| T 3  | 15 37 | 13 59 | 3 11 | 4 27  | 2 45 | 1 2  | 0 37 | 7 32  | 0 45 | 9 33  | 1 3  | 6 18 | 2 23 | 19 24 | 0 11 | 5 51 |
| W 4  | 15 55 | 10 46 | 2 9  | 4 35  | 2 52 | 1 9  | 0 28 | 7 50  | 0 45 | 9 38  | 1 3  | 6 19 | 2 23 | 19 24 | 0 11 | 5 52 |
| T 5  | 16 12 | 7 5   | 1 2  | 4 46  | 2 57 | 1 15 | 0 19 | 8 7   | 0 44 | 9 43  | 1 4  | 6 19 | 2 23 | 19 25 | 0 11 | 5 52 |
| F 6  | 16 29 | 3 8   | 0s 8 | 4 58  | 3 2  | 1 23 | 0 10 | 8 24  | 0 44 | 9 48  | 1 4  | 6 20 | 2 22 | 19 26 | 0 11 | 5 52 |
| S 7  | 16 46 | 0n54  | 1 15 | 5 12  | 3 6  | 1 31 | 0 2  | 8 41  | 0 43 | 9 53  | 1 4  | 6 20 | 2 22 | 19 27 | 0 11 | 5 53 |
| S 8  | 17 2  | 4 49  | 2 18 | 5 29  | 3 9  | 1 40 | 0s 6 | 8 58  | 0 43 | 9 58  | 1 4  | 6 21 | 2 22 | 19 28 | 0 11 | 5 53 |
| M 9  | 17 19 | 8 29  | 3 13 | 5 47  | 3 11 | 1 49 | 0 14 | 9 15  | 0 42 | 10 3  | 1 4  | 6 21 | 2 22 | 19 28 | 0 11 | 5 53 |
| T 10 | 17 35 | 11 45 | 3 59 | 6 6   | 3 13 | 1 59 | 0 22 | 9 32  | 0 42 | 10 8  | 1 4  | 6 21 | 2 22 | 19 29 | 0 11 | 5 53 |
| W11  | 17 50 | 14 28 | 4 33 | 6 28  | 3 14 | 2 10 | 0 29 | 9 49  | 0 41 | 10 13 | 1 4  | 6 22 | 2 22 | 19 30 | 0 11 | 5 53 |
| T 12 | 18 6  | 16 34 | 4 54 | 6 51  | 3 14 | 2 21 | 0 36 | 10 6  | 0 41 | 10 17 | 1 4  | 6 22 | 2 21 | 19 31 | 0 11 | 5 54 |
| F 13 | 18 21 | 17 55 | 5 3  | 7 15  | 3 13 | 2 33 | 0 43 | 10 22 | 0 40 | 10 22 | 1 4  | 6 22 | 2 21 | 19 31 | 0 11 | 5 54 |
| S 14 | 18 35 | 18 30 | 4 58 | 7 41  | 3 12 | 2 45 | 0 50 | 10 39 | 0 40 | 10 27 | 1 4  | 6 22 | 2 21 | 19 32 | 0 11 | 5 54 |
| S 15 | 18 50 | 18 16 | 4 41 | 8 8   | 3 10 | 2 58 | 0 56 | 10 55 | 0 39 | 10 32 | 1 4  | 6 23 | 2 21 | 19 33 | 0 11 | 5 54 |
| M16  | 19 4  | 17 14 | 4 11 | 8 37  | 3 8  | 3 11 | 1 2  | 11 17 | 0 39 | 10 37 | 1 4  | 6 23 | 2 21 | 19 34 | 0 11 | 5 54 |
| T 17 | 19 17 | 15 26 | 3 30 | 9 6   | 3 5  | 3 24 | 1 8  | 11 27 | 0 38 | 10 41 | 1 4  | 6 23 | 2 20 | 19 35 | 0 11 | 5 54 |
| W18  | 19 31 | 12 55 | 2 39 | 9 37  | 3 1  | 3 38 | 1 14 | 11 43 | 0 38 | 10 46 | 1 4  | 6 23 | 2 20 | 19 35 | 0 11 | 5 55 |
| T 19 | 19 44 | 9 47  | 1 40 | 10 9  | 2 57 | 3 53 | 1 20 | 11 59 | 0 37 | 10 51 | 1 4  | 6 23 | 2 20 | 19 36 | 0 11 | 5 55 |
| F 20 | 19 57 | 6 6   | 0 34 | 10 42 | 2 52 | 4 7  | 1 25 | 12 15 | 0 36 | 10 56 | 1 4  | 6 23 | 2 20 | 19 37 | 0 11 | 5 55 |
| S 21 | 20 9  | 2 1   | 0n36 | 11 15 | 2 46 | 4 22 | 1 30 | 12 30 | 0 36 | 11 0  | 1 4  | 6 22 | 2 20 | 19 38 | 0 11 | 5 55 |
| S 22 | 20 21 | 2s18  | 1 46 | 11 50 | 2 40 | 4 38 | 1 35 | 12 46 | 0 35 | 11 5  | 1 4  | 6 22 | 2 19 | 19 39 | 0 11 | 5 55 |
| M23  | 20 33 | 6 39  | 2 52 | 12 25 | 2 34 | 4 54 | 1 40 | 13 1  | 0 35 | 11 9  | 1 4  | 6 22 | 2 19 | 19 39 | 0 11 | 5 55 |
| T 24 | 20 44 | 10 45 | 3 49 | 13 1  | 2 27 | 5 10 | 1 45 | 13 16 | 0 34 | 11 14 | 1 4  | 6 22 | 2 19 | 19 40 | 0 11 | 5 55 |
| W25  | 20 55 | 14 17 | 4 32 | 13 37 | 2 19 | 5 26 | 1 49 | 13 31 | 0 33 | 11 18 | 1 4  | 6 21 | 2 19 | 19 41 | 0 11 | 5 55 |
| T 26 | 21 6  | 16 54 | 4 56 | 14 14 | 2 11 | 5 43 | 1 53 | 13 46 | 0 33 | 11 23 | 1 4  | 6 21 | 2 19 | 19 42 | 0 11 | 5 55 |
| F 27 | 21 16 | 18 20 | 5 0  | 14 52 | 2 3  | 6 0  | 1 57 | 14 1  | 0 32 | 11 27 | 1 4  | 6 21 | 2 18 | 19 43 | 0 11 | 5 55 |
| S 28 | 21 26 | 18 27 | 4 43 | 15 29 | 1 54 | 6 17 | 2 1  | 14 15 | 0 32 | 11 32 | 1 4  | 6 20 | 2 18 | 19 43 | 0 11 | 5 55 |
| S 29 | 21 36 | 17 17 | 4 6  | 16 7  | 1 45 | 6 35 | 2 5  | 14 30 | 0 31 | 11 36 | 1 4  | 6 20 | 2 18 | 19 44 | 0 11 | 5 55 |
| M30  | 21 45 | 15 1  | 3 15 | 16 44 | 1 35 | 6 52 | 2 8  | 14 44 | 0 30 | 11 41 | 1 4  | 6 19 | 2 18 | 19 45 | 0 11 | 5 55 |
| T 31 | 21n54 | 11s55 | 2n12 | 17n22 | 1s25 | 7n10 | 2s11 | 14n58 | 0s30 | 11n45 | 1s 5 | 6n19 | 2n18 | 19n46 | 0s11 | 5n55 |

Julian Day Number = 2369120.5, Delta T = 21.81 sec  
 Ecliptic obliquity = 23°27'58, Nutation = - 0°00'04, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 21°35'22, Lahiri = 20°42'23Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1774  
geocentric

JUNE 1774

00:00 UT

| Day  | Sid.t    | ☉                      | ☽                   | ♂                   | ♀                   | ♂                   | ♂                  | ♂                   | ♂                   | ♂                   | ♂                    | ♂                    | ♂                   | ♂                   | ♂                   | Day  |
|------|----------|------------------------|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|---------------------|---------------------|----------------------|----------------------|---------------------|---------------------|---------------------|------|
| W 1  | 16 38 6  | 10 <sup>II</sup> 27'15 | 6 <sup>II</sup> 11  | 25 <sup>II</sup> 42 | 24 <sup>II</sup> 39 | 12 <sup>II</sup> 42 | 3 <sup>II</sup> 55 | 19 <sup>II</sup> 24 | 28 <sup>II</sup> 58 | 17 <sup>II</sup> 46 | 24 <sup>II</sup> R39 | 18 <sup>II</sup> R28 | 18 <sup>II</sup> 6  | 24 <sup>II</sup> 24 | 11 <sup>II</sup> 55 | W 1  |
| T 2  | 16 42 3  | 11°24'40               | 19°23               | 27°38               | 25°36               | 13°26               | 4° 8               | 19°26               | 29° 2               | 17°46               | 24 <sup>II</sup> 38  | 18 <sup>II</sup> 28  | 18° 3               | 24°31               | 11°57               | T 2  |
| F 3  | 16 45 59 | 12°22'05               | 2°14                | 29°36               | 26°34               | 14°10               | 4°20               | 19°27               | 29° 5               | 17°46               | 24°37                | 18°28                | 18° 0               | 24°37               | 11°59               | F 3  |
| S 4  | 16 49 56 | 13°19'29               | 14°48               | 1 <sup>II</sup> 36  | 27°33               | 14°54               | 4°33               | 19°28               | 29° 9               | 17°46               | 24°36                | 18°26                | 17°56               | 24°44               | 12° 1               | S 4  |
| S 5  | 16 53 52 | 14°16'53               | 27° 9               | 3°38                | 28°31               | 15°38               | 4°46               | 19°29               | 29°12               | 17°46               | 24°35                | 18°21                | 17°53               | 24°51               | 12° 3               | S 5  |
| M 6  | 16 57 49 | 15°14'16               | 9 <sup>II</sup> 19  | 5°42                | 29°30               | 16°21               | 4°58               | 19°31               | 29°16               | 17°47               | 24°34                | 18°14                | 17°50               | 24°58               | 12° 5               | M 6  |
| T 7  | 17 1 45  | 16°11'38               | 21°22               | 7°48                | 0 <sup>II</sup> 30  | 17° 5               | 5°11               | 19°33               | 29°19               | 17°47               | 24°33                | 18° 4                | 17°47               | 25° 4               | 12° 7               | T 7  |
| W 8  | 17 5 42  | 17° 9'00               | 3 <sup>II</sup> 20  | 9°55                | 1°30                | 17°49               | 5°23               | 19°34               | 29°22               | 17°47               | 24°32                | 17°51                | 17°44               | 25°11               | 12° 9               | W 8  |
| T 9  | 17 9 39  | 18° 6'21               | 15°14               | 12° 4               | 2°30                | 18°32               | 5°36               | 19°36               | 29°26               | 17°47               | 24°31                | 17°38                | 17°41               | 25°18               | 12°11               | T 9  |
| F 10 | 17 13 35 | 19° 3'42               | 27° 6               | 14°13               | 3°30                | 19°16               | 5°48               | 19°38               | 29°29               | 17°48               | 24°30                | 17°24                | 17°37               | 25°24               | 12°13               | F 10 |
| S 11 | 17 17 32 | 20° 1'02               | 8 <sup>II</sup> 58  | 16°24               | 4°31                | 19°59               | 6° 0               | 19°40               | 29°32               | 17°48               | 24°29                | 17°10                | 17°34               | 25°31               | 12°15               | S 11 |
| S 12 | 17 21 28 | 20°58'21               | 20°50               | 18°36               | 5°32                | 20°42               | 6°13               | 19°42               | 29°36               | 17°49               | 24°28                | 16°59                | 17°31               | 25°38               | 12°17               | S 12 |
| M13  | 17 25 25 | 21°55'39               | 2 <sup>II</sup> 46  | 20°47               | 6°33                | 21°26               | 6°25               | 19°44               | 29°39               | 17°49               | 24°27                | 16°50                | 17°28               | 25°45               | 12°18               | M13  |
| T 14 | 17 29 21 | 22°52'56               | 14°47               | 22°59               | 7°35                | 22° 9               | 6°37               | 19°46               | 29°42               | 17°50               | 24°26                | 16°45                | 17°25               | 25°51               | 12°20               | T 14 |
| W15  | 17 33 18 | 23°50'13               | 26°58               | 25°11               | 8°37                | 22°52               | 6°49               | 19°49               | 29°46               | 17°50               | 24°24                | 16°41                | 17°22               | 25°58               | 12°22               | W15  |
| T 16 | 17 37 14 | 24°47'29               | 9 <sup>II</sup> 22  | 27°22               | 9°39                | 23°35               | 7° 1               | 19°51               | 29°49               | 17°51               | 24°23                | 16°40                | 17°18               | 26° 5               | 12°23               | T 16 |
| F 17 | 17 41 11 | 25°44'44               | 22° 4               | 29°33               | 10°42               | 24°18               | 7°12               | 19°54               | 29°52               | 17°51               | 24°22                | 16°40                | 17°15               | 26°12               | 12°25               | F 17 |
| S 18 | 17 45 8  | 26°41'59               | 5 <sup>II</sup> 7   | 1 <sup>II</sup> 42  | 11°44               | 25° 1               | 7°24               | 19°57               | 29°55               | 17°52               | 24°21                | 16°40                | 17°12               | 26°18               | 12°26               | S 18 |
| S 19 | 17 49 4  | 27°39'13               | 18°37               | 3°51                | 12°47               | 25°44               | 7°36               | 19°59               | 29°59               | 17°53               | 24°20                | 16°39                | 17° 9               | 26°25               | 12°28               | S 19 |
| M20  | 17 53 1  | 28°36'26               | 2 <sup>II</sup> 36  | 5°58                | 13°50               | 26°27               | 7°47               | 20° 2               | 0 <sup>II</sup> 2   | 17°53               | 24°18                | 16°35                | 17° 6               | 26°32               | 12°29               | M20  |
| T 21 | 17 56 57 | 29°33'38               | 17° 3               | 8° 4                | 14°54               | 27°10               | 7°59               | 20° 5               | 0° 5                | 17°54               | 24°17                | 16°29                | 17° 2               | 26°38               | 12°30               | T 21 |
| W22  | 18 0 54  | 0 <sup>II</sup> 30'50  | 1 <sup>II</sup> 55  | 10° 8               | 15°57               | 27°52               | 8°10               | 20° 8               | 0° 8                | 17°55               | 24°16                | 16°21                | 16°59               | 26°45               | 12°32               | W22  |
| T 23 | 18 4 50  | 1°28'02                | 17° 6               | 12°10               | 17° 1               | 28°35               | 8°21               | 20°11               | 0°11                | 17°55               | 24°15                | 16°12                | 16°56               | 26°52               | 12°33               | T 23 |
| F 24 | 18 8 47  | 2°25'13                | 2 <sup>II</sup> 36  | 14°11               | 18° 5               | 29°18               | 8°33               | 20°14               | 0°14                | 17°56               | 24°13                | 16° 1                | 16°53               | 26°59               | 12°34               | F 24 |
| S 25 | 18 12 43 | 3°22'24                | 17°23               | 16° 9               | 19° 9               | 0 <sup>II</sup> 0   | 8°44               | 20°18               | 0°17                | 17°57               | 24°12                | 15°52                | 16°50               | 27° 5               | 12°35               | S 25 |
| S 26 | 18 16 40 | 4°19'35                | 2 <sup>II</sup> 46  | 18° 6               | 20°14               | 0°43                | 8°55               | 20°21               | 0°20                | 17°58               | 24°11                | 15°45                | 16°47               | 27°12               | 12°36               | S 26 |
| M27  | 18 20 37 | 5°16'46                | 17°26               | 20° 0               | 21°18               | 1°25                | 9° 6               | 20°25               | 0°23                | 17°59               | 24° 9                | 15°39                | 16°43               | 27°19               | 12°37               | M27  |
| T 28 | 18 24 33 | 6°13'57                | 1 <sup>II</sup> 39  | 21°53               | 22°23               | 2° 8                | 9°16               | 20°28               | 0°26                | 18° 0               | 24° 8                | 15°37                | 16°40               | 27°25               | 12°38               | T 28 |
| W29  | 18 28 30 | 7°11'08                | 15°24               | 23°43               | 23°28               | 2°50                | 9°27               | 20°32               | 0°29                | 18° 1               | 24° 7                | 15°D36               | 16°37               | 27°32               | 12°39               | W29  |
| T 30 | 18 32 26 | 8 <sup>II</sup> 8'19   | 28 <sup>II</sup> 41 | 25°32               | 24°33               | 3 <sup>II</sup> 32  | 9°38               | 20°36               | 0 <sup>II</sup> 32  | 18 <sup>II</sup> 2  | 24 <sup>II</sup> 5   | 15 <sup>II</sup> 37  | 16 <sup>II</sup> 34 | 27 <sup>II</sup> 39 | 12°40               | T 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 |
| W 1  | 22n 2 | 8s15  | 1n 5 | 17n59 | 1s15 | 7n28  | 2s14 | 15n12 | 0s29 | 11n49 | 1s 5 | 6n18 | 2n17 | 19n46 | 0s11 | 5n55 | 1n10 | 23s 8 | 1s57 | 4n34 | 4n43 | 18n14 | 6n42 | 2n 9 |     |
| T 2  | 22 10 | 4 17  | 0s 5 | 18 36 | 1 5  | 7 47  | 2 17 | 15 26 | 0 29 | 11 54 | 1 5  | 6 18 | 2 17 | 19 47 | 0 11 | 5 55 | 1 10 | 23 9  | 1 57 | 4 34 | 4 44 | 18 15 | 6 43 | 2 9  |     |
| F 3  | 22 18 | 0 13  | 1 12 | 19 12 | 0 54 | 8 5   | 2 20 | 15 40 | 0 28 | 11 58 | 1 5  | 6 17 | 2 17 | 19 48 | 0 11 | 5 55 | 1 10 | 23 9  | 1 58 | 4 34 | 4 45 | 18 15 | 6 44 | 2 9  |     |
| S 4  | 22 25 | 3n46  | 2 14 | 19 48 | 0 43 | 8 23  | 2 23 | 15 53 | 0 27 | 12 2  | 1 5  | 6 16 | 2 17 | 19 49 | 0 11 | 5 55 | 1 10 | 23 9  | 1 58 | 4 35 | 4 46 | 18 15 | 6 44 | 2 9  |     |
| S 5  | 22 32 | 7 32  | 3 9  | 20 22 | 0 32 | 8 42  | 2 25 | 16 7  | 0 27 | 12 6  | 1 5  | 6 16 | 2 17 | 19 49 | 0 11 | 5 55 | 1 10 | 23 10 | 1 58 | 4 37 | 4 48 | 18 16 | 6 45 | 2 9  |     |
| M 6  | 22 39 | 10 55 | 3 54 | 20 56 | 0 21 | 9 1   | 2 27 | 16 20 | 0 26 | 12 10 | 1 5  | 6 15 | 2 16 | 19 50 | 0 11 | 5 54 | 1 10 | 23 10 | 1 58 | 4 40 | 4 49 | 18 16 | 6 46 | 2 9  |     |
| T 7  | 22 45 | 13 48 | 4 28 | 21 28 | 0 10 | 9 20  | 2 29 | 16 33 | 0 25 | 12 15 | 1 5  | 6 14 | 2 16 | 19 51 | 0 11 | 5 54 | 1 10 | 23 10 | 1 58 | 4 43 | 4 50 | 18 16 | 6 47 | 2 9  |     |
| W 8  | 22 51 | 16 6  | 4 50 | 21 58 | 0n 0 | 9 38  | 2 31 | 16 46 | 0 25 | 12 19 | 1 5  | 6 13 | 2 16 | 19 52 | 0 11 | 5 54 | 1 10 | 23 11 | 1 58 | 4 48 | 4 51 | 18 17 | 6 48 | 2 10 |     |
| T 9  | 22 56 | 17 41 | 4 59 | 22 27 | 0 11 | 9 57  | 2 33 | 16 59 | 0 24 | 12 23 | 1 5  | 6 12 | 2 16 | 19 52 | 0 11 | 5 54 | 1 10 | 23 11 | 1 58 | 4 54 | 4 53 | 18 17 | 6 49 | 2 10 |     |
| F 10 | 23 1  | 18 31 | 4 55 | 22 53 | 0 22 | 10 16 | 2 35 | 17 11 | 0 23 | 12 27 | 1 5  | 6 11 | 2 16 | 19 53 | 0 11 | 5 54 | 1 10 | 23 11 | 1 58 | 4 59 | 4 54 | 18 17 | 6 49 | 2 10 |     |
| S 11 | 23 5  | 18 32 | 4 39 | 23 18 | 0 32 | 10 35 | 2 36 | 17 23 | 0 23 | 12 31 | 1 5  | 6 10 | 2 15 | 19 54 | 0 11 | 5 54 | 1 10 | 23 11 | 1 59 | 5 4  | 4 55 | 18 18 | 6 50 | 2 10 |     |
| S 12 | 23 9  | 17 44 | 4 10 | 23 40 | 0 42 | 10 54 | 2 38 | 17 36 | 0 22 | 12 35 | 1 5  | 6 9  | 2 15 | 19 54 | 0 11 | 5 53 | 1 10 | 23 12 | 1 59 | 5 9  | 4 56 | 18 18 | 6 51 | 2 10 |     |
| M13  | 23 13 | 16 10 | 3 30 | 24 0  | 0 51 | 11 13 | 2 39 | 17 48 | 0 22 | 12 38 | 1 6  | 6 8  | 2 15 | 19 55 | 0 11 | 5 53 | 1 10 | 23 12 | 1 59 | 5 12 | 4 57 | 18 18 | 6 51 | 2 10 |     |
| T 14 | 23 16 | 13 52 | 2 40 | 24 17 | 1 0  | 11 32 | 2 40 | 17 59 | 0 21 | 12 42 | 1 6  | 6 7  | 2 15 | 19 56 | 0 11 | 5 53 | 1 10 | 23 12 | 1 59 | 5 14 | 4 59 | 18 19 | 6 52 | 2 10 |     |
| W15  | 23 19 | 10 56 | 1 42 | 24 31 | 1 8  | 11 51 | 2 41 | 18 11 | 0 20 | 12 46 | 1 6  | 6 6  | 2 15 | 19 57 | 0 11 | 5 53 | 1 10 | 23 13 | 1 59 | 5 16 | 5 0  | 18 19 | 6 53 | 2 10 |     |
| T 16 | 23 22 | 7 28  | 0 39 | 24 42 | 1 16 | 12 10 | 2 41 | 18 23 | 0 20 | 12 50 | 1 6  | 6 5  | 2 15 | 19 57 | 0 11 | 5 53 | 1 10 | 23 13 | 1 59 | 5 16 | 5 1  | 18 19 | 6 53 | 2 10 |     |
| F 17 | 23 24 | 3 35  | 0n29 | 24 51 | 1 23 | 12 29 | 2 42 | 18 34 | 0 19 | 12 54 | 1 6  | 6 4  | 2 14 | 19 58 | 0 11 | 5 52 | 1 9  | 23 13 | 1 59 | 5 16 | 5 2  | 18 20 | 6 54 | 2 10 |     |
| S 18 | 23 25 | 0s34  | 1 36 | 24 57 | 1 30 | 12 48 | 2 43 | 18 45 | 0 18 | 12 57 | 1 6  | 6 3  | 2 14 | 19 59 | 0 11 | 5 52 | 1 9  | 23 14 | 1 59 | 5 16 | 5 4  | 18 20 | 6 55 | 2 10 |     |
| S 19 | 23 27 | 4 50  | 2 41 | 25 0  | 1 35 | 13 6  | 2 43 | 18 56 | 0 17 | 13 1  | 1 6  | 6 1  | 2 14 | 19 59 | 0 11 | 5 52 | 1 9  | 23 14 | 2 0  | 5 17 | 5 5  | 18 20 | 6 55 | 2 10 |     |
| M20  | 23 28 | 8 59  | 3 38 | 25 0  | 1 40 | 13 25 | 2 43 | 19 7  | 0 17 | 13 5  | 1 6  | 6 0  | 2 14 | 20 0  | 0 11 | 5 51 | 1 9  | 23 14 | 2 0  | 5 18 | 5 6  | 18 21 | 6 56 | 2 10 |     |
| T 21 | 23 28 | 12 44 | 4 23 | 24 58 | 1 45 | 13 43 | 2 43 | 19 17 | 0 16 | 13 8  | 1 6  | 5 59 | 2 14 | 20 1  | 0 11 | 5 51 | 1 9  | 23 15 | 2 0  | 5 20 | 5 7  | 18 21 | 6 57 | 2 10 |     |
| W22  | 23 28 | 15 48 | 4 52 | 24 53 | 1 48 | 14 1  | 2 43 | 19 27 | 0 15 | 13 12 | 1 6  | 5 57 | 2 13 | 20 1  | 0 11 | 5 51 | 1 9  | 23 15 | 2 0  | 5 23 | 5 9  | 18 21 | 6 57 | 2 10 |     |
| T 23 | 23 27 | 17 50 | 5 1  | 24 45 | 1 51 | 14 20 | 2 43 | 19 38 | 0 15 | 13 15 | 1 7  | 5 56 | 2 13 | 20 2  | 0 11 | 5 50 | 1 9  | 23 15 | 2 0  | 5 27 | 5 10 | 18 22 | 6 58 | 2 10 |     |
| F 24 | 23 27 | 18 37 | 4 49 | 24 35 | 1 53 | 14 38 | 2 43 | 19 48 | 0 14 | 13 19 | 1 7  | 5 54 | 2 13 | 20 3  | 0 11 | 5 50 | 1 9  | 23 16 | 2 0  | 5 31 | 5 11 | 18 22 | 6 58 | 2 10 |     |
| S 25 | 23 25 | 18 3  | 4 17 | 24 23 | 1 54 | 14 55 | 2 43 | 19 57 | 0 13 | 13 22 | 1 7  | 5 53 | 2 13 | 20 3  | 0 11 | 5 50 | 1 9  | 23 16 | 2 0  | 5 35 | 5 12 | 18 22 | 6 59 | 2 10 |     |
| S 26 | 23 24 | 16 13 | 3 27 | 24 8  | 1 55 | 15 13 | 2 42 | 20 7  | 0 13 | 13 26 | 1 7  | 5 52 | 2 13 | 20 4  | 0 11 | 5 49 | 1 9  | 23 17 | 2 0  | 5 38 | 5 14 | 18 23 | 6 59 | 2 10 |     |
| M27  | 23 22 | 13 21 | 2 24 | 23 52 | 1 55 | 15 30 | 2 41 | 20 16 | 0 12 | 13 29 | 1 7  | 5 50 | 2 12 | 20 5  | 0 11 | 5 49 | 1 9  | 23 17 | 2 0  | 5 40 | 5 15 | 18 23 | 7 0  | 2 10 |     |
| T 28 | 23 19 | 9 45  | 1 13 | 23 34 | 1 54 | 15 48 | 2 41 | 20 26 | 0 11 | 13 32 | 1 7  | 5 48 | 2 12 | 20 5  | 0 11 | 5 49 | 1 9  | 23 17 | 2 1  | 5 41 | 5 16 | 18 23 | 7 0  | 2 10 |     |
| W29  | 23 16 | 5 45  | 0 1  | 23 14 | 1 53 | 16 5  | 2 40 | 20 35 | 0 11 | 13 36 | 1 7  | 5 47 | 2 12 | 20 6  | 0 11 | 5 48 | 1 9  | 23 18 | 2 1  | 5 41 | 5 17 | 18 23 | 7 0  | 2 10 |     |
| T 30 | 23n13 | 1s35  | 1s 9 | 22n52 | 1n51 | 16n21 | 2s39 | 20n43 | 0s10 | 13n39 | 1s 7 | 5n45 | 2n12 | 20n 7 | 0s11 | 5n48 | 1n 9 | 23s18 | 2s 1 | 5n41 | 5n19 | 18n24 | 7n 1 | 2n10 |     |

# ASTRODIENST EPHEMERIS for the year 1774

## geocentric

JULY 1774

00:00 UT

| Day  | Sid.t    | ☉                    | ☽                   | ♂                   | ♀                   | ♂                   | ♂                  | ♂                   | ♂                  | ♂                   | ♂                   | ♂                   | ♂                   | ♂                   | ♂                   | Day  |
|------|----------|----------------------|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------|
| F 1  | 18 36 23 | 9 <sup>53</sup> 5'31 | 11 <sup>33</sup> 33 | 27 <sup>18</sup> 18 | 25 <sup>39</sup> 39 | 4 <sup>14</sup> 14  | 9 <sup>48</sup> 48 | 20 <sup>39</sup> 39 | 0 <sup>35</sup> 35 | 18 <sup>3</sup> 3   | 24 <sup>R</sup> 4   | 15 <sup>R</sup> 37  | 16 <sup>31</sup> 31 | 27 <sup>46</sup> 46 | 12 <sup>41</sup> 41 | F 1  |
| S 2  | 18 40 19 | 10° 2'42             | 24° 5               | 29° 2               | 26° 44              | 4° 56               | 9° 59              | 20° 43              | 0° 38              | 18° 4               | 24 <sup>2</sup> 2   | 15 <sup>36</sup> 36 | 16° 28              | 27° 52              | 12° 42              | S 2  |
| S 3  | 18 44 16 | 10° 59'54            | 6 <sup>22</sup> 22  | 0 <sup>45</sup> 45  | 27° 50              | 5° 38               | 10° 9              | 20° 47              | 0° 41              | 18° 5               | 24° 1               | 15° 33              | 16° 24              | 27° 59              | 12° 43              | S 3  |
| M 4  | 18 48 12 | 11° 57'07            | 18° 27              | 2° 25               | 28° 56              | 6° 20               | 10° 19             | 20° 51              | 0° 44              | 18° 6               | 24° 0               | 15° 27              | 16° 21              | 28° 6               | 12° 43              | M 4  |
| T 5  | 18 52 9  | 12° 54'20            | 0 <sup>25</sup> 25  | 4° 3                | 0 <sup>11</sup> 11  | 7° 2                | 10° 29             | 20° 55              | 0° 47              | 18° 7               | 23° 58              | 15° 20              | 16° 18              | 28° 12              | 12° 44              | T 5  |
| W 6  | 18 56 6  | 13° 51'33            | 12° 18              | 5° 39               | 1° 8                | 7° 44               | 10° 39             | 21° 0               | 0° 50              | 18° 8               | 23° 57              | 15° 10              | 16° 15              | 28° 19              | 12° 44              | W 6  |
| T 7  | 19 0 2   | 14° 48'46            | 24° 10              | 7° 13               | 2° 14               | 8° 26               | 10° 49             | 21° 4               | 0° 52              | 18° 9               | 23° 55              | 14° 59              | 16° 12              | 28° 26              | 12° 45              | T 7  |
| F 8  | 19 3 59  | 15° 46'00            | 6 <sup>25</sup> 25  | 8° 44               | 3° 21               | 9° 8                | 10° 59             | 21° 8               | 0° 55              | 18° 11              | 23° 54              | 14° 48              | 16° 8               | 28° 33              | 12° 45              | F 8  |
| S 9  | 19 7 55  | 16° 43'14            | 17° 56              | 10° 14              | 4° 28               | 9° 49               | 11° 8              | 21° 13              | 0° 58              | 18° 12              | 23° 53              | 14° 37              | 16° 5               | 28° 39              | 12° 46              | S 9  |
| S 10 | 19 11 52 | 17° 40'28            | 29° 53              | 11° 41              | 5° 34               | 10° 31              | 11° 18             | 21° 17              | 1° 0               | 18° 13              | 23° 51              | 14° 28              | 16° 2               | 28° 46              | 12° 46              | S 10 |
| M 11 | 19 15 48 | 18° 37'42            | 11 <sup>55</sup> 55 | 13° 7               | 6° 41               | 11° 13              | 11° 27             | 21° 22              | 1° 3               | 18° 14              | 23° 50              | 14° 21              | 15° 59              | 28° 53              | 12° 46              | M 11 |
| T 12 | 19 19 45 | 19° 34'57            | 24° 5               | 14° 30              | 7° 48               | 11° 54              | 11° 36             | 21° 27              | 1° 6               | 18° 16              | 23° 48              | 14° 17              | 15° 56              | 29° 0               | 12° 47              | T 12 |
| W 13 | 19 23 42 | 20° 32'11            | 6 <sup>23</sup> 23  | 15° 51              | 8° 56               | 12° 35              | 11° 45             | 21° 31              | 1° 8               | 18° 17              | 23° 47              | 14° 15              | 15° 53              | 29° 6               | 12° 47              | W 13 |
| T 14 | 19 27 38 | 21° 29'26            | 18° 54              | 17° 9               | 10° 3               | 13° 17              | 11° 54             | 21° 36              | 1° 11              | 18° 19              | 23° 45              | 14° D15             | 15° 49              | 29° 13              | 12° 47              | T 14 |
| F 15 | 19 31 35 | 22° 26'41            | 1 <sup>40</sup> 40  | 18° 26              | 11° 10              | 13° 58              | 12° 3              | 21° 41              | 1° 13              | 18° 20              | 23° 44              | 14° 16              | 15° 46              | 29° 20              | 12° 47              | F 15 |
| S 16 | 19 35 31 | 23° 23'57            | 14° 44              | 19° 40              | 12° 18              | 14° 39              | 12° 12             | 21° 46              | 1° 16              | 18° 21              | 23° 43              | 14° 17              | 15° 43              | 29° 26              | 12° R47             | S 16 |
| S 17 | 19 39 28 | 24° 21'12            | 28° 11              | 20° 51              | 13° 26              | 15° 20              | 12° 21             | 21° 51              | 1° 18              | 18° 23              | 23° 41              | 14° R17             | 15° 40              | 29° 33              | 12° 47              | S 17 |
| M 18 | 19 43 24 | 25° 18'28            | 12 <sup>2</sup> 2   | 22° 0               | 14° 34              | 16° 1               | 12° 29             | 21° 56              | 1° 21              | 18° 24              | 23° 40              | 14° 15              | 15° 37              | 29° 40              | 12° 47              | M 18 |
| T 19 | 19 47 21 | 26° 15'44            | 26° 17              | 23° 7               | 15° 42              | 16° 42              | 12° 37             | 22° 1               | 1° 23              | 18° 26              | 23° 38              | 14° 12              | 15° 34              | 29° 47              | 12° 47              | T 19 |
| W 20 | 19 51 17 | 27° 13'00            | 10 <sup>55</sup> 55 | 24° 11              | 16° 50              | 17° 23              | 12° 46             | 22° 7               | 1° 25              | 18° 27              | 23° 37              | 14° 7               | 15° 30              | 29° 53              | 12° 47              | W 20 |
| T 21 | 19 55 14 | 28° 10'17            | 25° 52              | 25° 12              | 17° 58              | 18° 4               | 12° 54             | 22° 12              | 1° 28              | 18° 29              | 23° 35              | 14° 1               | 15° 27              | 0 <sup>0</sup> 0    | 12° 47              | T 21 |
| F 22 | 19 59 11 | 29° 7'34             | 10 <sup>58</sup> 58 | 26° 10              | 19° 6               | 18° 45              | 13° 2              | 22° 17              | 1° 30              | 18° 30              | 23° 34              | 13° 55              | 15° 24              | 0° 7                | 12° 46              | F 22 |
| S 23 | 20 3 7   | 0 <sup>45</sup> 45   | 26° 6               | 27° 5               | 20° 15              | 19° 26              | 13° 9              | 22° 23              | 1° 32              | 18° 32              | 23° 33              | 13° 48              | 15° 21              | 0° 13               | 12° 46              | S 23 |
| S 24 | 20 7 4   | 1° 2'11              | 11 <sup>4</sup> 4   | 27° 57              | 21° 23              | 20° 7               | 13° 17             | 22° 28              | 1° 34              | 18° 34              | 23° 31              | 13° 44              | 15° 18              | 0° 20               | 12° 45              | S 24 |
| M 25 | 20 11 0  | 1° 59'30             | 25° 45              | 28° 45              | 22° 32              | 20° 47              | 13° 25             | 22° 34              | 1° 36              | 18° 35              | 23° 30              | 13° 41              | 15° 14              | 0° 27               | 12° 45              | M 25 |
| T 26 | 20 14 57 | 2° 56'50             | 10 <sup>2</sup> 2   | 29° 31              | 23° 41              | 21° 28              | 13° 32             | 22° 40              | 1° 38              | 18° 37              | 23° 28              | 13° D39             | 15° 11              | 0° 34               | 12° 45              | T 26 |
| W 27 | 20 18 53 | 3° 54'11             | 23° 52              | 0 <sup>13</sup> 13  | 24° 49              | 22° 8               | 13° 39             | 22° 45              | 1° 40              | 18° 39              | 23° 27              | 13° 40              | 15° 8               | 0° 40               | 12° 44              | W 27 |
| T 28 | 20 22 50 | 4° 51'33             | 7 <sup>14</sup> 14  | 0° 51               | 25° 58              | 22° 49              | 13° 46             | 22° 51              | 1° 42              | 18° 40              | 23° 25              | 13° 41              | 15° 5               | 0° 47               | 12° 43              | T 28 |
| F 29 | 20 26 46 | 5° 48'56             | 20° 12              | 1° 25               | 27° 8               | 23° 29              | 13° 53             | 22° 57              | 1° 44              | 18° 42              | 23° 24              | 13° 42              | 15° 2               | 0° 54               | 12° 43              | F 29 |
| S 30 | 20 30 43 | 6° 46'20             | 2 <sup>47</sup> 47  | 1° 55               | 28° 17              | 24° 9               | 14° 0              | 23° 3               | 1° 46              | 18° 44              | 23° 23              | 13° R43             | 14° 59              | 1° 0                | 12° 42              | S 30 |
| S 31 | 20 34 39 | 7 <sup>46</sup> 46   | 15 <sup>5</sup> 5   | 2 <sup>21</sup> 21  | 29 <sup>26</sup> 26 | 24 <sup>49</sup> 49 | 14 <sup>8</sup> 8  | 23 <sup>9</sup> 9   | 1 <sup>48</sup> 48 | 18 <sup>46</sup> 46 | 23 <sup>21</sup> 21 | 13 <sup>43</sup> 43 | 14 <sup>55</sup> 55 | 1 <sup>7</sup> 7    | 12 <sup>41</sup> 41 | S 31 |

| Day  | ☉     | ☽     | ♂    | ♀     | ♂    | ♂     | ♂    | ♂            | ♂    | ♂     | ♂    | ♂    | ♂    | ♂     | ♂    | ♂    |
|------|-------|-------|------|-------|------|-------|------|--------------|------|-------|------|------|------|-------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl         | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl |
| F 1  | 23n 9 | 2n32  | 2s13 | 22n29 | 1n48 | 16n38 | 2s38 | 20n52        | 0s 9 | 13n42 | 1s 7 | 5n44 | 2n12 | 20n 7 | 0s11 | 5n47 |
| S 2  | 23 5  | 6 25  | 3 10 | 22 5  | 1 45 | 16 54 | 2 37 | 21 0         | 0 8  | 13 45 | 1 8  | 5 42 | 2 12 | 20 8  | 0 11 | 5 47 |
| S 3  | 23 1  | 9 56  | 3 56 | 21 39 | 1 41 | 17 10 | 2 36 | 21 9         | 0 8  | 13 48 | 1 8  | 5 40 | 2 11 | 20 8  | 0 11 | 5 47 |
| M 4  | 22 56 | 13 0  | 4 31 | 21 12 | 1 36 | 17 26 | 2 34 | 21 17        | 0 7  | 13 51 | 1 8  | 5 38 | 2 11 | 20 9  | 0 11 | 5 46 |
| T 5  | 22 50 | 15 29 | 4 53 | 20 44 | 1 31 | 17 41 | 2 33 | 21 24        | 0 6  | 13 54 | 1 8  | 5 37 | 2 11 | 20 10 | 0 11 | 5 46 |
| W 6  | 22 45 | 17 17 | 5 3  | 20 16 | 1 25 | 17 56 | 2 32 | 21 32        | 0 6  | 13 57 | 1 8  | 5 35 | 2 11 | 20 10 | 0 11 | 5 45 |
| T 7  | 22 38 | 18 21 | 5 0  | 19 46 | 1 19 | 18 11 | 2 30 | 21 39        | 0 5  | 14 0  | 1 8  | 5 33 | 2 11 | 20 11 | 0 11 | 5 45 |
| F 8  | 22 32 | 18 37 | 4 43 | 19 16 | 1 13 | 18 25 | 2 28 | 21 47        | 0 4  | 14 3  | 1 8  | 5 31 | 2 11 | 20 11 | 0 11 | 5 44 |
| S 9  | 22 25 | 18 4  | 4 14 | 18 45 | 1 6  | 18 39 | 2 27 | 21 54        | 0 3  | 14 6  | 1 8  | 5 29 | 2 10 | 20 12 | 0 11 | 5 44 |
| S 10 | 22 18 | 16 42 | 3 34 | 18 14 | 0 58 | 18 53 | 2 25 | 22 0         | 0 3  | 14 9  | 1 9  | 5 27 | 2 10 | 20 12 | 0 11 | 5 43 |
| M 11 | 22 10 | 14 36 | 2 44 | 17 42 | 0 50 | 19 6  | 2 23 | 22 7         | 0 2  | 14 12 | 1 9  | 5 25 | 2 10 | 20 13 | 0 11 | 5 43 |
| T 12 | 22 2  | 11 51 | 1 46 | 17 10 | 0 42 | 19 19 | 2 21 | 22 13        | 0 1  | 14 14 | 1 9  | 5 23 | 2 10 | 20 13 | 0 11 | 5 42 |
| W 13 | 21 54 | 8 32  | 0 42 | 16 38 | 0 33 | 19 32 | 2 19 | 22 20        | 0 0  | 14 17 | 1 9  | 5 21 | 2 10 | 20 14 | 0 11 | 5 42 |
| T 14 | 21 45 | 4 47  | 0n25 | 16 5  | 0 24 | 19 44 | 2 17 | 22 25        | 0n 0 | 14 20 | 1 9  | 5 19 | 2 10 | 20 15 | 0 11 | 5 41 |
| F 15 | 21 36 | 0 45  | 1 32 | 15 33 | 0 14 | 19 55 | 2 14 | 22 31        | 0 1  | 14 22 | 1 9  | 5 17 | 2 10 | 20 15 | 0 11 | 5 40 |
| S 16 | 21 26 | 3s24  | 2 37 | 15 0  | 0 4  | 20 7  | 2 12 | 22 37        | 0 2  | 14 25 | 1 9  | 5 15 | 2 9  | 20 16 | 0 11 | 5 40 |
| S 17 | 21 16 | 7 30  | 3 34 | 14 28 | 0s 6 | 20 17 | 2 10 | 22 42        | 0 3  | 14 27 | 1 10 | 5 13 | 2 9  | 20 16 | 0 11 | 5 39 |
| M 18 | 21 6  | 11 19 | 4 21 | 13 56 | 0 17 | 20 28 | 2 7  | 22 47        | 0 3  | 14 30 | 1 10 | 5 11 | 2 9  | 20 17 | 0 11 | 5 39 |
| T 19 | 20 55 | 14 35 | 4 53 | 13 24 | 0 28 | 20 38 | 2 5  | 22 52        | 0 4  | 14 32 | 1 10 | 5 8  | 2 9  | 20 17 | 0 11 | 5 38 |
| W 20 | 20 44 | 17 2  | 5 8  | 12 52 | 0 39 | 20 47 | 2 2  | 22 57        | 0 5  | 14 34 | 1 10 | 5 6  | 2 9  | 20 17 | 0 11 | 5 37 |
| T 21 | 20 33 | 18 23 | 5 2  | 12 21 | 0 50 | 20 56 | 2 0  | 23 1         | 0 6  | 14 37 | 1 10 | 5 4  | 2 9  | 20 18 | 0 11 | 5 37 |
| F 22 | 20 21 | 18 27 | 4 35 | 11 50 | 1 2  | 21 4  | 1 57 | 23 6         | 0 6  | 14 39 | 1 10 | 5 2  | 2 9  | 20 18 | 0 11 | 5 36 |
| S 23 | 20 9  | 17 13 | 3 49 | 11 21 | 1 14 | 21 12 | 1 54 | 23 10        | 0 7  | 14 41 | 1 11 | 5 0  | 2 8  | 20 19 | 0 11 | 5 35 |
| S 24 | 19 57 | 14 47 | 2 47 | 10 51 | 1 26 | 21 20 | 1 52 | 23 14        | 0 8  | 14 43 | 1 11 | 4 57 | 2 8  | 20 19 | 0 11 | 5 35 |
| M 25 | 19 44 | 11 27 | 1 36 | 10 23 | 1 38 | 21 27 | 1 49 | 23 17        | 0 9  | 14 45 | 1 11 | 4 55 | 2 8  | 20 20 | 0 11 | 5 34 |
| T 26 | 19 31 | 7 31  | 0 20 | 9 56  | 1 50 | 21 33 | 1 46 | 23 21        | 0 9  | 14 47 | 1 11 | 4 53 | 2 8  | 20 20 | 0 11 | 5 34 |
| W 27 | 19 18 | 3 17  | 0s55 | 9 30  | 2 3  | 21 39 | 1 43 | 23 24        | 0 10 | 14 49 | 1 11 | 4 50 | 2 8  | 20 21 | 0 11 | 5 33 |
| T 28 | 19 4  | 0n58  | 2 5  | 9 5   | 2 15 | 21 44 | 1 40 | 23 27        | 0 11 | 14 51 | 1 11 | 4 48 | 2 8  | 20 21 | 0 11 | 5 32 |
| F 29 | 18 50 | 5 2   | 3 6  | 8 41  | 2 28 | 21 49 | 1 37 | <b>23 30</b> | 0 12 | 14 53 | 1 12 | 4 45 | 2 8  | 20 21 | 0 11 | 5 31 |
| S 30 | 18 36 | 8 46  | 3 56 | 8 18  | 2 40 | 21 53 | 1 34 | <b>23 33</b> | 0 13 | 14 55 | 1 12 | 4 43 | 2 8  | 20 22 | 0 11 | 5 31 |
| S 31 | 18n21 | 12n 1 | 4s34 | 7n58  | 2s53 | 21n57 | 1s31 | <b>23n35</b> | 0n13 | 14n57 | 1s12 | 4n41 | 2n 7 | 20n22 | 0s11 | 5n30 |

Julian Day Number = 2369181.5, Delta T = 21.83 sec  
 Ecliptic obliquity = 23°27'58, Nutation = - 0°00'04, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 21°35'31, Lahiri = 20°42'31Greg. Calendar



# ASTRODIENST EPHEMERIS for the year 1774

## geocentric

AUGUST 1774

00:00 UT

| Day  | Sid.t    | ☉        | ☽     | ♀      | ♂     | ♂     | ♂     | ♂     | ♂    | ♂     | ♂      | ♂      | ♂     | ♂    | ♂      | Day  |
|------|----------|----------|-------|--------|-------|-------|-------|-------|------|-------|--------|--------|-------|------|--------|------|
| M 1  | 20 38 36 | 8♌41'12  | 27♋11 | 2♊42   | 0♈36  | 25♊30 | 14♈13 | 23♊15 | 1♊50 | 18♊47 | 23°R20 | 13°R41 | 14♊52 | 1♌14 | 12°R40 | M 1  |
| T 2  | 20 42 33 | 9°38'40  | 9♊7   | 2°58   | 1°45  | 26°10 | 14°19 | 23°21 | 1°52 | 18°49 | 23♋19  | 13♊38  | 14°49 | 1°21 | 12°Y40 | T 2  |
| W 3  | 20 46 29 | 10°36'09 | 21° 0 | 3°10   | 2°55  | 26°50 | 14°26 | 23°27 | 1°54 | 18°51 | 23°17  | 13°34  | 14°46 | 1°27 | 12°39  | W 3  |
| T 4  | 20 50 26 | 11°33'40 | 2♌51  | 3°17   | 4° 5  | 27°30 | 14°32 | 23°33 | 1°55 | 18°53 | 23°16  | 13°28  | 14°43 | 1°34 | 12°38  | T 4  |
| F 5  | 20 54 22 | 12°31'12 | 14°45 | 3°R19  | 5°14  | 28° 9 | 14°37 | 23°39 | 1°57 | 18°55 | 23°14  | 13°23  | 14°39 | 1°41 | 12°37  | F 5  |
| S 6  | 20 58 19 | 13°28'44 | 26°44 | 3°15   | 6°24  | 28°49 | 14°43 | 23°45 | 1°59 | 18°57 | 23°13  | 13°18  | 14°36 | 1°48 | 12°36  | S 6  |
| S 7  | 21 2 15  | 14°26'18 | 8♌49  | 3° 6   | 7°34  | 29°29 | 14°49 | 23°52 | 2° 0 | 18°58 | 23°12  | 13°13  | 14°33 | 1°54 | 12°35  | S 7  |
| M 8  | 21 6 12  | 15°23'54 | 21° 2 | 2°52   | 8°44  | 0♈9   | 14°54 | 23°58 | 2° 2 | 19° 0 | 23°11  | 13°10  | 14°30 | 2° 1 | 12°33  | M 8  |
| T 9  | 21 10 8  | 16°21'30 | 3♊25  | 2°32   | 9°55  | 0°48  | 14°59 | 24° 4 | 2° 3 | 19° 2 | 23° 9  | 13° 9  | 14°27 | 2° 8 | 12°32  | T 9  |
| W10  | 21 14 5  | 17°19'07 | 15°58 | 2° 7   | 11° 5 | 1°28  | 15° 4 | 24°11 | 2° 5 | 19° 4 | 23° 8  | 13°D 8 | 14°24 | 2°14 | 12°31  | W10  |
| T 11 | 21 18 2  | 18°16'46 | 28°44 | 1°36   | 12°15 | 2° 7  | 15° 9 | 24°17 | 2° 6 | 19° 6 | 23° 7  | 13° 9  | 14°20 | 2°21 | 12°30  | T 11 |
| F 12 | 21 21 58 | 19°14'25 | 11♌43 | 1° 1   | 13°26 | 2°46  | 15°13 | 24°24 | 2° 7 | 19° 8 | 23° 5  | 13°10  | 14°17 | 2°28 | 12°28  | F 12 |
| S 13 | 21 25 55 | 20°12'06 | 24°58 | 0°21   | 14°36 | 3°26  | 15°18 | 24°30 | 2° 9 | 19°10 | 23° 4  | 13°12  | 14°14 | 2°35 | 12°27  | S 13 |
| S 14 | 21 29 51 | 21° 9'47 | 8♊29  | 29♌37  | 15°47 | 4° 5  | 15°22 | 24°37 | 2°10 | 19°12 | 23° 3  | 13°13  | 14°11 | 2°41 | 12°25  | S 14 |
| M15  | 21 33 48 | 22° 7'30 | 22°18 | 28°50  | 16°58 | 4°44  | 15°26 | 24°43 | 2°11 | 19°14 | 23° 2  | 13°R13 | 14° 8 | 2°48 | 12°24  | M15  |
| T 16 | 21 37 44 | 23° 5'14 | 6♊24  | 28° 0  | 18° 9 | 5°23  | 15°30 | 24°50 | 2°12 | 19°16 | 23° 0  | 13°13  | 14° 5 | 2°55 | 12°22  | T 16 |
| W17  | 21 41 41 | 24° 2'59 | 20°47 | 27° 8  | 19°19 | 6° 2  | 15°34 | 24°57 | 2°13 | 19°18 | 22°59  | 13°12  | 14° 1 | 3° 1 | 12°21  | W17  |
| T 18 | 21 45 37 | 25° 0'45 | 5♌23  | 26°15  | 20°30 | 6°41  | 15°37 | 25° 4 | 2°14 | 19°20 | 22°58  | 13°10  | 13°58 | 3° 8 | 12°19  | T 18 |
| F 19 | 21 49 34 | 25°58'32 | 20° 6 | 25°23  | 21°41 | 7°20  | 15°41 | 25°10 | 2°15 | 19°22 | 22°57  | 13° 7  | 13°55 | 3°15 | 12°17  | F 19 |
| S 20 | 21 53 31 | 26°56'20 | 4♌51  | 24°32  | 22°53 | 7°59  | 15°44 | 25°17 | 2°16 | 19°24 | 22°56  | 13° 5  | 13°52 | 3°22 | 12°16  | S 20 |
| S 21 | 21 57 27 | 27°54'10 | 19°31 | 23°43  | 24° 4 | 8°37  | 15°47 | 25°24 | 2°17 | 19°27 | 22°55  | 13° 4  | 13°49 | 3°28 | 12°14  | S 21 |
| M22  | 22 1 24  | 28°52'01 | 3♊58  | 22°57  | 25°15 | 9°16  | 15°50 | 25°31 | 2°18 | 19°29 | 22°54  | 13° 3  | 13°45 | 3°35 | 12°12  | M22  |
| T 23 | 22 5 20  | 29°49'53 | 18° 7 | 22°16  | 26°27 | 9°54  | 15°52 | 25°38 | 2°19 | 19°31 | 22°53  | 13°D 3 | 13°42 | 3°42 | 12°10  | T 23 |
| W24  | 22 9 17  | 0♊47'48  | 1°Y54 | 21°40  | 27°38 | 10°33 | 15°55 | 25°45 | 2°20 | 19°33 | 22°51  | 13° 4  | 13°39 | 3°48 | 12° 8  | W24  |
| T 25 | 22 13 13 | 1°45'44  | 15°17 | 21°10  | 28°50 | 11°11 | 15°57 | 25°52 | 2°20 | 19°35 | 22°50  | 13° 4  | 13°36 | 3°55 | 12° 6  | T 25 |
| F 26 | 22 17 10 | 2°43'41  | 28°18 | 20°48  | 0♌1   | 11°49 | 15°59 | 25°59 | 2°21 | 19°37 | 22°49  | 13° 5  | 13°33 | 4° 2 | 12° 4  | F 26 |
| S 27 | 22 21 6  | 3°41'41  | 10♌57 | 20°32  | 1°13  | 12°28 | 16° 1 | 26° 6 | 2°22 | 19°39 | 22°48  | 13° 6  | 13°30 | 4° 9 | 12° 2  | S 27 |
| S 28 | 22 25 3  | 4°39'42  | 23°18 | 20°D25 | 2°25  | 13° 6 | 16° 3 | 26°13 | 2°22 | 19°41 | 22°47  | 13° 7  | 13°26 | 4°15 | 12° 0  | S 28 |
| M29  | 22 29 0  | 5°37'46  | 5♊25  | 20°26  | 3°37  | 13°44 | 16° 4 | 26°20 | 2°23 | 19°44 | 22°46  | 13°R 7 | 13°23 | 4°22 | 11°58  | M29  |
| T 30 | 22 32 56 | 6°35'51  | 17°23 | 20°35  | 4°49  | 14°22 | 16° 5 | 26°27 | 2°23 | 19°46 | 22°45  | 13° 7  | 13°20 | 4°29 | 11°56  | T 30 |
| W31  | 22 36 53 | 7♊33'58  | 29♊16 | 20♌53  | 6♌1   | 15°50 | 16° 6 | 26°35 | 2♊24 | 19°48 | 22°45  | 13° 6  | 13°17 | 4°35 | 11°Y54 | W31  |

| Day  | ☉     | ☽     | ♀    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂    | ♂    | ♂     | ♂    | ♂    |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | lat  |
| M 1  | 18n 7 | 14n42 | 4s59 | 7n39  | 3s 5 | 22n 0 | 1s28 | 23n37 | 0n14 | 14n59 | 1s12 | 4n38 | 2n 7 | 20n22 | 0s11 | 5n29 |
| T 2  | 17 51 | 16 44 | 5 11 | 7 22  | 3 17 | 22 2  | 1 25 | 23 40 | 0 15 | 15 0  | 1 12 | 4 36 | 2 7  | 20 23 | 0 11 | 5 29 |
| W 3  | 17 36 | 18 1  | 5 9  | 7 6   | 3 29 | 22 4  | 1 22 | 23 41 | 0 16 | 15 2  | 1 12 | 4 33 | 2 7  | 20 23 | 0 11 | 5 28 |
| T 4  | 17 20 | 18 32 | 4 54 | 6 53  | 3 40 | 22 5  | 1 19 | 23 43 | 0 16 | 15 4  | 1 13 | 4 31 | 2 7  | 20 24 | 0 11 | 5 27 |
| F 5  | 17 4  | 18 14 | 4 26 | 6 43  | 3 51 | 22 6  | 1 16 | 23 44 | 0 17 | 15 5  | 1 13 | 4 28 | 2 7  | 20 24 | 0 11 | 5 26 |
| S 6  | 16 48 | 17 7  | 3 47 | 6 35  | 4 1  | 22 6  | 1 12 | 23 46 | 0 18 | 15 7  | 1 13 | 4 25 | 2 7  | 20 24 | 0 11 | 5 26 |
| S 7  | 16 31 | 15 14 | 2 57 | 6 29  | 4 10 | 22 6  | 1 9  | 23 47 | 0 19 | 15 8  | 1 13 | 4 23 | 2 7  | 20 25 | 0 11 | 5 25 |
| M 8  | 16 14 | 12 38 | 1 58 | 6 26  | 4 19 | 22 5  | 1 6  | 23 48 | 0 20 | 15 9  | 1 13 | 4 20 | 2 7  | 20 25 | 0 11 | 5 24 |
| T 9  | 15 57 | 9 26  | 0 53 | 6 26  | 4 27 | 22 3  | 1 3  | 23 48 | 0 20 | 15 11 | 1 13 | 4 18 | 2 7  | 20 25 | 0 11 | 5 23 |
| W10  | 15 40 | 5 47  | 0n16 | 6 29  | 4 33 | 22 1  | 0 59 | 23 49 | 0 21 | 15 12 | 1 14 | 4 15 | 2 6  | 20 25 | 0 11 | 5 23 |
| T 11 | 15 22 | 1 48  | 1 25 | 6 35  | 4 39 | 21 58 | 0 56 | 23 49 | 0 22 | 15 13 | 1 14 | 4 12 | 2 6  | 20 26 | 0 11 | 5 22 |
| F 12 | 15 4  | 2s20  | 2 31 | 6 43  | 4 42 | 21 55 | 0 53 | 23 49 | 0 23 | 15 14 | 1 14 | 4 10 | 2 6  | 20 26 | 0 11 | 5 21 |
| S 13 | 14 46 | 6 25  | 3 30 | 6 55  | 4 45 | 21 51 | 0 50 | 23 49 | 0 24 | 15 16 | 1 14 | 4 7  | 2 6  | 20 26 | 0 11 | 5 20 |
| S 14 | 14 28 | 10 15 | 4 19 | 7 10  | 4 45 | 21 46 | 0 46 | 23 49 | 0 25 | 15 17 | 1 14 | 4 4  | 2 6  | 20 26 | 0 11 | 5 19 |
| M15  | 14 9  | 13 37 | 4 55 | 7 27  | 4 44 | 21 41 | 0 43 | 23 48 | 0 25 | 15 18 | 1 14 | 4 2  | 2 6  | 20 27 | 0 11 | 5 19 |
| T 16 | 13 50 | 16 16 | 5 13 | 7 47  | 4 41 | 21 35 | 0 40 | 23 48 | 0 26 | 15 19 | 1 15 | 3 59 | 2 6  | 20 27 | 0 11 | 5 18 |
| W17  | 13 31 | 17 57 | 5 12 | 8 9   | 4 37 | 21 28 | 0 37 | 23 47 | 0 27 | 15 19 | 1 15 | 3 56 | 2 6  | 20 27 | 0 11 | 5 17 |
| T 18 | 13 12 | 18 30 | 4 52 | 8 33  | 4 30 | 21 21 | 0 33 | 23 46 | 0 28 | 15 20 | 1 15 | 3 53 | 2 6  | 20 27 | 0 11 | 5 16 |
| F 19 | 12 52 | 17 48 | 4 12 | 8 58  | 4 21 | 21 13 | 0 30 | 23 44 | 0 29 | 15 21 | 1 15 | 3 51 | 2 6  | 20 28 | 0 11 | 5 15 |
| S 20 | 12 33 | 15 54 | 3 16 | 9 25  | 4 11 | 21 5  | 0 27 | 23 43 | 0 29 | 15 22 | 1 15 | 3 48 | 2 6  | 20 28 | 0 11 | 5 15 |
| S 21 | 12 13 | 12 59 | 2 7  | 9 52  | 3 59 | 20 56 | 0 23 | 23 41 | 0 30 | 15 23 | 1 16 | 3 45 | 2 6  | 20 28 | 0 11 | 5 14 |
| M22  | 11 53 | 9 17  | 0 50 | 10 20 | 3 45 | 20 47 | 0 20 | 23 40 | 0 31 | 15 23 | 1 16 | 3 42 | 2 6  | 20 28 | 0 11 | 5 13 |
| T 23 | 11 33 | 5 8   | 0s28 | 10 48 | 3 30 | 20 37 | 0 17 | 23 38 | 0 32 | 15 24 | 1 16 | 3 39 | 2 6  | 20 28 | 0 11 | 5 12 |
| W24  | 11 12 | 0 49  | 1 42 | 11 14 | 3 14 | 20 26 | 0 14 | 23 35 | 0 33 | 15 24 | 1 16 | 3 37 | 2 6  | 20 28 | 0 11 | 5 11 |
| T 25 | 10 52 | 3n25  | 2 49 | 11 40 | 2 57 | 20 15 | 0 11 | 23 33 | 0 34 | 15 25 | 1 16 | 3 34 | 2 5  | 20 29 | 0 11 | 5 10 |
| F 26 | 10 31 | 7 22  | 3 45 | 12 4  | 2 39 | 20 3  | 0 7  | 23 31 | 0 34 | 15 25 | 1 17 | 3 31 | 2 5  | 20 29 | 0 11 | 5 10 |
| S 27 | 10 10 | 10 52 | 4 28 | 12 26 | 2 20 | 19 50 | 0 4  | 23 28 | 0 35 | 15 26 | 1 17 | 3 28 | 2 5  | 20 29 | 0 11 | 5 9  |
| S 28 | 9 49  | 13 48 | 4 58 | 12 47 | 2 2  | 19 37 | 0 1  | 23 25 | 0 36 | 15 26 | 1 17 | 3 25 | 2 5  | 20 29 | 0 11 | 5 8  |
| M29  | 9 27  | 16 5  | 5 14 | 13 4  | 1 43 | 19 24 | 0n 2 | 23 22 | 0 37 | 15 26 | 1 17 | 3 22 | 2 5  | 20 29 | 0 11 | 5 7  |
| T 30 | 9 6   | 17 37 | 5 16 | 13 19 | 1 24 | 19 10 | 0 5  | 23 19 | 0 38 | 15 26 | 1 17 | 3 20 | 2 5  | 20 29 | 0 11 | 5 6  |
| W31  | 8n44  | 18n23 | 5s 4 | 13n30 | 1s 6 | 18n55 | 0n 8 | 23n16 | 0n39 | 15n26 | 1s17 | 3n17 | 2n 5 | 20n29 | 0s11 | 5n 5 |

Julian Day Number = 2369212.5, Delta T = 21.84 sec  
 Ecliptic obliquity = 23°27'58, Nutation = - 0°00'04, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 21°35'35, Lahiri = 20°42'36Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1774  
geocentric

SEPTEMBER 1774

00:00 UT

| Day  | Sid.t    | ☉        | ☽     | ♂     | ♀     | ♂     | ♂      | ♂     | ♂     | ♂     | ♂      | ♂      | ♂     | ♂    | ♂      | Day  |
|------|----------|----------|-------|-------|-------|-------|--------|-------|-------|-------|--------|--------|-------|------|--------|------|
| T 1  | 22 40 49 | 8♐32'08  | 11♌8  | 21♏19 | 7♏13  | 15♌38 | 16♌7   | 26♐42 | 2♐24  | 19♐50 | 22°R44 | 13°R 6 | 13♐14 | 4♌42 | 11°R52 | T 1  |
| F 2  | 22 44 46 | 9°30'19  | 23° 4 | 21°54 | 8°25  | 16°15 | 16° 8  | 26°49 | 2°24  | 19°52 | 22♌43  | 13♐5   | 13°11 | 4°49 | 11°Y50 | F 2  |
| S 3  | 22 48 42 | 10°28'32 | 5♏8   | 22°37 | 9°37  | 16°53 | 16° 8  | 26°56 | 2°24  | 19°55 | 22°42  | 13° 5  | 13° 7 | 4°56 | 11°47  | S 3  |
| S 4  | 22 52 39 | 11°26'47 | 17°21 | 23°28 | 10°49 | 17°31 | 16° 9  | 27° 3 | 2°25  | 19°57 | 22°41  | 13° 5  | 13° 4 | 5° 2 | 11°45  | S 4  |
| M 5  | 22 56 35 | 12°25'04 | 29°46 | 24°26 | 12° 2 | 18° 8 | 16°R 9 | 27°11 | 2°25  | 19°59 | 22°40  | 13° 5  | 13° 1 | 5° 9 | 11°43  | M 5  |
| T 6  | 23 0 32  | 13°23'23 | 12♐25 | 25°32 | 13°14 | 18°46 | 16° 8  | 27°18 | 2°25  | 20° 1 | 22°39  | 13° 5  | 12°58 | 5°16 | 11°40  | T 6  |
| W 7  | 23 4 29  | 14°21'43 | 25°19 | 26°44 | 14°27 | 19°23 | 16° 8  | 27°25 | 2°R25 | 20° 3 | 22°39  | 13° 5  | 12°55 | 5°22 | 11°38  | W 7  |
| T 8  | 23 8 25  | 15°20'05 | 8♌27  | 28° 2 | 15°39 | 20° 0 | 16° 8  | 27°33 | 2°25  | 20° 6 | 22°38  | 13° 5  | 12°51 | 5°29 | 11°36  | T 8  |
| F 9  | 23 12 22 | 16°18'29 | 21°49 | 29°25 | 16°52 | 20°37 | 16° 7  | 27°40 | 2°25  | 20° 8 | 22°37  | 13° 4  | 12°48 | 5°36 | 11°33  | F 9  |
| S 10 | 23 16 18 | 17°16'55 | 5♐24  | 0♐54  | 18° 5 | 21°14 | 16° 6  | 27°47 | 2°25  | 20°10 | 22°36  | 13° 4  | 12°45 | 5°43 | 11°31  | S 10 |
| S 11 | 23 20 15 | 18°15'23 | 19°11 | 2°27  | 19°18 | 21°51 | 16° 5  | 27°55 | 2°25  | 20°12 | 22°36  | 13° 3  | 12°42 | 5°49 | 11°28  | S 11 |
| M12  | 23 24 11 | 19°13'52 | 3♌8   | 4° 4  | 20°30 | 22°28 | 16° 3  | 28° 2 | 2°24  | 20°15 | 22°35  | 13° 3  | 12°39 | 5°56 | 11°26  | M12  |
| T 13 | 23 28 8  | 20°12'22 | 17°14 | 5°44  | 21°43 | 23° 5 | 16° 2  | 28° 9 | 2°24  | 20°17 | 22°34  | 13°D 3 | 12°36 | 6° 3 | 11°23  | T 13 |
| W14  | 23 32 4  | 21°10'55 | 1♌27  | 7°27  | 22°56 | 23°42 | 16° 0  | 28°17 | 2°24  | 20°19 | 22°34  | 13° 3  | 12°32 | 6° 9 | 11°21  | W14  |
| T 15 | 23 36 1  | 22° 9'29 | 15°44 | 9°12  | 24° 9 | 24°18 | 15°58  | 28°24 | 2°24  | 20°21 | 22°33  | 13° 3  | 12°29 | 6°16 | 11°18  | T 15 |
| F 16 | 23 39 58 | 23° 8'04 | 0♌3   | 10°59 | 25°22 | 24°55 | 15°56  | 28°32 | 2°23  | 20°23 | 22°33  | 13° 4  | 12°26 | 6°23 | 11°15  | F 16 |
| S 17 | 23 43 54 | 24° 6'41 | 14°21 | 12°47 | 26°36 | 25°31 | 15°54  | 28°39 | 2°23  | 20°26 | 22°32  | 13° 5  | 12°23 | 6°29 | 11°13  | S 17 |
| S 18 | 23 47 51 | 25° 5'20 | 28°33 | 14°37 | 27°49 | 26° 7 | 15°51  | 28°47 | 2°22  | 20°28 | 22°32  | 13° 6  | 12°20 | 6°36 | 11°10  | S 18 |
| M19  | 23 51 47 | 26° 4'01 | 12♌36 | 16°27 | 29° 2 | 26°44 | 15°48  | 28°54 | 2°22  | 20°30 | 22°31  | 13°R 6 | 12°16 | 6°43 | 11° 7  | M19  |
| T 20 | 23 55 44 | 27° 2'43 | 26°25 | 18°17 | 0♐15  | 27°20 | 15°45  | 29° 1 | 2°21  | 20°32 | 22°31  | 13° 6  | 12°13 | 6°50 | 11° 5  | T 20 |
| W21  | 23 59 40 | 28° 1'28 | 9♐59  | 20° 8 | 1°29  | 27°56 | 15°42  | 29° 9 | 2°20  | 20°35 | 22°30  | 13° 5  | 12°10 | 6°56 | 11° 2  | W21  |
| T 22 | 0 3 37   | 29° 0'15 | 23°15 | 21°58 | 2°42  | 28°32 | 15°39  | 29°16 | 2°20  | 20°37 | 22°30  | 13° 3  | 12° 7 | 7° 3 | 10°59  | T 22 |
| F 23 | 0 7 33   | 29°59'03 | 6♌12  | 23°49 | 3°56  | 29° 8 | 15°35  | 29°24 | 2°19  | 20°39 | 22°30  | 13° 0  | 12° 4 | 7°10 | 10°57  | F 23 |
| S 24 | 0 11 30  | 0♌57'54  | 18°50 | 25°39 | 5° 9  | 29°43 | 15°32  | 29°31 | 2°18  | 20°41 | 22°29  | 12°58  | 12° 1 | 7°16 | 10°54  | S 24 |
| S 25 | 0 15 26  | 1°56'47  | 1♐12  | 27°29 | 6°23  | 0♏19  | 15°28  | 29°39 | 2°17  | 20°43 | 22°29  | 12°55  | 11°57 | 7°23 | 10°51  | S 25 |
| M26  | 0 19 23  | 2°55'43  | 13°20 | 29°18 | 7°37  | 0°55  | 15°24  | 29°46 | 2°16  | 20°46 | 22°29  | 12°53  | 11°54 | 7°30 | 10°48  | M26  |
| T 27 | 0 23 20  | 3°54'41  | 25°19 | 1♌6   | 8°50  | 1°30  | 15°19  | 29°54 | 2°15  | 20°48 | 22°29  | 12°52  | 11°51 | 7°37 | 10°46  | T 27 |
| W28  | 0 27 16  | 4°53'41  | 7♌12  | 2°54  | 10° 4 | 2° 5  | 15°15  | 0♌1   | 2°14  | 20°50 | 22°28  | 12°D52 | 11°48 | 7°43 | 10°43  | W28  |
| T 29 | 0 31 13  | 5°52'43  | 19° 4 | 4°41  | 11°18 | 2°41  | 15°10  | 0° 8  | 2°13  | 20°52 | 22°28  | 12°52  | 11°45 | 7°50 | 10°40  | T 29 |
| F 30 | 0 35 9   | 6♌51'48  | 1♏0   | 6♌27  | 12♐32 | 3♏16  | 15° 6  | 0♌16  | 2♐12  | 20♐54 | 22♌28  | 12♐54  | 11♐42 | 7♌57 | 10°Y37 | F 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 |
| T 1  | 8n23 | 18n21 | 4s40 | 13n39 | 0s48 | 18n40 | 0n11 | 23n12 | 0n40 | 15n26 | 1s18 | 3n14 | 2n 5 | 20n29 | 0s11 | 5n 4 | 1n 8 | 23s37 | 2s 6 | 6n39 | 6n36 | 18n36 | 6n44 | 2n13 |     |      |     |
| F 2  | 8 1  | 17 30 | 4 3  | 13 44 | 0 31 | 18 24 | 0 14 | 23 9  | 0 40 | 15 26 | 1 18 | 3 11 | 2 5  | 20 29 | 0 11 | 5 4  | 1 8  | 23 37 | 2 6  | 6 39 | 6 37 | 18 36 | 6 43 | 2 13 |     |      |     |
| S 3  | 7 39 | 15 51 | 3 15 | 13 46 | 0 15 | 18 8  | 0 17 | 23 5  | 0 41 | 15 26 | 1 18 | 3 8  | 2 5  | 20 29 | 0 11 | 5 3  | 1 8  | 23 37 | 2 6  | 6 39 | 6 38 | 18 36 | 6 42 | 2 13 |     |      |     |
| S 4  | 7 17 | 13 28 | 2 18 | 13 44 | 0n 1 | 17 51 | 0 20 | 23 1  | 0 42 | 15 26 | 1 18 | 3 5  | 2 5  | 20 29 | 0 11 | 5 2  | 1 8  | 23 37 | 2 6  | 6 39 | 6 40 | 18 36 | 6 41 | 2 13 |     |      |     |
| M 5  | 6 55 | 10 25 | 1 13 | 13 38 | 0 16 | 17 34 | 0 23 | 22 57 | 0 43 | 15 26 | 1 18 | 3 2  | 2 5  | 20 29 | 0 11 | 5 1  | 1 8  | 23 37 | 2 6  | 6 39 | 6 41 | 18 36 | 6 40 | 2 13 |     |      |     |
| T 6  | 6 32 | 6 51  | 0 4  | 13 29 | 0 29 | 17 16 | 0 26 | 22 52 | 0 44 | 15 26 | 1 19 | 2 59 | 2 5  | 20 29 | 0 11 | 5 0  | 1 8  | 23 38 | 2 6  | 6 39 | 6 42 | 18 36 | 6 39 | 2 13 |     |      |     |
| W 7  | 6 10 | 2 54  | 1n 7 | 13 17 | 0 42 | 16 58 | 0 28 | 22 48 | 0 45 | 15 26 | 1 19 | 2 56 | 2 5  | 20 29 | 0 11 | 4 59 | 1 8  | 23 38 | 2 6  | 6 39 | 6 43 | 18 36 | 6 38 | 2 13 |     |      |     |
| T 8  | 5 47 | 1s16  | 2 16 | 13 1  | 0 54 | 16 39 | 0 31 | 22 44 | 0 46 | 15 25 | 1 19 | 2 53 | 2 5  | 20 29 | 0 11 | 4 58 | 1 8  | 23 38 | 2 6  | 6 39 | 6 44 | 18 36 | 6 37 | 2 13 |     |      |     |
| F 9  | 5 25 | 5 26  | 3 19 | 12 41 | 1 4  | 16 20 | 0 34 | 22 39 | 0 46 | 15 25 | 1 19 | 2 51 | 2 5  | 20 29 | 0 11 | 4 57 | 1 8  | 23 38 | 2 6  | 6 40 | 6 46 | 18 36 | 6 36 | 2 13 |     |      |     |
| S 10 | 5 2  | 9 23  | 4 11 | 12 19 | 1 14 | 16 0  | 0 36 | 22 34 | 0 47 | 15 25 | 1 19 | 2 48 | 2 5  | 20 29 | 0 11 | 4 57 | 1 8  | 23 38 | 2 6  | 6 40 | 6 47 | 18 36 | 6 35 | 2 13 |     |      |     |
| S 11 | 4 39 | 12 53 | 4 50 | 11 53 | 1 22 | 15 40 | 0 39 | 22 29 | 0 48 | 15 24 | 1 19 | 2 45 | 2 5  | 20 29 | 0 11 | 4 56 | 1 8  | 23 38 | 2 6  | 6 40 | 6 48 | 18 37 | 6 34 | 2 12 |     |      |     |
| M12  | 4 16 | 15 42 | 5 12 | 11 25 | 1 29 | 15 20 | 0 42 | 22 24 | 0 49 | 15 23 | 1 20 | 2 42 | 2 5  | 20 29 | 0 11 | 4 55 | 1 8  | 23 39 | 2 6  | 6 40 | 6 49 | 18 37 | 6 33 | 2 12 |     |      |     |
| T 13 | 3 53 | 17 36 | 5 16 | 10 53 | 1 35 | 14 59 | 0 44 | 22 19 | 0 50 | 15 23 | 1 20 | 2 39 | 2 5  | 20 29 | 0 11 | 4 54 | 1 8  | 23 39 | 2 6  | 6 40 | 6 51 | 18 37 | 6 32 | 2 12 |     |      |     |
| W14  | 3 30 | 18 27 | 5 1  | 10 20 | 1 40 | 14 37 | 0 46 | 22 13 | 0 51 | 15 22 | 1 20 | 2 36 | 2 5  | 20 29 | 0 11 | 4 53 | 1 8  | 23 39 | 2 6  | 6 40 | 6 52 | 18 37 | 6 31 | 2 12 |     |      |     |
| T 15 | 3 7  | 18 7  | 4 27 | 9 44  | 1 44 | 14 15 | 0 49 | 22 8  | 0 52 | 15 22 | 1 20 | 2 33 | 2 5  | 20 29 | 0 11 | 4 52 | 1 8  | 23 39 | 2 6  | 6 40 | 6 53 | 18 37 | 6 30 | 2 12 |     |      |     |
| F 16 | 2 44 | 16 38 | 3 36 | 9 6   | 1 47 | 13 53 | 0 51 | 22 2  | 0 53 | 15 21 | 1 20 | 2 30 | 2 5  | 20 29 | 0 11 | 4 51 | 1 8  | 23 39 | 2 6  | 6 40 | 6 54 | 18 37 | 6 29 | 2 12 |     |      |     |
| S 17 | 2 20 | 14 7  | 2 33 | 8 27  | 1 49 | 13 30 | 0 53 | 21 56 | 0 54 | 15 20 | 1 20 | 2 27 | 2 5  | 20 29 | 0 11 | 4 51 | 1 8  | 23 39 | 2 6  | 6 39 | 6 55 | 18 37 | 6 28 | 2 12 |     |      |     |
| S 18 | 1 57 | 10 45 | 1 20 | 7 46  | 1 50 | 13 7  | 0 56 | 21 50 | 0 55 | 15 19 | 1 21 | 2 24 | 2 5  | 20 29 | 0 11 | 4 50 | 1 8  | 23 39 | 2 6  | 6 39 | 6 57 | 18 37 | 6 27 | 2 12 |     |      |     |
| M19  | 1 34 | 6 48  | 0 3  | 7 3   | 1 51 | 12 44 | 0 58 | 21 44 | 0 55 | 15 18 | 1 21 | 2 21 | 2 5  | 20 29 | 0 11 | 4 49 | 1 8  | 23 39 | 2 6  | 6 39 | 6 58 | 18 37 | 6 26 | 2 12 |     |      |     |
| T 20 | 1 11 | 2 32  | 1s13 | 6 20  | 1 50 | 12 20 | 1 0  | 21 38 | 0 56 | 15 17 | 1 21 | 2 18 | 2 5  | 20 29 | 0 11 | 4 48 | 1 8  | 23 40 | 2 6  | 6 39 | 6 59 | 18 37 | 6 25 | 2 12 |     |      |     |
| W21  | 0 47 | 1n46  | 2 23 | 5 35  | 1 50 | 11 56 | 1 2  | 21 32 | 0 57 | 15 16 | 1 21 | 2 15 | 2 5  | 20 29 | 0 11 | 4 47 | 1 8  | 23 40 | 2 6  | 6 39 | 7 0  | 18 37 | 6 24 | 2 12 |     |      |     |
| T 22 | 0 24 | 5 53  | 3 24 | 4 50  | 1 48 | 11 31 | 1 4  | 21 26 | 0 58 | 15 15 | 1 21 | 2 12 | 2 5  | 20 28 | 0 11 | 4 46 | 1 8  | 23 40 | 2 6  | 6 40 | 7 1  | 18 37 | 6 23 | 2 12 |     |      |     |
| F 23 | 0 0  | 9 37  | 4 13 | 4 5   | 1 46 | 11 6  | 1 6  | 21 19 | 0 59 | 15 14 | 1 21 | 2 9  | 2 5  | 20 28 | 0 11 | 4 45 | 1 8  | 23 40 | 2 6  | 6 41 | 7 3  | 18 37 | 6 22 | 2 12 |     |      |     |
| S 24 | 0s23 | 12 50 | 4 48 | 3 18  | 1 43 | 10 41 | 1 8  | 21 13 | 1 0  | 15 13 | 1 21 | 2 6  | 2 5  | 20 28 | 0 11 | 4 45 | 1 8  | 23 40 | 2 6  | 6 42 | 7 4  | 18 37 | 6 20 | 2 12 |     |      |     |
| S 25 | 0 47 | 15 23 | 5 9  | 2 32  | 1 40 | 10 15 | 1 10 | 21 6  | 1 1  | 15 11 | 1 22 | 2 4  | 2 5  | 20 28 | 0 11 | 4 44 | 1 8  | 23 40 | 2 6  | 6 43 | 7 5  | 18 37 | 6 19 | 2 12 |     |      |     |
| M26  | 1 10 | 17 13 | 5 15 | 1 45  | 1 36 | 9 50  | 1 11 | 20 59 | 1 2  | 15 10 | 1 22 | 2 1  | 2 5  | 20 28 | 0 11 | 4 43 | 1 8  | 23 40 | 2 6  | 6 44 | 7 6  | 18 37 | 6 18 | 2 12 |     |      |     |
| T 27 | 1 33 | 18 15 | 5 8  | 0 58  | 1 32 | 9 24  | 1 13 | 20 52 | 1 3  | 15 9  | 1 22 | 1 58 | 2 6  | 20 28 | 0 11 | 4 42 | 1 8  | 23 40 | 2 6  | 6 44 | 7 8  | 18 37 | 6 17 | 2 12 |     |      |     |
| W28  | 1 57 | 18 29 | 4 47 | 0 11  | 1 28 | 8 57  | 1 15 | 20 45 | 1 4  | 15 7  | 1 22 | 1 55 | 2 6  | 20 27 | 0 11 | 4 41 | 1 8  | 23 40 | 2 6  | 6 44 | 7 9  | 18 37 | 6 16 | 2 12 |     |      |     |
| T 29 | 2 20 | 17 54 | 4 15 | 0s36  | 1 23 | 8 31  | 1 16 | 20 38 | 1 5  | 15 6  | 1 22 | 1 52 | 2 6  | 20 27 | 0 11 | 4 40 | 1 8  | 23 40 | 2 6  | 6 44 | 7 10 | 18 37 | 6 15 | 2 12 |     |      |     |
| F 30 | 2s44 | 16n32 | 3s31 | 1s23  | 1n18 | 8n 4  | 1n18 | 20n31 | 1n 6 | 15n 4 | 1s22 | 1n49 | 2n 6 | 20n27 | 0s11 | 4n39 | 1n 8 | 23s40 | 2s 7 | 6n44 | 7n11 | 18n37 | 6n14 | 2n12 |     |      |     |

ASTRODIENST EPHEMERIS for the year 1774  
geocentric

OCTOBER 1774

00:00 UT

| Day  | Sid.t   | ☉   | ☽   | ♊                               | ♋                               | ♌                                | ♍                               | ♎                              | ♏                              | ♐                               | ♑                               | ♒                               | ♓                               | ♈                               | ♉                               | Day  |
|------|---------|---|---|---------------------------------|---------------------------------|----------------------------------|---------------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|------|
| S 1  | 0 39 6  | 7 <sup>h</sup> 50 <sup>m</sup> 55 <sup>s</sup>    | 13 <sup>h</sup> 06 <sup>m</sup>                 | 8 <sup>h</sup> 13 <sup>m</sup>  | 13 <sup>h</sup> 46 <sup>m</sup> | 3 <sup>h</sup> 05 <sup>m</sup> 1 | 15 <sup>h</sup> R 1             | 0 <sup>h</sup> 23 <sup>m</sup> | 2 <sup>h</sup> R11             | 20 <sup>h</sup> 56 <sup>m</sup> | 22 <sup>h</sup> R28             | 12 <sup>h</sup> 55 <sup>m</sup> | 11 <sup>h</sup> 38 <sup>m</sup> | 8 <sup>h</sup> 53 <sup>m</sup>  | 10 <sup>h</sup> R34             | S 1  |
| S 2  | 0 43 2  | 8 <sup>h</sup> 50 <sup>m</sup> 04 <sup>s</sup>    | 25 <sup>h</sup> 24 <sup>m</sup>                 | 9 <sup>h</sup> 58 <sup>m</sup>  | 15 <sup>h</sup> 0 <sup>m</sup>  | 4 <sup>h</sup> 26 <sup>m</sup>   | 14 <sup>h</sup> 56 <sup>m</sup> | 0 <sup>h</sup> 31 <sup>m</sup> | 2 <sup>h</sup> II10            | 20 <sup>h</sup> 59 <sup>m</sup> | 22 <sup>h</sup> 38 <sup>m</sup> | 12 <sup>h</sup> 57 <sup>m</sup> | 11 <sup>h</sup> 35 <sup>m</sup> | 8 <sup>h</sup> 10 <sup>m</sup>  | 10 <sup>h</sup> V32             | S 2  |
| M 3  | 0 46 59 | 9 <sup>h</sup> 49 <sup>m</sup> 15 <sup>s</sup>    | 7 <sup>h</sup> 48 <sup>m</sup> 58 <sup>s</sup>  | 11 <sup>h</sup> 41 <sup>m</sup> | 16 <sup>h</sup> 14 <sup>m</sup> | 5 <sup>h</sup> 0 <sup>m</sup>    | 14 <sup>h</sup> 50 <sup>m</sup> | 0 <sup>h</sup> 38 <sup>m</sup> | 2 <sup>h</sup> 9 <sup>m</sup>  | 21 <sup>h</sup> 1 <sup>m</sup>  | 22 <sup>h</sup> 28 <sup>m</sup> | 12 <sup>h</sup> R58             | 11 <sup>h</sup> 32 <sup>m</sup> | 8 <sup>h</sup> 17 <sup>m</sup>  | 10 <sup>h</sup> 29 <sup>m</sup> | M 3  |
| T 4  | 0 50 55 | 10 <sup>h</sup> 48 <sup>m</sup> 29 <sup>s</sup>   | 20 <sup>h</sup> 52 <sup>m</sup>                 | 13 <sup>h</sup> 25 <sup>m</sup> | 17 <sup>h</sup> 28 <sup>m</sup> | 5 <sup>h</sup> 35 <sup>m</sup>   | 14 <sup>h</sup> 45 <sup>m</sup> | 0 <sup>h</sup> 45 <sup>m</sup> | 2 <sup>h</sup> 7 <sup>m</sup>  | 21 <sup>h</sup> 3 <sup>m</sup>  | 22 <sup>h</sup> 28 <sup>m</sup> | 12 <sup>h</sup> 58 <sup>m</sup> | 11 <sup>h</sup> 29 <sup>m</sup> | 8 <sup>h</sup> 24 <sup>m</sup>  | 10 <sup>h</sup> 26 <sup>m</sup> | T 4  |
| W 5  | 0 54 52 | 11 <sup>h</sup> 47 <sup>m</sup> 45 <sup>s</sup>   | 4 <sup>h</sup> 5 <sup>m</sup>                   | 15 <sup>h</sup> 7 <sup>m</sup>  | 18 <sup>h</sup> 42 <sup>m</sup> | 6 <sup>h</sup> 10 <sup>m</sup>   | 14 <sup>h</sup> 39 <sup>m</sup> | 0 <sup>h</sup> 53 <sup>m</sup> | 2 <sup>h</sup> 6 <sup>m</sup>  | 21 <sup>h</sup> 5 <sup>m</sup>  | 22 <sup>h</sup> D28             | 12 <sup>h</sup> 56 <sup>m</sup> | 11 <sup>h</sup> 26 <sup>m</sup> | 8 <sup>h</sup> 30 <sup>m</sup>  | 10 <sup>h</sup> 23 <sup>m</sup> | W 5  |
| T 6  | 0 58 49 | 12 <sup>h</sup> 47 <sup>m</sup> 03 <sup>s</sup>   | 17 <sup>h</sup> 37 <sup>m</sup>                 | 16 <sup>h</sup> 49 <sup>m</sup> | 19 <sup>h</sup> 56 <sup>m</sup> | 6 <sup>h</sup> 44 <sup>m</sup>   | 14 <sup>h</sup> 33 <sup>m</sup> | 1 <sup>h</sup> 0 <sup>m</sup>  | 2 <sup>h</sup> 5 <sup>m</sup>  | 21 <sup>h</sup> 7 <sup>m</sup>  | 22 <sup>h</sup> 28 <sup>m</sup> | 12 <sup>h</sup> 53 <sup>m</sup> | 11 <sup>h</sup> 22 <sup>m</sup> | 8 <sup>h</sup> 37 <sup>m</sup>  | 10 <sup>h</sup> 20 <sup>m</sup> | T 6  |
| F 7  | 1 2 45  | 13 <sup>h</sup> 46 <sup>m</sup> 22 <sup>s</sup>   | 1 <sup>h</sup> 26 <sup>m</sup>                  | 18 <sup>h</sup> 29 <sup>m</sup> | 21 <sup>h</sup> 11 <sup>m</sup> | 7 <sup>h</sup> 18 <sup>m</sup>   | 14 <sup>h</sup> 27 <sup>m</sup> | 1 <sup>h</sup> 7 <sup>m</sup>  | 2 <sup>h</sup> 3 <sup>m</sup>  | 21 <sup>h</sup> 9 <sup>m</sup>  | 22 <sup>h</sup> 28 <sup>m</sup> | 12 <sup>h</sup> 49 <sup>m</sup> | 11 <sup>h</sup> 19 <sup>m</sup> | 8 <sup>h</sup> 44 <sup>m</sup>  | 10 <sup>h</sup> 18 <sup>m</sup> | F 7  |
| S 8  | 1 6 42  | 14 <sup>h</sup> 45 <sup>m</sup> 44 <sup>s</sup>   | 15 <sup>h</sup> 29 <sup>m</sup>                 | 20 <sup>h</sup> 9 <sup>m</sup>  | 22 <sup>h</sup> 25 <sup>m</sup> | 7 <sup>h</sup> 53 <sup>m</sup>   | 14 <sup>h</sup> 21 <sup>m</sup> | 1 <sup>h</sup> 15 <sup>m</sup> | 2 <sup>h</sup> 2 <sup>m</sup>  | 21 <sup>h</sup> 11 <sup>m</sup> | 22 <sup>h</sup> 28 <sup>m</sup> | 12 <sup>h</sup> 44 <sup>m</sup> | 11 <sup>h</sup> 16 <sup>m</sup> | 8 <sup>h</sup> 50 <sup>m</sup>  | 10 <sup>h</sup> 15 <sup>m</sup> | S 8  |
| S 9  | 1 10 38 | 15 <sup>h</sup> 45 <sup>m</sup> 08 <sup>s</sup>   | 29 <sup>h</sup> 41 <sup>m</sup>                 | 21 <sup>h</sup> 49 <sup>m</sup> | 23 <sup>h</sup> 39 <sup>m</sup> | 8 <sup>h</sup> 27 <sup>m</sup>   | 14 <sup>h</sup> 15 <sup>m</sup> | 1 <sup>h</sup> 22 <sup>m</sup> | 2 <sup>h</sup> 0 <sup>m</sup>  | 21 <sup>h</sup> 13 <sup>m</sup> | 22 <sup>h</sup> 28 <sup>m</sup> | 12 <sup>h</sup> 39 <sup>m</sup> | 11 <sup>h</sup> 13 <sup>m</sup> | 8 <sup>h</sup> 57 <sup>m</sup>  | 10 <sup>h</sup> 12 <sup>m</sup> | S 9  |
| M10  | 1 14 35 | 16 <sup>h</sup> 44 <sup>m</sup> 34 <sup>s</sup>   | 13 <sup>h</sup> 48 <sup>m</sup> 58 <sup>s</sup> | 23 <sup>h</sup> 27 <sup>m</sup> | 24 <sup>h</sup> 54 <sup>m</sup> | 9 <sup>h</sup> 1 <sup>m</sup>    | 14 <sup>h</sup> 9 <sup>m</sup>  | 1 <sup>h</sup> 29 <sup>m</sup> | 1 <sup>h</sup> 59 <sup>m</sup> | 21 <sup>h</sup> 15 <sup>m</sup> | 22 <sup>h</sup> 28 <sup>m</sup> | 12 <sup>h</sup> 35 <sup>m</sup> | 11 <sup>h</sup> 10 <sup>m</sup> | 9 <sup>h</sup> 4 <sup>m</sup>   | 10 <sup>h</sup> 9 <sup>m</sup>  | M10  |
| T 11 | 1 18 31 | 17 <sup>h</sup> 44 <sup>m</sup> 01 <sup>s</sup>   | 28 <sup>h</sup> 16 <sup>m</sup>                 | 25 <sup>h</sup> 5 <sup>m</sup>  | 26 <sup>h</sup> 8 <sup>m</sup>  | 9 <sup>h</sup> 34 <sup>m</sup>   | 14 <sup>h</sup> 2 <sup>m</sup>  | 1 <sup>h</sup> 37 <sup>m</sup> | 1 <sup>h</sup> 57 <sup>m</sup> | 21 <sup>h</sup> 17 <sup>m</sup> | 22 <sup>h</sup> 28 <sup>m</sup> | 12 <sup>h</sup> 32 <sup>m</sup> | 11 <sup>h</sup> 7 <sup>m</sup>  | 9 <sup>h</sup> 10 <sup>m</sup>  | 10 <sup>h</sup> 7 <sup>m</sup>  | T 11 |
| W12  | 1 22 28 | 18 <sup>h</sup> 43 <sup>m</sup> 31 <sup>s</sup>   | 12 <sup>h</sup> 30 <sup>m</sup>                 | 26 <sup>h</sup> 42 <sup>m</sup> | 27 <sup>h</sup> 22 <sup>m</sup> | 10 <sup>h</sup> 8 <sup>m</sup>   | 13 <sup>h</sup> 56 <sup>m</sup> | 1 <sup>h</sup> 44 <sup>m</sup> | 1 <sup>h</sup> 56 <sup>m</sup> | 21 <sup>h</sup> 20 <sup>m</sup> | 22 <sup>h</sup> 28 <sup>m</sup> | 12 <sup>h</sup> D30             | 11 <sup>h</sup> 3 <sup>m</sup>  | 9 <sup>h</sup> 17 <sup>m</sup>  | 10 <sup>h</sup> 4 <sup>m</sup>  | W12  |
| T 13 | 1 26 24 | 19 <sup>h</sup> 43 <sup>m</sup> 01 <sup>s</sup>   | 26 <sup>h</sup> 39 <sup>m</sup>                 | 28 <sup>h</sup> 19 <sup>m</sup> | 28 <sup>h</sup> 37 <sup>m</sup> | 10 <sup>h</sup> 42 <sup>m</sup>  | 13 <sup>h</sup> 49 <sup>m</sup> | 1 <sup>h</sup> 51 <sup>m</sup> | 1 <sup>h</sup> 54 <sup>m</sup> | 21 <sup>h</sup> 22 <sup>m</sup> | 22 <sup>h</sup> 28 <sup>m</sup> | 12 <sup>h</sup> 30 <sup>m</sup> | 11 <sup>h</sup> 0 <sup>m</sup>  | 9 <sup>h</sup> 24 <sup>m</sup>  | 10 <sup>h</sup> 1 <sup>m</sup>  | T 13 |
| F 14 | 1 30 21 | 20 <sup>h</sup> 42 <sup>m</sup> 34 <sup>s</sup>   | 10 <sup>h</sup> 34 <sup>m</sup>                 | 29 <sup>h</sup> 55 <sup>m</sup> | 29 <sup>h</sup> 51 <sup>m</sup> | 11 <sup>h</sup> 15 <sup>m</sup>  | 13 <sup>h</sup> 42 <sup>m</sup> | 1 <sup>h</sup> 58 <sup>m</sup> | 1 <sup>h</sup> 52 <sup>m</sup> | 21 <sup>h</sup> 24 <sup>m</sup> | 22 <sup>h</sup> 29 <sup>m</sup> | 12 <sup>h</sup> 32 <sup>m</sup> | 10 <sup>h</sup> 57 <sup>m</sup> | 9 <sup>h</sup> 31 <sup>m</sup>  | 9 <sup>h</sup> 58 <sup>m</sup>  | F 14 |
| S 15 | 1 34 18 | 21 <sup>h</sup> 42 <sup>m</sup> 08 <sup>s</sup>   | 24 <sup>h</sup> 35 <sup>m</sup>                 | 1 <sup>h</sup> 30 <sup>m</sup>  | 1 <sup>h</sup> 6 <sup>m</sup>   | 11 <sup>h</sup> 48 <sup>m</sup>  | 13 <sup>h</sup> 35 <sup>m</sup> | 2 <sup>h</sup> 5 <sup>m</sup>  | 1 <sup>h</sup> 51 <sup>m</sup> | 21 <sup>h</sup> 26 <sup>m</sup> | 22 <sup>h</sup> 29 <sup>m</sup> | 12 <sup>h</sup> 33 <sup>m</sup> | 10 <sup>h</sup> 54 <sup>m</sup> | 9 <sup>h</sup> 37 <sup>m</sup>  | 9 <sup>h</sup> 56 <sup>m</sup>  | S 15 |
| S 16 | 1 38 14 | 22 <sup>h</sup> 41 <sup>m</sup> 44 <sup>s</sup>   | 8 <sup>h</sup> 20 <sup>m</sup>                  | 3 <sup>h</sup> 4 <sup>m</sup>   | 2 <sup>h</sup> 21 <sup>m</sup>  | 12 <sup>h</sup> 21 <sup>m</sup>  | 13 <sup>h</sup> 28 <sup>m</sup> | 2 <sup>h</sup> 13 <sup>m</sup> | 1 <sup>h</sup> 49 <sup>m</sup> | 21 <sup>h</sup> 28 <sup>m</sup> | 22 <sup>h</sup> 29 <sup>m</sup> | 12 <sup>h</sup> R34             | 10 <sup>h</sup> 51 <sup>m</sup> | 9 <sup>h</sup> 44 <sup>m</sup>  | 9 <sup>h</sup> 53 <sup>m</sup>  | S 16 |
| M17  | 1 42 11 | 23 <sup>h</sup> 41 <sup>m</sup> 22 <sup>s</sup>   | 21 <sup>h</sup> 56 <sup>m</sup>                 | 4 <sup>h</sup> 38 <sup>m</sup>  | 3 <sup>h</sup> 35 <sup>m</sup>  | 12 <sup>h</sup> 55 <sup>m</sup>  | 13 <sup>h</sup> 21 <sup>m</sup> | 2 <sup>h</sup> 20 <sup>m</sup> | 1 <sup>h</sup> 47 <sup>m</sup> | 21 <sup>h</sup> 29 <sup>m</sup> | 22 <sup>h</sup> 30 <sup>m</sup> | 12 <sup>h</sup> 34 <sup>m</sup> | 10 <sup>h</sup> 47 <sup>m</sup> | 9 <sup>h</sup> 51 <sup>m</sup>  | 9 <sup>h</sup> 50 <sup>m</sup>  | M17  |
| T 18 | 1 46 7  | 24 <sup>h</sup> 41 <sup>m</sup> 02 <sup>s</sup>   | 5 <sup>h</sup> V21                              | 6 <sup>h</sup> 12 <sup>m</sup>  | 4 <sup>h</sup> 50 <sup>m</sup>  | 13 <sup>h</sup> 27 <sup>m</sup>  | 13 <sup>h</sup> 13 <sup>m</sup> | 2 <sup>h</sup> 27 <sup>m</sup> | 1 <sup>h</sup> 45 <sup>m</sup> | 21 <sup>h</sup> 31 <sup>m</sup> | 22 <sup>h</sup> 30 <sup>m</sup> | 12 <sup>h</sup> 31 <sup>m</sup> | 10 <sup>h</sup> 44 <sup>m</sup> | 9 <sup>h</sup> 57 <sup>m</sup>  | 9 <sup>h</sup> 48 <sup>m</sup>  | T 18 |
| W19  | 1 50 4  | 25 <sup>h</sup> 40 <sup>m</sup> 44 <sup>s</sup>   | 18 <sup>h</sup> 33 <sup>m</sup>                 | 7 <sup>h</sup> 44 <sup>m</sup>  | 6 <sup>h</sup> 4 <sup>m</sup>   | 14 <sup>h</sup> 0 <sup>m</sup>   | 13 <sup>h</sup> 6 <sup>m</sup>  | 2 <sup>h</sup> 34 <sup>m</sup> | 1 <sup>h</sup> 43 <sup>m</sup> | 21 <sup>h</sup> 33 <sup>m</sup> | 22 <sup>h</sup> 30 <sup>m</sup> | 12 <sup>h</sup> 27 <sup>m</sup> | 10 <sup>h</sup> 41 <sup>m</sup> | 10 <sup>h</sup> 4 <sup>m</sup>  | 9 <sup>h</sup> 45 <sup>m</sup>  | W19  |
| T 20 | 1 54 0  | 26 <sup>h</sup> 40 <sup>m</sup> 27 <sup>s</sup>   | 1 <sup>h</sup> 33 <sup>m</sup>                  | 9 <sup>h</sup> 17 <sup>m</sup>  | 7 <sup>h</sup> 19 <sup>m</sup>  | 14 <sup>h</sup> 33 <sup>m</sup>  | 12 <sup>h</sup> 59 <sup>m</sup> | 2 <sup>h</sup> 41 <sup>m</sup> | 1 <sup>h</sup> 41 <sup>m</sup> | 21 <sup>h</sup> 35 <sup>m</sup> | 22 <sup>h</sup> 31 <sup>m</sup> | 12 <sup>h</sup> 21 <sup>m</sup> | 10 <sup>h</sup> 38 <sup>m</sup> | 10 <sup>h</sup> 11 <sup>m</sup> | 9 <sup>h</sup> 42 <sup>m</sup>  | T 20 |
| F 21 | 1 57 57 | 27 <sup>h</sup> 40 <sup>m</sup> 13 <sup>s</sup>   | 14 <sup>h</sup> 19 <sup>m</sup>                 | 10 <sup>h</sup> 48 <sup>m</sup> | 8 <sup>h</sup> 34 <sup>m</sup>  | 15 <sup>h</sup> 5 <sup>m</sup>   | 12 <sup>h</sup> 51 <sup>m</sup> | 2 <sup>h</sup> 48 <sup>m</sup> | 1 <sup>h</sup> 40 <sup>m</sup> | 21 <sup>h</sup> 37 <sup>m</sup> | 22 <sup>h</sup> 31 <sup>m</sup> | 12 <sup>h</sup> 13 <sup>m</sup> | 10 <sup>h</sup> 35 <sup>m</sup> | 10 <sup>h</sup> 18 <sup>m</sup> | 9 <sup>h</sup> 40 <sup>m</sup>  | F 21 |
| S 22 | 2 1 53  | 28 <sup>h</sup> 40 <sup>m</sup> 00 <sup>s</sup>   | 26 <sup>h</sup> 51 <sup>m</sup>                 | 12 <sup>h</sup> 19 <sup>m</sup> | 9 <sup>h</sup> 49 <sup>m</sup>  | 15 <sup>h</sup> 38 <sup>m</sup>  | 12 <sup>h</sup> 43 <sup>m</sup> | 2 <sup>h</sup> 55 <sup>m</sup> | 1 <sup>h</sup> 38 <sup>m</sup> | 21 <sup>h</sup> 39 <sup>m</sup> | 22 <sup>h</sup> 32 <sup>m</sup> | 12 <sup>h</sup> 4 <sup>m</sup>  | 10 <sup>h</sup> 32 <sup>m</sup> | 10 <sup>h</sup> 24 <sup>m</sup> | 9 <sup>h</sup> 37 <sup>m</sup>  | S 22 |
| S 23 | 2 5 50  | 29 <sup>h</sup> 39 <sup>m</sup> 50 <sup>s</sup>   | 9 <sup>h</sup> II 9                             | 13 <sup>h</sup> 50 <sup>m</sup> | 11 <sup>h</sup> 4 <sup>m</sup>  | 16 <sup>h</sup> 10 <sup>m</sup>  | 12 <sup>h</sup> 36 <sup>m</sup> | 3 <sup>h</sup> 2 <sup>m</sup>  | 1 <sup>h</sup> 36 <sup>m</sup> | 21 <sup>h</sup> 41 <sup>m</sup> | 22 <sup>h</sup> 32 <sup>m</sup> | 11 <sup>h</sup> 55 <sup>m</sup> | 10 <sup>h</sup> 28 <sup>m</sup> | 10 <sup>h</sup> 31 <sup>m</sup> | 9 <sup>h</sup> 34 <sup>m</sup>  | S 23 |
| M24  | 2 9 46  | 0 <sup>h</sup> III39 <sup>m</sup> 42 <sup>s</sup> | 21 <sup>h</sup> 15 <sup>m</sup>                 | 15 <sup>h</sup> 20 <sup>m</sup> | 12 <sup>h</sup> 18 <sup>m</sup> | 16 <sup>h</sup> 42 <sup>m</sup>  | 12 <sup>h</sup> 28 <sup>m</sup> | 3 <sup>h</sup> 9 <sup>m</sup>  | 1 <sup>h</sup> 34 <sup>m</sup> | 21 <sup>h</sup> 43 <sup>m</sup> | 22 <sup>h</sup> 33 <sup>m</sup> | 11 <sup>h</sup> 48 <sup>m</sup> | 10 <sup>h</sup> 25 <sup>m</sup> | 10 <sup>h</sup> 38 <sup>m</sup> | 9 <sup>h</sup> 32 <sup>m</sup>  | M24  |
| T 25 | 2 13 43 | 1 <sup>h</sup> 39 <sup>m</sup> 36 <sup>s</sup>    | 3 <sup>h</sup> 51 <sup>m</sup>                  | 16 <sup>h</sup> 49 <sup>m</sup> | 13 <sup>h</sup> 33 <sup>m</sup> | 17 <sup>h</sup> 14 <sup>m</sup>  | 12 <sup>h</sup> 20 <sup>m</sup> | 3 <sup>h</sup> 16 <sup>m</sup> | 1 <sup>h</sup> 31 <sup>m</sup> | 21 <sup>h</sup> 45 <sup>m</sup> | 22 <sup>h</sup> 33 <sup>m</sup> | 11 <sup>h</sup> 42 <sup>m</sup> | 10 <sup>h</sup> 22 <sup>m</sup> | 10 <sup>h</sup> 44 <sup>m</sup> | 9 <sup>h</sup> 29 <sup>m</sup>  | T 25 |
| W26  | 2 17 40 | 2 <sup>h</sup> 39 <sup>m</sup> 32 <sup>s</sup>    | 15 <sup>h</sup> 4 <sup>m</sup>                  | 18 <sup>h</sup> 18 <sup>m</sup> | 14 <sup>h</sup> 48 <sup>m</sup> | 17 <sup>h</sup> 45 <sup>m</sup>  | 12 <sup>h</sup> 12 <sup>m</sup> | 3 <sup>h</sup> 22 <sup>m</sup> | 1 <sup>h</sup> 29 <sup>m</sup> | 21 <sup>h</sup> 46 <sup>m</sup> | 22 <sup>h</sup> 34 <sup>m</sup> | 11 <sup>h</sup> 38 <sup>m</sup> | 10 <sup>h</sup> 19 <sup>m</sup> | 10 <sup>h</sup> 51 <sup>m</sup> | 9 <sup>h</sup> 27 <sup>m</sup>  | W26  |
| T 27 | 2 21 36 | 3 <sup>h</sup> 39 <sup>m</sup> 31 <sup>s</sup>    | 26 <sup>h</sup> 54 <sup>m</sup>                 | 19 <sup>h</sup> 46 <sup>m</sup> | 16 <sup>h</sup> 3 <sup>m</sup>  | 18 <sup>h</sup> 17 <sup>m</sup>  | 12 <sup>h</sup> 4 <sup>m</sup>  | 3 <sup>h</sup> 29 <sup>m</sup> | 1 <sup>h</sup> 27 <sup>m</sup> | 21 <sup>h</sup> 48 <sup>m</sup> | 22 <sup>h</sup> 35 <sup>m</sup> | 11 <sup>h</sup> 36 <sup>m</sup> | 10 <sup>h</sup> 16 <sup>m</sup> | 10 <sup>h</sup> 58 <sup>m</sup> | 9 <sup>h</sup> 24 <sup>m</sup>  | T 27 |
| F 28 | 2 25 33 | 4 <sup>h</sup> 39 <sup>m</sup> 31 <sup>s</sup>    | 8 <sup>h</sup> II49                             | 21 <sup>h</sup> 14 <sup>m</sup> | 17 <sup>h</sup> 18 <sup>m</sup> | 18 <sup>h</sup> 48 <sup>m</sup>  | 11 <sup>h</sup> 56 <sup>m</sup> | 3 <sup>h</sup> 36 <sup>m</sup> | 1 <sup>h</sup> 25 <sup>m</sup> | 21 <sup>h</sup> 50 <sup>m</sup> | 22 <sup>h</sup> 35 <sup>m</sup> | 11 <sup>h</sup> D36             | 10 <sup>h</sup> 13 <sup>m</sup> | 11 <sup>h</sup> 4 <sup>m</sup>  | 9 <sup>h</sup> 22 <sup>m</sup>  | F 28 |
| S 29 | 2 29 29 | 5 <sup>h</sup> 39 <sup>m</sup> 34 <sup>s</sup>    | 20 <sup>h</sup> 52 <sup>m</sup>                 | 22 <sup>h</sup> 41 <sup>m</sup> | 18 <sup>h</sup> 33 <sup>m</sup> | 19 <sup>h</sup> 20 <sup>m</sup>  | 11 <sup>h</sup> 48 <sup>m</sup> | 3 <sup>h</sup> 43 <sup>m</sup> | 1 <sup>h</sup> 23 <sup>m</sup> | 21 <sup>h</sup> 52 <sup>m</sup> | 22 <sup>h</sup> 36 <sup>m</sup> | 11 <sup>h</sup> 36 <sup>m</sup> | 10 <sup>h</sup> 9 <sup>m</sup>  | 11 <sup>h</sup> 11 <sup>m</sup> | 9 <sup>h</sup> 19 <sup>m</sup>  | S 29 |
| S 30 | 2 33 26 | 6 <sup>h</sup> 39 <sup>m</sup> 39 <sup>s</sup>    | 3 <sup>h</sup> II10                             | 24 <sup>h</sup> 8 <sup>m</sup>  | 19 <sup>h</sup> 48 <sup>m</sup> | 19 <sup>h</sup> 51 <sup>m</sup>  | 11 <sup>h</sup> 40 <sup>m</sup> | 3 <sup>h</sup> 49 <sup>m</sup> | 1 <sup>h</sup> 21 <sup>m</sup> | 21 <sup>h</sup> 53 <sup>m</sup> | 22 <sup>h</sup> 37 <sup>m</sup> | 11 <sup>h</sup> 37 <sup>m</sup> | 10 <sup>h</sup> 6 <sup>m</sup>  | 11 <sup>h</sup> 18 <sup>m</sup> | 9 <sup>h</sup> 17 <sup>m</sup>  | S 30 |
| M31  | 2 37 22 | 7 <sup>h</sup> III39 <sup>m</sup> 46 <sup>s</sup> | 15 <sup>h</sup> II46                            | 25 <sup>h</sup> III34           | 21 <sup>h</sup> 3 <sup>m</sup>  | 20 <sup>h</sup> II22             | 11 <sup>h</sup> 53 <sup>m</sup> | 3 <sup>h</sup> 56 <sup>m</sup> | 1 <sup>h</sup> II18            | 21 <sup>h</sup> 55 <sup>m</sup> | 22 <sup>h</sup> 37 <sup>m</sup> | 11 <sup>h</sup> R38             | 10 <sup>h</sup> II 3            | 11 <sup>h</sup> 25 <sup>m</sup> | 9 <sup>h</sup> V15              | M31  |

| 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 | decl | decl | decl | decl | decl | decl | decl | decl | decl |
| S 1 | 3s 7  | 14n24 | 2s37 | 2s 9  | 1n12 | 7n37 | 1n19 | 20n24 | 1n 7 | 15n 3 | 1s22 | 1n46 | 2n 6 | 20n27 | 0s11 | 4n39 | 1n 8 | 23s40 | 2s 7 | 6n43 | 7n12 | 18n37 | 6n12 | 2n12 |      |      |      |      |      |      |      |      |      |      |
| S 2 | 3 30  | 11 35 | 1 35 | 2 55  | 1 7  | 7 9  | 1 20 | 20 16 | 1 8  | 15 1  | 1 22 | 1 43 | 2 6  | 20 26 | 0 11 | 4 38 | 1 8  | 23 40 | 2 7  | 6 42 | 7 14 | 18 37 | 6 11 | 2 11 |      |      |      |      |      |      |      |      |      |      |
| M 3 | 3 54  | 8 10  | 0 27 | 3 42  | 1 1  | 6 42 | 1 22 | 20 9  | 1 9  | 15 0  | 1 22 | 1 40 | 2 6  | 20 26 | 0 11 | 4 37 | 1 9  | 23 40 | 2 7  | 6 42 | 7 15 | 18 37 | 6 10 | 2 11 |      |      |      |      |      |      |      |      |      |      |
| T 4 | 4 17  | 4 17  | 0n43 | 4 27  | 0 55 | 6 14 | 1 23 | 20 1  | 1 10 | 14 58 | 1 23 | 1 37 | 2 6  | 20 26 | 0 11 | 4 36 | 1 9  | 23 40 | 2 7  | 6 42 | 7 16 | 18 37 | 6 9  | 2 11 |      |      |      |      |      |      |      |      |      |      |
| W 5 | 4 40  | 0 6   | 1 53 | 5 13  | 0 49 | 5 46 | 1 24 | 19 54 | 1 11 | 14 56 | 1 23 | 1 35 | 2 6  | 20 26 | 0 11 | 4 35 | 1 9  | 23 40 | 2 7  | 6 43 | 7 17 | 18 37 | 6 8  | 2 11 |      |      |      |      |      |      |      |      |      |      |
| T 6 | 5 3   | 4s10  | 2 58 | 5 57  | 0 43 | 5 18 | 1 25 | 19 46 | 1 12 | 14 54 | 1 23 | 1 32 | 2 6  | 20 25 | 0 11 | 4 35 | 1 9  | 23 41 | 2 7  | 6 44 | 7 18 | 18 37 | 6 7  | 2 11 |      |      |      |      |      |      |      |      |      |      |
| F 7 | 5 26  | 8 19  | 3 54 | 6 42  | 0 36 | 4 49 | 1 26 | 19 38 | 1 13 | 14 53 | 1 23 | 1 29 | 2 6  | 20 25 | 0 11 | 4 34 | 1 9  | 23 41 | 2 7  | 6 45 | 7 20 | 18 37 | 6 5  | 2 11 |      |      |      |      |      |      |      |      |      |      |
| S 8 | 5 49  | 12 4  | 4 37 | 7 26  | 0 30 | 4 21 | 1 27 | 19 30 | 1 14 | 14 51 | 1 23 | 1 26 | 2 6  | 20 25 | 0 11 | 4 33 | 1 9  | 23 41 | 2 7  | 6 47 | 7 21 | 18 37 | 6 4  | 2 11 |      |      |      |      |      |      |      |      |      |      |
| S 9 | 6 12  | 15 10 | 5 4  | 8 9   | 0 23 | 3 52 | 1 28 | 19 22 | 1 15 | 14 49 | 1 23 | 1 23 | 2 6  | 20 25 | 0 11 | 4 32 | 1 9  | 23 41 | 2 7  | 6 49 | 7 22 | 18 37 | 6 3  | 2 11 |      |      |      |      |      |      |      |      |      |      |
| M10 | 6 35  | 17 21 | 5 11 | 8 52  | 0 16 | 3 23 | 1 29 | 19 14 | 1 16 | 14 47 | 1 23 | 1 20 | 2 6  | 20 24 | 0 11 | 4 31 | 1 9  | 23 41 | 2 7  | 6 51 | 7 23 | 18 37 | 6 2  | 2 11 |      |      |      |      |      |      |      |      |      |      |
| T11 | 6 58  | 18 27 | 5 0  | 9 34  | 0 9  | 2 54 | 1 29 | 19 6  | 1 17 | 14 45 | 1 23 | 1 18 | 2 6  | 20 24 | 0 11 | 4 31 | 1 9  | 23 41 | 2 7  | 6 52 | 7 24 | 18 37 | 6 1  | 2 11 |      |      |      |      |      |      |      |      |      |      |
| W12 | 7 21  | 18 24 | 4 30 | 10 16 | 0 3  | 2 25 | 1 30 | 18 58 | 1 18 | 14 43 | 1 23 | 1 15 | 2 7  | 20 24 | 0 11 | 4 30 | 1 9  | 23 41 | 2 7  | 6 52 | 7 26 | 18 37 | 6 0  | 2 11 |      |      |      |      |      |      |      |      |      |      |
| T13 | 7 43  | 17 11 | 3 44 | 10 57 | 0s 4 | 1 56 | 1 31 | 18 50 | 1 19 | 14 41 | 1 23 | 1 12 | 2 7  | 20 23 | 0 11 | 4 29 | 1 9  | 23 41 | 2 7  | 6 52 | 7 27 | 18 37 | 5 58 | 2 11 |      |      |      |      |      |      |      |      |      |      |
| F14 | 8 6   | 14 56 | 2 45 | 11 38 | 0 11 | 1 27 | 1 31 | 18 42 | 1 20 | 14 39 | 1 23 | 1 9  | 2 7  | 20 23 | 0 11 | 4 28 | 1 9  | 23 41 | 2 7  | 6 52 | 7 28 | 18 37 | 5 57 | 2 10 |      |      |      |      |      |      |      |      |      |      |
| S15 | 8 28  | 14 50 | 1 36 | 12 17 | 0 18 | 0 58 | 1 31 | 18 33 | 1 21 | 14 37 | 1 23 | 1 6  | 2 7  | 20 23 | 0 11 | 4 27 | 1 9  | 23 40 | 2 7  | 6 51 | 7 29 | 18 37 | 5 56 | 2 10 |      |      |      |      |      |      |      |      |      |      |
| S16 | 8 50  | 8 6   | 0 23 | 12 56 | 0 25 | 0 28 | 1 32 | 18 25 | 1 22 | 14 34 | 1 23 | 1 4  | 2 7  | 20 22 | 0 11 | 4 27 | 1 9  | 23 40 | 2 7  | 6 51 | 7 30 | 18 37 | 5 55 | 2 10 |      |      |      |      |      |      |      |      |      |      |
| M17 | 9 12  | 3 59  | 0s51 | 13 35 | 0 32 | 0s 1 | 1 32 | 18 17 | 1 23 | 14 32 | 1 23 | 1 1  | 2 7  | 20 22 | 0 11 | 4 26 | 1 9  | 23 40 | 2 7  | 6 51 | 7 32 | 18 37 | 5 54 | 2 10 |      |      |      |      |      |      |      |      |      |      |
| T18 | 9 34  | 0n17  | 2 0  | 14 12 | 0 38 | 0 31 | 1 32 | 18 8  | 1 24 | 14 30 | 1 23 | 0 58 | 2 7  | 20 22 | 0 11 | 4 25 | 1 9  | 23 40 | 2 7  | 6 52 | 7 33 | 18 37 | 5 53 | 2 10 |      |      |      |      |      |      |      |      |      |      |
| W19 | 9 56  | 4 28  | 3 2  | 14 49 | 0 45 | 1 0  | 1 32 | 18 0  | 1 25 | 14 28 | 1 23 | 0 56 | 2 7  | 20 21 | 0 11 | 4 24 | 1 9  | 23 40 | 2 7  | 6 54 | 7 34 | 18 37 | 5 51 | 2 10 |      |      |      |      |      |      |      |      |      |      |
| T20 | 10 18 | 8 22  | 3 54 | 15 25 | 0 52 | 1 30 | 1 32 | 17 51 | 1 26 | 14 26 | 1 23 | 0 53 | 2 7  | 20 21 | 0 11 | 4 24 | 1 9  | 23 40 | 2 7  | 6 56 | 7 35 | 18 37 | 5 50 | 2 10 |      |      |      |      |      |      |      |      |      |      |
| F21 | 10 39 | 11 49 | 4 32 | 16 1  | 0 59 | 1 59 | 1 32 | 17 43 | 1 27 | 14 23 | 1 23 | 0 50 | 2 7  | 20 20 | 0 11 | 4 23 | 1 9  | 23 40 | 2 7  | 6 59 | 7 37 | 18 36 | 5 49 | 2 10 |      |      |      |      |      |      |      |      |      |      |
| S22 | 11 1  | 14 40 | 4 57 | 16 35 | 1 5  | 2 29 | 1 32 | 17 34 | 1 28 | 14 21 | 1 23 | 0 47 | 2 8  | 20 20 | 0 11 | 4 22 | 1 9  | 23 40 | 2 7  | 7 3  | 7 38 | 18 36 | 5 48 | 2 10 |      |      |      |      |      |      |      |      |      |      |
| S23 | 11 22 | 16 47 | 5 7  | 17 9  | 1 11 | 2 58 | 1 32 | 17 26 | 1 29 | 14 19 | 1 23 | 0 45 | 2 8  | 20 20 | 0 11 | 4 22 | 1 9  | 23 40 | 2 7  | 7 6  | 7 39 | 18 36 | 5 47 | 2 9  |      |      |      |      |      |      |      |      |      |      |
| M24 | 11 43 | 18 8  | 5 3  | 17 41 | 1 18 | 3 27 | 1 32 | 17 17 | 1 30 | 14 16 | 1 23 | 0 42 | 2 8  | 20 19 | 0 11 | 4 21 | 1 9  | 23 40 | 2 7  | 7 9  | 7 40 | 18 36 | 5 46 | 2 9  |      |      |      |      |      |      |      |      |      |      |
| T25 | 12 4  | 18 40 | 4 46 | 18 13 | 1 24 | 3 57 | 1 32 | 17 8  | 1 31 | 14 14 | 1 23 | 0 40 | 2 8  | 20 19 | 0 11 | 4 20 | 1 9  | 23 40 | 2 7  | 7 11 | 7 41 | 18 36 | 5 45 | 2 9  |      |      |      |      |      |      |      |      |      |      |
| W26 | 12 25 | 18 22 | 4 17 | 18 44 | 1 30 | 4 26 | 1 31 | 17 0  | 1 32 | 14 12 | 1 23 | 0 37 | 2 8  | 20 18 | 0 11 | 4 20 | 1 9  | 23 40 | 2 7  | 7 13 | 7 43 | 18 36 | 5 43 | 2 9  |      |      |      |      |      |      |      |      |      |      |
| T27 | 12 45 | 17 15 | 3 37 | 19 14 | 1 36 | 4 55 | 1 31 | 16 51 | 1 34 | 14 9  | 1 23 | 0 34 | 2 8  | 20 18 | 0 11 | 4 19 | 1 9  | 23 40 | 2 7  | 7 13 | 7 44 | 18 36 | 5 42 | 2 9  |      |      |      |      |      |      |      |      |      |      |
| F28 | 13 5  | 15 23 | 2 47 | 19 44 | 1 42 | 5 25 | 1 30 | 16 42 | 1 35 | 14 7  | 1 23 | 0 32 | 2 8  | 20 18 | 0 11 | 4 18 | 1 9  | 23 40 | 2 7  | 7 13 | 7 45 | 18 36 | 5 41 | 2 9  |      |      |      |      |      |      |      |      |      |      |
| S29 | 13 25 | 12 50 | 1 49 | 20 12 | 1 47 | 5 54 | 1 30 | 16 33 | 1 36 | 14 4  | 1 23 | 0 29 | 2 9  | 20 17 | 0 11 | 4 18 | 1 9  | 23 40 | 2 7  | 7 13 | 7 46 | 18 36 | 5 40 | 2 9  |      |      |      |      |      |      |      |      |      |      |
| S30 | 13 45 | 9 39  | 0 45 | 20 39 | 1 53 | 6 23 | 1 29 | 16 25 | 1 37 | 14 2  | 1 23 | 0 27 | 2 9  | 20 17 | 0 11 | 4 17 | 1 9  | 23 40 | 2 7  | 7 13 | 7 47 | 18 36 | 5 39 | 2 9  |      |      |      |      |      |      |      |      |      |      |
| M31 | 14s 5 | 5n57  | 0n22 | 21s 5 | 1s58 | 6s51 | 1n29 | 16n16 | 1n38 | 13n59 | 1s23 | 0n24 | 2n 9 | 20n16 | 0s11 | 4n16 | 1n 9 | 23s40 | 2s 7 | 7n13 | 7n49 | 18n36 | 5n38 | 2n 8 |      |      |      |      |      |      |      |      |      |      |



# ASTRODIENST EPHEMERIS for the year 1774

## geocentric

DECEMBER 1774

00:00 UT

| Day  | Sid.t   | ☉        | ☽      | ♀      | ♀     | ♂     | ♂     | ♂    | ♂     | ♂      | ♂     | ♂     | ♂    | ♂     | ♂     | Day  |
|------|---------|----------|--------|--------|-------|-------|-------|------|-------|--------|-------|-------|------|-------|-------|------|
| T 1  | 4 39 36 | 8♌56°30  | 3♈54   | 18°R48 | 29♈58 | 4♈34  | 7°R40 | 6♌54 | 0°R 2 | 22♈34  | 23♌13 | 8°R34 | 8♈25 | 14♌52 | 8°R20 | T 1  |
| F 2  | 4 43 32 | 9°57'25  | 18°16  | 17♌44  | 1♌13  | 4°57  | 7♌35  | 6°59 | 29♌59 | 22°35  | 23°15 | 8♈25  | 8°21 | 14°59 | 8°Y19 | F 2  |
| S 3  | 4 47 29 | 10°58'22 | 3♌ 3   | 16°32  | 2°29  | 5°20  | 7°29  | 7° 3 | 29°57 | 22°36  | 23°16 | 8°13  | 8°18 | 15° 6 | 8°18  | S 3  |
| S 4  | 4 51 25 | 11°59'20 | 18° 6  | 15°13  | 3°44  | 5°43  | 7°24  | 7° 8 | 29°55 | 22°37  | 23°18 | 8° 1  | 8°15 | 15°12 | 8°17  | S 4  |
| M 5  | 4 55 22 | 13° 0'19 | 3♌14   | 13°51  | 5° 0  | 6° 5  | 7°18  | 7°12 | 29°53 | 22°37  | 23°19 | 7°50  | 8°12 | 15°19 | 8°16  | M 5  |
| T 6  | 4 59 18 | 14° 1'18 | 18°18  | 12°28  | 6°15  | 6°27  | 7°13  | 7°17 | 29°50 | 22°38  | 23°21 | 7°41  | 8° 9 | 15°26 | 8°16  | T 6  |
| W 7  | 5 3 15  | 15° 2'18 | 3♌ 8   | 11° 7  | 7°31  | 6°49  | 7° 8  | 7°21 | 29°48 | 22°39  | 23°22 | 7°34  | 8° 5 | 15°32 | 8°15  | W 7  |
| T 8  | 5 7 11  | 16° 3'19 | 17°39  | 9°51   | 8°46  | 7°10  | 7° 4  | 7°25 | 29°45 | 22°39  | 23°24 | 7°31  | 8° 2 | 15°39 | 8°14  | T 8  |
| F 9  | 5 11 8  | 17° 4'20 | 1♌46   | 8°41   | 10° 2 | 7°31  | 6°59  | 7°29 | 29°43 | 22°40  | 23°26 | 7°30  | 7°59 | 15°46 | 8°14  | F 9  |
| S 10 | 5 15 5  | 18° 5'22 | 15°31  | 7°40   | 11°17 | 7°52  | 6°55  | 7°33 | 29°41 | 22°40  | 23°27 | 7°30  | 7°56 | 15°52 | 8°13  | S 10 |
| S 11 | 5 19 1  | 19° 6'24 | 28°53  | 6°49   | 12°33 | 8°12  | 6°50  | 7°37 | 29°38 | 22°41  | 23°29 | 7°30  | 7°53 | 15°59 | 8°13  | S 11 |
| M12  | 5 22 58 | 20° 7'27 | 11°Y57 | 6° 9   | 13°48 | 8°31  | 6°46  | 7°41 | 29°36 | 22°41  | 23°31 | 7°28  | 7°50 | 16° 6 | 8°12  | M12  |
| T 13 | 5 26 54 | 21° 8'30 | 24°45  | 5°40   | 15° 4 | 8°51  | 6°42  | 7°45 | 29°34 | 22°42  | 23°33 | 7°24  | 7°46 | 16°13 | 8°12  | T 13 |
| W14  | 5 30 51 | 22° 9'34 | 7♌20   | 5°22   | 16°19 | 9°10  | 6°39  | 7°48 | 29°31 | 22°42  | 23°34 | 7°17  | 7°43 | 16°19 | 8°11  | W14  |
| T 15 | 5 34 47 | 23°10'37 | 19°44  | 5°D15  | 17°35 | 9°28  | 6°35  | 7°52 | 29°29 | 22°42  | 23°36 | 7° 6  | 7°40 | 16°26 | 8°11  | T 15 |
| F 16 | 5 38 44 | 24°11'42 | 1♌59   | 5°17   | 18°50 | 9°46  | 6°32  | 7°55 | 29°27 | 22°43  | 23°38 | 6°54  | 7°37 | 16°33 | 8°11  | F 16 |
| S 17 | 5 42 40 | 25°12'47 | 14° 6  | 5°29   | 20° 6 | 10° 4 | 6°29  | 7°58 | 29°25 | 22°43  | 23°39 | 6°40  | 7°34 | 16°39 | 8°11  | S 17 |
| S 18 | 5 46 37 | 26°13'52 | 26° 7  | 5°50   | 21°21 | 10°21 | 6°26  | 8° 2 | 29°22 | 22°43  | 23°41 | 6°27  | 7°31 | 16°46 | 8°11  | S 18 |
| M19  | 5 50 34 | 27°14'58 | 8♌ 3   | 6°18   | 22°37 | 10°38 | 6°24  | 8° 5 | 29°20 | 22°43  | 23°43 | 6°14  | 7°27 | 16°53 | 8°D11 | M19  |
| T 20 | 5 54 30 | 28°16'04 | 19°54  | 6°53   | 23°52 | 10°54 | 6°21  | 8° 8 | 29°18 | 22°44  | 23°45 | 6° 3  | 7°24 | 16°59 | 8°11  | T 20 |
| W21  | 5 58 27 | 29°17'11 | 1♌43   | 7°35   | 25° 8 | 11°10 | 6°19  | 8°11 | 29°16 | 22°44  | 23°47 | 5°55  | 7°21 | 17° 6 | 8°11  | W21  |
| T 22 | 6 2 23  | 0♌18'18  | 13°32  | 8°21   | 26°23 | 11°25 | 6°17  | 8°14 | 29°14 | 22°44  | 23°49 | 5°49  | 7°18 | 17°13 | 8°11  | T 22 |
| F 23 | 6 6 20  | 1°19'26  | 25°24  | 9°13   | 27°39 | 11°40 | 6°15  | 8°17 | 29°12 | 22°44  | 23°50 | 5°47  | 7°15 | 17°20 | 8°11  | F 23 |
| S 24 | 6 10 16 | 2°20'34  | 7♈24   | 10° 9  | 28°54 | 11°54 | 6°13  | 8°19 | 29°10 | 22°44  | 23°52 | 5°D46 | 7°11 | 17°26 | 8°11  | S 24 |
| S 25 | 6 14 13 | 3°21'43  | 19°36  | 11° 9  | 0♌10  | 12° 8 | 6°12  | 8°22 | 29° 8 | 22°R44 | 23°54 | 5°47  | 7° 8 | 17°33 | 8°12  | S 25 |
| M26  | 6 18 9  | 4°22'52  | 2♌ 4   | 12°12  | 1°25  | 12°21 | 6°11  | 8°24 | 29° 6 | 22°44  | 23°56 | 5°R47 | 7° 5 | 17°40 | 8°12  | M26  |
| T 27 | 6 22 6  | 5°24'02  | 14°55  | 13°19  | 2°41  | 12°34 | 6°10  | 8°27 | 29° 4 | 22°44  | 23°58 | 5°47  | 7° 2 | 17°46 | 8°12  | T 27 |
| W28  | 6 26 3  | 6°25'12  | 28°12  | 14°27  | 3°56  | 12°46 | 6° 9  | 8°29 | 29° 2 | 22°44  | 24° 0 | 5°45  | 6°59 | 17°53 | 8°13  | W28  |
| T 29 | 6 29 59 | 7°26'22  | 11♌58  | 15°39  | 5°12  | 12°58 | 6° 8  | 8°31 | 29° 0 | 22°44  | 24° 2 | 5°40  | 6°56 | 18° 0 | 8°13  | T 29 |
| F 30 | 6 33 56 | 8°27'33  | 26°15  | 16°52  | 6°27  | 13° 9 | 6° 8  | 8°33 | 28°59 | 22°44  | 24° 4 | 5°33  | 6°52 | 18° 6 | 8°14  | F 30 |
| S 31 | 6 37 52 | 9♌28'45  | 10♌59  | 18♌ 7  | 7♌43  | 13♈19 | 6°D 8 | 8♌35 | 28♌57 | 22♈43  | 24♌ 5 | 5♈25  | 6♈49 | 18♌13 | 8°Y15 | S 31 |

| Day  | ☉     | ☽     | ♀    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂    | ♂    | ♂     | ♂    | ♂    | ♂    |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl | lat  |
| T 1  | 21s49 | 8s57  | 4n 8 | 22s58 | 0n 2 | 19s31 | 0n40 | 11n59 | 2n18 | 12n51 | 1s18 | 0s41 | 2n15 | 20n 1 | 0s10 | 4n 2 | 1n11 |
| F 2  | 21 58 | 12 46 | 4 42 | 22 32 | 0 22 | 19 49 | 0 38 | 11 52 | 2 20 | 12 50 | 1 18 | 0 42 | 2 15 | 20 0  | 0 10 | 4 2  | 1 11 |
| S 3  | 22 7  | 15 54 | 4 59 | 22 5  | 0 43 | 20 6  | 0 35 | 11 45 | 2 21 | 12 48 | 1 17 | 0 44 | 2 15 | 20 0  | 0 10 | 4 1  | 1 11 |
| S 4  | 22 15 | 18 1  | 4 56 | 21 36 | 1 3  | 20 23 | 0 33 | 11 38 | 2 23 | 12 47 | 1 17 | 0 46 | 2 15 | 19 59 | 0 10 | 4 1  | 1 11 |
| M 5  | 22 23 | 18 54 | 4 32 | 21 8  | 1 22 | 20 39 | 0 31 | 11 31 | 2 24 | 12 45 | 1 17 | 0 47 | 2 16 | 19 59 | 0 10 | 4 1  | 1 11 |
| T 6  | 22 30 | 18 26 | 3 49 | 20 39 | 1 41 | 20 55 | 0 28 | 11 25 | 2 26 | 12 44 | 1 17 | 0 49 | 2 16 | 19 58 | 0 10 | 4 1  | 1 11 |
| W 7  | 22 38 | 16 42 | 2 51 | 20 12 | 1 57 | 21 9  | 0 26 | 11 18 | 2 27 | 12 42 | 1 16 | 0 50 | 2 16 | 19 58 | 0 10 | 4 0  | 1 11 |
| T 8  | 22 44 | 13 56 | 1 43 | 19 46 | 2 12 | 21 24 | 0 24 | 11 12 | 2 29 | 12 41 | 1 16 | 0 51 | 2 16 | 19 57 | 0 10 | 4 0  | 1 11 |
| F 9  | 22 50 | 10 23 | 0 30 | 19 24 | 2 25 | 21 38 | 0 21 | 11 5  | 2 31 | 12 40 | 1 16 | 0 53 | 2 17 | 19 57 | 0 10 | 4 0  | 1 11 |
| S 10 | 22 56 | 6 22  | 0s42 | 19 4  | 2 35 | 21 51 | 0 19 | 10 59 | 2 32 | 12 39 | 1 16 | 0 54 | 2 17 | 19 56 | 0 10 | 4 0  | 1 11 |
| S 11 | 23 1  | 2 8   | 1 51 | 18 48 | 2 43 | 22 3  | 0 17 | 10 53 | 2 34 | 12 38 | 1 15 | 0 55 | 2 17 | 19 56 | 0 10 | 4 0  | 1 11 |
| M12  | 23 6  | 2n 6  | 2 52 | 18 35 | 2 49 | 22 15 | 0 14 | 10 47 | 2 35 | 12 37 | 1 15 | 0 57 | 2 17 | 19 55 | 0 10 | 4 0  | 1 11 |
| T 13 | 23 10 | 6 9   | 3 42 | 18 27 | 2 52 | 22 26 | 0 12 | 10 41 | 2 37 | 12 36 | 1 15 | 0 58 | 2 18 | 19 55 | 0 10 | 4 0  | 1 11 |
| W14  | 23 14 | 9 51  | 4 21 | 18 22 | 2 54 | 22 36 | 0 9  | 10 36 | 2 39 | 12 35 | 1 14 | 0 59 | 2 18 | 19 54 | 0 10 | 3 59 | 1 11 |
| T 15 | 23 17 | 13 4  | 4 47 | 18 21 | 2 54 | 22 46 | 0 7  | 10 30 | 2 40 | 12 34 | 1 14 | 1 0  | 2 18 | 19 54 | 0 10 | 3 59 | 1 11 |
| F 16 | 23 20 | 15 41 | 5 0  | 18 23 | 2 52 | 22 55 | 0 5  | 10 25 | 2 42 | 12 33 | 1 14 | 1 1  | 2 18 | 19 53 | 0 10 | 3 59 | 1 11 |
| S 17 | 23 23 | 17 35 | 4 58 | 18 28 | 2 49 | 23 3  | 0 2  | 10 20 | 2 44 | 12 32 | 1 14 | 1 3  | 2 19 | 19 53 | 0 10 | 3 59 | 1 11 |
| S 18 | 23 25 | 18 41 | 4 44 | 18 35 | 2 45 | 23 11 | 0s 0 | 10 15 | 2 45 | 12 32 | 1 13 | 1 4  | 2 19 | 19 52 | 0 10 | 3 59 | 1 11 |
| M19  | 23 26 | 18 57 | 4 17 | 18 45 | 2 40 | 23 18 | 0 3  | 10 10 | 2 47 | 12 31 | 1 13 | 1 5  | 2 19 | 19 52 | 0 10 | 3 59 | 1 12 |
| T 20 | 23 27 | 18 23 | 3 38 | 18 56 | 2 35 | 23 24 | 0 5  | 10 5  | 2 49 | 12 31 | 1 13 | 1 6  | 2 20 | 19 51 | 0 10 | 3 59 | 1 12 |
| W21  | 23 28 | 17 1  | 2 51 | 19 9  | 2 28 | 23 30 | 0 7  | 10 1  | 2 51 | 12 30 | 1 12 | 1 6  | 2 20 | 19 51 | 0 10 | 3 59 | 1 12 |
| T 22 | 23 28 | 14 56 | 1 56 | 19 24 | 2 22 | 23 35 | 0 10 | 9 57  | 2 52 | 12 30 | 1 12 | 1 7  | 2 20 | 19 51 | 0 10 | 3 59 | 1 12 |
| F 23 | 23 28 | 12 12 | 0 55 | 19 39 | 2 14 | 23 39 | 0 12 | 9 53  | 2 54 | 12 29 | 1 12 | 1 8  | 2 20 | 19 50 | 0 10 | 3 59 | 1 12 |
| S 24 | 23 27 | 8 56  | 0n 9 | 19 55 | 2 7  | 23 42 | 0 14 | 9 49  | 2 56 | 12 29 | 1 11 | 1 9  | 2 21 | 19 50 | 0 10 | 3 59 | 1 12 |
| S 25 | 23 25 | 5 15  | 1 13 | 20 11 | 1 59 | 23 45 | 0 17 | 9 45  | 2 58 | 12 29 | 1 11 | 1 10 | 2 21 | 19 49 | 0 10 | 3 59 | 1 12 |
| M26  | 23 24 | 1 15  | 2 16 | 20 27 | 1 51 | 23 47 | 0 19 | 9 42  | 3 0  | 12 29 | 1 11 | 1 10 | 2 21 | 19 49 | 0 10 | 3 59 | 1 12 |
| T 27 | 23 21 | 2s54  | 3 14 | 20 44 | 1 42 | 23 48 | 0 22 | 9 39  | 3 1  | 12 29 | 1 11 | 1 11 | 2 21 | 19 49 | 0 10 | 3 59 | 1 12 |
| W28  | 23 19 | 7 4   | 4 3  | 21 0  | 1 34 | 23 48 | 0 24 | 9 36  | 3 3  | 12 29 | 1 10 | 1 12 | 2 21 | 19 48 | 0 10 | 3 59 | 1 12 |
| T 29 | 23 15 | 11 0  | 4 40 | 21 17 | 1 25 | 23 48 | 0 26 | 9 33  | 3 5  | 12 29 | 1 10 | 1 12 | 2 22 | 19 48 | 0 10 | 3 59 | 1 12 |
| F 30 | 23 12 | 14 27 | 5 2  | 21 33 | 1 17 | 23 47 | 0 28 | 9 30  | 3 7  | 12 29 | 1 10 | 1 13 | 2 22 | 19 47 | 0 10 | 4 0  | 1 12 |
| S 31 | 23s 8 | 17s 6 | 5n 4 | 21s48 | 1n 8 | 23s45 | 0s31 | 9n28  | 3n 9 | 12n29 | 1s 9 | 1s13 | 2n23 | 19n47 | 0s10 | 4n 0 | 1n12 |

Julian Day Number = 2369334.5, Delta T = 21.88 sec  
 Ecliptic obliquity = 23°27'58, Nutation = - 0°00'08, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 21°35'52, Lahiri = 20°42'52Greg. Calendar