



# Astrodienst Ephemeris Tables for the year 1901

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 1901  
geocentric

JANUARY 1901

00:00 UT

| Day  | Sid.t   | ☉        | ☽     | ♂     | ♀     | ♂      | ♂     | ♂     | ♂     | ♂      | ♂      | ♂      | ♂     | ♂     | ♂     | Day  |
|------|---------|----------|-------|-------|-------|--------|-------|-------|-------|--------|--------|--------|-------|-------|-------|------|
| T 1  | 6 39 48 | 9♂54'33  | 18♂19 | 27♂41 | 10♂45 | 11♂39  | 25♂57 | 7♂42  | 14♂18 | 27°R31 | 16°R16 | 1♂18   | 29♂50 | 15♂10 | 28♂43 | T 1  |
| W 2  | 6 43 44 | 10°55'42 | 2♂24  | 29°12 | 12° 0 | 11°47  | 26°11 | 7°49  | 14°22 | 27°R29 | 16°R15 | 1°R19  | 29°47 | 15°17 | 28°50 | W 2  |
| T 3  | 6 47 41 | 11°56'51 | 16°23 | 0♂44  | 13°14 | 11°54  | 26°24 | 7°56  | 14°25 | 27°28  | 16°14  | 1°18   | 29°44 | 15°23 | 28°56 | T 3  |
| F 4  | 6 51 37 | 12°58'00 | 0♂14  | 2°17  | 14°29 | 12° 1  | 26°38 | 8° 3  | 14°29 | 27°26  | 16°13  | 1°15   | 29°40 | 15°30 | 29° 3 | F 4  |
| S 5  | 6 55 34 | 13°59'08 | 13°52 | 3°49  | 15°43 | 12° 8  | 26°51 | 8°10  | 14°32 | 27°25  | 16°12  | 1°10   | 29°37 | 15°37 | 29° 9 | S 5  |
| S 6  | 6 59 31 | 15° 0'17 | 27°15 | 5°22  | 16°58 | 12°13  | 27° 5 | 8°18  | 14°35 | 27°23  | 16°11  | 1° 3   | 29°34 | 15°43 | 29°16 | S 6  |
| M 7  | 7 3 27  | 16° 1'25 | 10♂22 | 6°56  | 18°12 | 12°18  | 27°18 | 8°25  | 14°39 | 27°21  | 16°10  | 0°54   | 29°31 | 15°50 | 29°22 | M 7  |
| T 8  | 7 7 24  | 17° 2'33 | 23°10 | 8°30  | 19°27 | 12°22  | 27°31 | 8°32  | 14°42 | 27°20  | 16° 9  | 0°46   | 29°28 | 15°57 | 29°28 | T 8  |
| W 9  | 7 11 20 | 18° 3'42 | 5♂40  | 10° 4 | 20°42 | 12°26  | 27°45 | 8°39  | 14°45 | 27°18  | 16° 8  | 0°38   | 29°25 | 16° 4 | 29°35 | W 9  |
| T 10 | 7 15 17 | 19° 4'50 | 17°54 | 11°39 | 21°56 | 12°29  | 27°58 | 8°46  | 14°48 | 27°17  | 16° 7  | 0°31   | 29°21 | 16°10 | 29°41 | T 10 |
| F 11 | 7 19 13 | 20° 5'58 | 29°56 | 13°14 | 23°11 | 12°31  | 28°11 | 8°53  | 14°51 | 27°15  | 16° 6  | 0°27   | 29°18 | 16°17 | 29°47 | F 11 |
| S 12 | 7 23 10 | 21° 7'06 | 11♂50 | 14°50 | 24°25 | 12°32  | 28°24 | 9° 0  | 14°55 | 27°14  | 16° 5  | 0°24   | 29°15 | 16°24 | 29°53 | S 12 |
| S 13 | 7 27 6  | 22° 8'13 | 23°39 | 16°26 | 25°40 | 12°R33 | 28°37 | 9° 7  | 14°58 | 27°12  | 16° 4  | 0°D24  | 29°12 | 16°30 | 29°59 | S 13 |
| M14  | 7 31 3  | 23° 9'21 | 5♂30  | 18° 2 | 26°55 | 12°33  | 28°51 | 9°14  | 15° 1 | 27°11  | 16° 3  | 0°24   | 29° 9 | 16°37 | 0♂ 6  | M14  |
| T 15 | 7 35 0  | 24°10'29 | 17°28 | 19°39 | 28°10 | 12°32  | 29° 4 | 9°21  | 15° 4 | 27° 9  | 16° 2  | 0°26   | 29° 5 | 16°44 | 0°12  | T 15 |
| W16  | 7 38 56 | 25°11'36 | 29°38 | 21°17 | 29°24 | 12°30  | 29°17 | 9°27  | 15° 7 | 27° 8  | 16° 1  | 0°R26  | 29° 2 | 16°50 | 0°18  | W16  |
| T 17 | 7 42 53 | 26°12'43 | 12♂ 4 | 22°55 | 0♂39  | 12°28  | 29°30 | 9°34  | 15°10 | 27° 6  | 16° 0  | 0°26   | 28°59 | 16°57 | 0°24  | T 17 |
| F 18 | 7 46 49 | 27°13'50 | 24°51 | 24°33 | 1°54  | 12°24  | 29°43 | 9°41  | 15°13 | 27° 5  | 16° 0  | 0°23   | 28°56 | 17° 4 | 0°30  | F 18 |
| S 19 | 7 50 46 | 28°14'56 | 7♂59  | 26°13 | 3° 8  | 12°20  | 29°55 | 9°48  | 15°16 | 27° 3  | 15°59  | 0°17   | 28°53 | 17°10 | 0°36  | S 19 |
| S 20 | 7 54 42 | 29°16'02 | 21°30 | 27°52 | 4°23  | 12°15  | 0♂ 8  | 9°55  | 15°19 | 27° 2  | 15°58  | 0° 9   | 28°50 | 17°17 | 0°42  | S 20 |
| M21  | 7 58 39 | 0♂17'07  | 5♂21  | 29°33 | 5°38  | 12°10  | 0°21  | 10° 2 | 15°22 | 27° 1  | 15°57  | 29♂59  | 28°46 | 17°24 | 0°48  | M21  |
| T 22 | 8 2 35  | 1°18'11  | 19°28 | 1♂14  | 6°53  | 12° 3  | 0°34  | 10° 9 | 15°24 | 26°59  | 15°56  | 29°49  | 28°43 | 17°30 | 0°54  | T 22 |
| W23  | 8 6 32  | 2°19'15  | 3♂47  | 2°55  | 8° 8  | 11°56  | 0°47  | 10°15 | 15°27 | 26°58  | 15°56  | 29°39  | 28°40 | 17°37 | 1° 0  | W23  |
| T 24 | 8 10 29 | 3°20'17  | 18°10 | 4°37  | 9°22  | 11°48  | 0°59  | 10°22 | 15°30 | 26°57  | 15°55  | 29°30  | 28°37 | 17°44 | 1° 6  | T 24 |
| F 25 | 8 14 25 | 4°21'19  | 2♂33  | 6°20  | 10°37 | 11°39  | 1°12  | 10°29 | 15°33 | 26°55  | 15°54  | 29°24  | 28°34 | 17°50 | 1°12  | F 25 |
| S 26 | 8 18 22 | 5°22'19  | 16°51 | 8° 3  | 11°52 | 11°29  | 1°24  | 10°35 | 15°35 | 26°54  | 15°53  | 29°20  | 28°31 | 17°57 | 1°18  | S 26 |
| S 27 | 8 22 18 | 6°23'18  | 1♂ 1  | 9°47  | 13° 7 | 11°19  | 1°37  | 10°42 | 15°38 | 26°53  | 15°53  | 29°D18 | 28°27 | 18° 4 | 1°23  | S 27 |
| M28  | 8 26 15 | 7°24'16  | 15° 3 | 11°31 | 14°22 | 11° 8  | 1°49  | 10°49 | 15°41 | 26°52  | 15°52  | 29°18  | 28°24 | 18°10 | 1°29  | M28  |
| T 29 | 8 30 11 | 8°25'13  | 28°54 | 13°16 | 15°36 | 10°55  | 2° 1  | 10°55 | 15°43 | 26°50  | 15°51  | 29°R19 | 28°21 | 18°17 | 1°35  | T 29 |
| W30  | 8 34 8  | 9°26'08  | 12♂37 | 15° 2 | 16°51 | 10°43  | 2°14  | 11° 2 | 15°46 | 26°49  | 15°51  | 29°18  | 28°18 | 18°24 | 1°40  | W30  |
| T 31 | 8 38 4  | 10°27'03 | 26♂10 | 16°47 | 18♂ 6 | 10♂29  | 2♂26  | 11♂ 8 | 15♂48 | 26♂48  | 15♂50  | 29♂15  | 28♂15 | 18♂30 | 1♂46  | T 31 |

| Day  | ☉     | ☽     | ♂    | ♀     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | lat   |
| T 1  | 23s 5 | 18n25 | 1n10 | 24s 0 | 0s34 | 20s48 | 1n16 | 10n10 | 3n13 | 23s 5 | 0n18 | 22s38 | 0n36 | 22s31 | 0n 0 | 22n11 |
| W 2  | 23 0  | 20 33 | 0s 6 | 24 7  | 0 40 | 21 1  | 1 14 | 10 9  | 3 15 | 23 5  | 0 18 | 22 37 | 0 36 | 22 32 | 0 0  | 22 11 |
| T 3  | 22 55 | 21 25 | 1 21 | 24 14 | 0 47 | 21 13 | 1 12 | 10 8  | 3 17 | 23 6  | 0 18 | 22 37 | 0 36 | 22 32 | 0 0  | 22 11 |
| F 4  | 22 49 | 20 57 | 2 30 | 24 19 | 0 53 | 21 24 | 1 9  | 10 7  | 3 19 | 23 6  | 0 18 | 22 37 | 0 36 | 22 32 | 0 0  | 22 11 |
| S 5  | 22 43 | 19 15 | 3 30 | 24 23 | 0 59 | 21 34 | 1 7  | 10 6  | 3 21 | 23 7  | 0 18 | 22 36 | 0 36 | 22 33 | 0 0  | 22 11 |
| S 6  | 22 36 | 16 31 | 4 17 | 24 25 | 1 5  | 21 44 | 1 5  | 10 6  | 3 23 | 23 7  | 0 18 | 22 36 | 0 36 | 22 33 | 0 0  | 22 11 |
| M 7  | 22 29 | 13 1  | 4 49 | 24 26 | 1 10 | 21 54 | 1 2  | 10 6  | 3 25 | 23 7  | 0 18 | 22 35 | 0 36 | 22 34 | 0 0  | 22 11 |
| T 8  | 22 22 | 9 0   | 5 5  | 24 26 | 1 16 | 22 2  | 1 0  | 10 6  | 3 27 | 23 8  | 0 18 | 22 35 | 0 36 | 22 34 | 0 0  | 22 11 |
| W 9  | 22 14 | 4 41  | 5 7  | 24 25 | 1 21 | 22 11 | 0 57 | 10 7  | 3 29 | 23 8  | 0 18 | 22 35 | 0 35 | 22 34 | 0 0  | 22 11 |
| T 10 | 22 6  | 0 16  | 4 54 | 24 22 | 1 26 | 22 18 | 0 54 | 10 7  | 3 31 | 23 8  | 0 18 | 22 34 | 0 35 | 22 35 | 0 0  | 22 11 |
| F 11 | 21 57 | 4s 5  | 4 28 | 24 18 | 1 31 | 22 25 | 0 52 | 10 9  | 3 33 | 23 9  | 0 18 | 22 34 | 0 35 | 22 35 | 0 0  | 22 11 |
| S 12 | 21 48 | 8 14  | 3 51 | 24 12 | 1 35 | 22 31 | 0 49 | 10 10 | 3 35 | 23 9  | 0 18 | 22 33 | 0 35 | 22 35 | 0 0  | 22 11 |
| S 13 | 21 38 | 12 3  | 3 5  | 24 5  | 1 39 | 22 36 | 0 47 | 10 12 | 3 37 | 23 9  | 0 18 | 22 33 | 0 35 | 22 36 | 0 0  | 22 11 |
| M14  | 21 28 | 15 24 | 2 10 | 23 56 | 1 43 | 22 41 | 0 44 | 10 13 | 3 39 | 23 9  | 0 17 | 22 33 | 0 35 | 22 36 | 0 0  | 22 11 |
| T 15 | 21 17 | 18 10 | 1 9  | 23 46 | 1 47 | 22 45 | 0 41 | 10 16 | 3 41 | 23 9  | 0 17 | 22 32 | 0 35 | 22 37 | 0 0  | 22 11 |
| W16  | 21 6  | 20 9  | 0 4  | 23 35 | 1 50 | 22 48 | 0 39 | 10 18 | 3 43 | 23 10 | 0 17 | 22 32 | 0 35 | 22 37 | 0 0  | 22 11 |
| T 17 | 20 55 | 21 13 | 1n 2 | 23 32 | 1 53 | 22 51 | 0 36 | 10 21 | 3 45 | 23 10 | 0 17 | 22 31 | 0 35 | 22 37 | 0 0  | 22 11 |
| F 18 | 20 43 | 21 14 | 2 7  | 23 7  | 1 56 | 22 53 | 0 33 | 10 24 | 3 47 | 23 10 | 0 17 | 22 31 | 0 35 | 22 38 | 0 0  | 22 11 |
| S 19 | 20 31 | 20 6  | 3 7  | 22 51 | 1 58 | 22 54 | 0 30 | 10 27 | 3 49 | 23 10 | 0 17 | 22 30 | 0 35 | 22 38 | 0 0  | 22 11 |
| S 20 | 20 19 | 17 49 | 3 58 | 22 34 | 2 0  | 22 55 | 0 28 | 10 31 | 3 51 | 23 10 | 0 17 | 22 30 | 0 35 | 22 38 | 0 0  | 22 11 |
| M21  | 20 6  | 14 28 | 4 36 | 22 15 | 2 2  | 22 55 | 0 25 | 10 35 | 3 53 | 23 10 | 0 17 | 22 30 | 0 35 | 22 39 | 0 0  | 22 11 |
| T 22 | 19 53 | 10 15 | 4 59 | 21 54 | 2 3  | 22 54 | 0 22 | 10 39 | 3 55 | 23 10 | 0 17 | 22 29 | 0 35 | 22 39 | 0 0  | 22 11 |
| W23  | 19 39 | 5 25  | 5 3  | 21 32 | 2 4  | 22 53 | 0 20 | 10 44 | 3 57 | 23 10 | 0 17 | 22 29 | 0 35 | 22 39 | 0 0  | 22 11 |
| T 24 | 19 25 | 0 16  | 4 48 | 21 8  | 2 5  | 22 50 | 0 17 | 10 49 | 3 58 | 23 10 | 0 17 | 22 28 | 0 35 | 22 39 | 0 0  | 22 11 |
| F 25 | 19 11 | 4n54  | 4 15 | 20 43 | 2 5  | 22 47 | 0 14 | 10 54 | 4 0  | 23 10 | 0 17 | 22 28 | 0 35 | 22 40 | 0 0  | 22 11 |
| S 26 | 18 56 | 9 47  | 3 26 | 20 16 | 2 5  | 22 44 | 0 11 | 10 59 | 4 2  | 23 10 | 0 17 | 22 27 | 0 35 | 22 40 | 0 0  | 22 11 |
| S 27 | 18 41 | 14 5  | 2 25 | 19 48 | 2 4  | 22 40 | 0 9  | 11 5  | 4 4  | 23 10 | 0 17 | 22 27 | 0 35 | 22 40 | 0 0  | 22 11 |
| M28  | 18 26 | 17 33 | 1 15 | 19 18 | 2 3  | 22 35 | 0 6  | 11 11 | 4 5  | 23 10 | 0 16 | 22 26 | 0 34 | 22 41 | 0 0  | 22 11 |
| T 29 | 18 10 | 19 58 | 0 2  | 18 47 | 2 1  | 22 29 | 0 3  | 11 17 | 4 7  | 23 10 | 0 16 | 22 26 | 0 34 | 22 41 | 0 0  | 22 11 |
| W30  | 17 54 | 21 10 | 1s10 | 18 14 | 1 59 | 22 23 | 0 1  | 11 23 | 4 9  | 23 10 | 0 16 | 22 25 | 0 34 | 22 41 | 0 0  | 22 11 |
| T 31 | 17s38 | 21n 6 | 2s17 | 17s39 | 1s56 | 22s16 | 0s 2 | 11n30 | 4n10 | 23s 9 | 0n16 | 22s25 | 0n34 | 22s42 | 0n 0 | 22n11 |

Julian Day Number = 2415385.5, Delta T = -0.76 sec  
Ecliptic obliquity = 23°27'03, Nutation = 0°00'15, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 23°21'28, Lahiri = 22°28'28

# ASTRODIENST EPHEMERIS for the year 1901

## geocentric

FEBRUARY 1901

00:00 UT

| Day  | Sid.t    | ☉                   | ☽                   | ♀                   | ♂                   | ♂                   | ♂                  | ♂                   | ♂                   | ♂                   | ♂                   | ♂                   | ♂                   | ♂                   | ♂                  | Day  |
|------|----------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|------|
| F 1  | 8 42 1   | 11 <sup>27</sup> 56 | 9 <sup>53</sup> 34  | 18 <sup>34</sup> 34 | 19 <sup>21</sup> 21 | 10 <sup>15</sup> 15 | 2 <sup>38</sup> 38 | 11 <sup>15</sup> 15 | 15 <sup>51</sup> 51 | 26 <sup>47</sup> 47 | 15 <sup>50</sup> 50 | 29 <sup>10</sup> 10 | 28 <sup>11</sup> 11 | 18 <sup>37</sup> 37 | 1 <sup>51</sup> 51 | F 1  |
| S 2  | 8 45 58  | 12 <sup>28</sup> 47 | 22 <sup>48</sup> 48 | 20 <sup>20</sup> 20 | 20 <sup>36</sup> 36 | 10 <sup>10</sup> 10 | 2 <sup>50</sup> 50 | 11 <sup>21</sup> 21 | 15 <sup>53</sup> 53 | 26 <sup>46</sup> 46 | 15 <sup>49</sup> 49 | 29 <sup>11</sup> 11 | 28 <sup>8</sup> 8   | 18 <sup>44</sup> 44 | 1 <sup>57</sup> 57 | S 2  |
| S 3  | 8 49 54  | 13 <sup>29</sup> 38 | 5 <sup>50</sup> 50  | 22 <sup>7</sup> 7   | 21 <sup>50</sup> 50 | 9 <sup>44</sup> 44  | 3 <sup>2</sup> 2   | 11 <sup>28</sup> 28 | 15 <sup>56</sup> 56 | 26 <sup>45</sup> 45 | 15 <sup>48</sup> 48 | 28 <sup>50</sup> 50 | 28 <sup>5</sup> 5   | 18 <sup>51</sup> 51 | 2 <sup>2</sup> 2   | S 3  |
| M 4  | 8 53 51  | 14 <sup>30</sup> 27 | 18 <sup>40</sup> 40 | 23 <sup>54</sup> 54 | 23 <sup>5</sup> 5   | 9 <sup>28</sup> 28  | 3 <sup>14</sup> 14 | 11 <sup>34</sup> 34 | 15 <sup>58</sup> 58 | 26 <sup>44</sup> 44 | 15 <sup>48</sup> 48 | 28 <sup>37</sup> 37 | 28 <sup>2</sup> 2   | 18 <sup>57</sup> 57 | 2 <sup>7</sup> 7   | M 4  |
| T 5  | 8 57 47  | 15 <sup>31</sup> 15 | 1 <sup>17</sup> 17  | 25 <sup>41</sup> 41 | 24 <sup>20</sup> 20 | 9 <sup>11</sup> 11  | 3 <sup>26</sup> 26 | 11 <sup>40</sup> 40 | 16 <sup>0</sup> 0   | 26 <sup>43</sup> 43 | 15 <sup>47</sup> 47 | 28 <sup>23</sup> 23 | 27 <sup>59</sup> 59 | 19 <sup>4</sup> 4   | 2 <sup>13</sup> 13 | T 5  |
| W 6  | 9 1 44   | 16 <sup>32</sup> 02 | 13 <sup>40</sup> 40 | 27 <sup>27</sup> 27 | 25 <sup>35</sup> 35 | 8 <sup>53</sup> 53  | 3 <sup>38</sup> 38 | 11 <sup>46</sup> 46 | 16 <sup>3</sup> 3   | 26 <sup>42</sup> 42 | 15 <sup>47</sup> 47 | 28 <sup>10</sup> 10 | 27 <sup>56</sup> 56 | 19 <sup>11</sup> 11 | 2 <sup>18</sup> 18 | W 6  |
| T 7  | 9 5 40   | 17 <sup>32</sup> 48 | 25 <sup>50</sup> 50 | 29 <sup>13</sup> 13 | 26 <sup>50</sup> 50 | 8 <sup>34</sup> 34  | 3 <sup>50</sup> 50 | 11 <sup>53</sup> 53 | 16 <sup>5</sup> 5   | 26 <sup>41</sup> 41 | 15 <sup>46</sup> 46 | 27 <sup>58</sup> 58 | 27 <sup>52</sup> 52 | 19 <sup>17</sup> 17 | 2 <sup>23</sup> 23 | T 7  |
| F 8  | 9 9 37   | 18 <sup>33</sup> 32 | 7 <sup>50</sup> 50  | 0 <sup>59</sup> 59  | 28 <sup>4</sup> 4   | 8 <sup>15</sup> 15  | 4 <sup>1</sup> 1   | 11 <sup>59</sup> 59 | 16 <sup>7</sup> 7   | 26 <sup>40</sup> 40 | 15 <sup>46</sup> 46 | 27 <sup>49</sup> 49 | 27 <sup>49</sup> 49 | 19 <sup>24</sup> 24 | 2 <sup>28</sup> 28 | F 8  |
| S 9  | 9 13 33  | 19 <sup>34</sup> 16 | 19 <sup>42</sup> 42 | 2 <sup>44</sup> 44  | 29 <sup>19</sup> 19 | 7 <sup>56</sup> 56  | 4 <sup>13</sup> 13 | 12 <sup>5</sup> 5   | 16 <sup>9</sup> 9   | 26 <sup>39</sup> 39 | 15 <sup>45</sup> 45 | 27 <sup>43</sup> 43 | 27 <sup>46</sup> 46 | 19 <sup>31</sup> 31 | 2 <sup>33</sup> 33 | S 9  |
| S 10 | 9 17 30  | 20 <sup>34</sup> 58 | 1 <sup>13</sup> 30  | 4 <sup>27</sup> 27  | 0 <sup>34</sup> 34  | 7 <sup>36</sup> 36  | 4 <sup>24</sup> 24 | 12 <sup>11</sup> 11 | 16 <sup>11</sup> 11 | 26 <sup>38</sup> 38 | 15 <sup>45</sup> 45 | 27 <sup>40</sup> 40 | 27 <sup>43</sup> 43 | 19 <sup>37</sup> 37 | 2 <sup>38</sup> 38 | S 10 |
| M 11 | 9 21 27  | 21 <sup>35</sup> 40 | 13 <sup>20</sup> 20 | 6 <sup>9</sup> 9    | 1 <sup>49</sup> 49  | 7 <sup>15</sup> 15  | 4 <sup>36</sup> 36 | 12 <sup>17</sup> 17 | 16 <sup>13</sup> 13 | 26 <sup>37</sup> 37 | 15 <sup>45</sup> 45 | 27 <sup>39</sup> 39 | 27 <sup>40</sup> 40 | 19 <sup>44</sup> 44 | 2 <sup>43</sup> 43 | M 11 |
| T 12 | 9 25 23  | 22 <sup>36</sup> 20 | 25 <sup>16</sup> 16 | 7 <sup>48</sup> 48  | 3 <sup>4</sup> 4    | 6 <sup>54</sup> 54  | 4 <sup>47</sup> 47 | 12 <sup>23</sup> 23 | 16 <sup>15</sup> 15 | 26 <sup>36</sup> 36 | 15 <sup>44</sup> 44 | 27 <sup>38</sup> 38 | 27 <sup>37</sup> 37 | 19 <sup>51</sup> 51 | 2 <sup>48</sup> 48 | T 12 |
| W 13 | 9 29 20  | 23 <sup>36</sup> 59 | 7 <sup>24</sup> 24  | 9 <sup>25</sup> 25  | 4 <sup>18</sup> 18  | 6 <sup>32</sup> 32  | 4 <sup>58</sup> 58 | 12 <sup>29</sup> 29 | 16 <sup>17</sup> 17 | 26 <sup>36</sup> 36 | 15 <sup>44</sup> 44 | 27 <sup>38</sup> 38 | 27 <sup>33</sup> 33 | 19 <sup>57</sup> 57 | 2 <sup>53</sup> 53 | W 13 |
| T 14 | 9 33 16  | 24 <sup>37</sup> 37 | 19 <sup>49</sup> 49 | 10 <sup>59</sup> 59 | 5 <sup>33</sup> 33  | 6 <sup>10</sup> 10  | 5 <sup>9</sup> 9   | 12 <sup>35</sup> 35 | 16 <sup>19</sup> 19 | 26 <sup>35</sup> 35 | 15 <sup>44</sup> 44 | 27 <sup>37</sup> 37 | 27 <sup>30</sup> 30 | 20 <sup>4</sup> 4   | 2 <sup>58</sup> 58 | T 14 |
| F 15 | 9 37 13  | 25 <sup>38</sup> 14 | 2 <sup>37</sup> 37  | 12 <sup>30</sup> 30 | 6 <sup>48</sup> 48  | 5 <sup>48</sup> 48  | 5 <sup>21</sup> 21 | 12 <sup>41</sup> 41 | 16 <sup>21</sup> 21 | 26 <sup>34</sup> 34 | 15 <sup>43</sup> 43 | 27 <sup>33</sup> 33 | 27 <sup>27</sup> 27 | 20 <sup>11</sup> 11 | 3 <sup>3</sup> 3   | F 15 |
| S 16 | 9 41 9   | 26 <sup>38</sup> 50 | 15 <sup>50</sup> 50 | 13 <sup>56</sup> 56 | 8 <sup>3</sup> 3    | 5 <sup>25</sup> 25  | 5 <sup>31</sup> 31 | 12 <sup>46</sup> 46 | 16 <sup>23</sup> 23 | 26 <sup>33</sup> 33 | 15 <sup>43</sup> 43 | 27 <sup>27</sup> 27 | 27 <sup>24</sup> 24 | 20 <sup>17</sup> 17 | 3 <sup>7</sup> 7   | S 16 |
| S 17 | 9 45 6   | 27 <sup>39</sup> 24 | 29 <sup>31</sup> 31 | 15 <sup>18</sup> 18 | 9 <sup>18</sup> 18  | 5 <sup>2</sup> 2    | 5 <sup>42</sup> 42 | 12 <sup>52</sup> 52 | 16 <sup>25</sup> 25 | 26 <sup>33</sup> 33 | 15 <sup>43</sup> 43 | 27 <sup>18</sup> 18 | 27 <sup>21</sup> 21 | 20 <sup>24</sup> 24 | 3 <sup>12</sup> 12 | S 17 |
| M 18 | 9 49 2   | 28 <sup>39</sup> 57 | 13 <sup>38</sup> 38 | 16 <sup>33</sup> 33 | 10 <sup>32</sup> 32 | 4 <sup>39</sup> 39  | 5 <sup>53</sup> 53 | 12 <sup>58</sup> 58 | 16 <sup>26</sup> 26 | 26 <sup>32</sup> 32 | 15 <sup>42</sup> 42 | 27 <sup>7</sup> 7   | 27 <sup>17</sup> 17 | 20 <sup>31</sup> 31 | 3 <sup>16</sup> 16 | M 18 |
| T 19 | 9 52 59  | 29 <sup>40</sup> 28 | 28 <sup>7</sup> 7   | 17 <sup>43</sup> 43 | 11 <sup>47</sup> 47 | 4 <sup>15</sup> 15  | 6 <sup>4</sup> 4   | 13 <sup>3</sup> 3   | 16 <sup>28</sup> 28 | 26 <sup>32</sup> 32 | 15 <sup>42</sup> 42 | 26 <sup>55</sup> 55 | 27 <sup>14</sup> 14 | 20 <sup>37</sup> 37 | 3 <sup>21</sup> 21 | T 19 |
| W 20 | 9 56 56  | 0 <sup>46</sup> 56  | 12 <sup>41</sup> 51 | 18 <sup>46</sup> 46 | 13 <sup>2</sup> 2   | 3 <sup>51</sup> 51  | 6 <sup>15</sup> 15 | 13 <sup>9</sup> 9   | 16 <sup>30</sup> 30 | 26 <sup>31</sup> 31 | 15 <sup>42</sup> 42 | 26 <sup>43</sup> 43 | 27 <sup>11</sup> 11 | 20 <sup>44</sup> 44 | 3 <sup>25</sup> 25 | W 20 |
| T 21 | 10 0 52  | 1 <sup>41</sup> 26  | 27 <sup>41</sup> 41 | 19 <sup>41</sup> 41 | 14 <sup>17</sup> 17 | 3 <sup>27</sup> 27  | 6 <sup>25</sup> 25 | 13 <sup>14</sup> 14 | 16 <sup>31</sup> 31 | 26 <sup>31</sup> 31 | 15 <sup>42</sup> 42 | 26 <sup>32</sup> 32 | 27 <sup>8</sup> 8   | 20 <sup>51</sup> 51 | 3 <sup>30</sup> 30 | T 21 |
| F 22 | 10 4 49  | 2 <sup>41</sup> 52  | 12 <sup>43</sup> 30 | 20 <sup>28</sup> 28 | 15 <sup>32</sup> 32 | 3 <sup>4</sup> 4    | 6 <sup>35</sup> 35 | 13 <sup>20</sup> 20 | 16 <sup>33</sup> 33 | 26 <sup>30</sup> 30 | 15 <sup>42</sup> 42 | 26 <sup>24</sup> 24 | 27 <sup>5</sup> 5   | 20 <sup>57</sup> 57 | 3 <sup>34</sup> 34 | F 22 |
| S 23 | 10 8 45  | 3 <sup>42</sup> 16  | 27 <sup>10</sup> 10 | 21 <sup>6</sup> 6   | 16 <sup>46</sup> 46 | 2 <sup>40</sup> 40  | 6 <sup>46</sup> 46 | 13 <sup>25</sup> 25 | 16 <sup>34</sup> 34 | 26 <sup>30</sup> 30 | 15 <sup>41</sup> 41 | 26 <sup>19</sup> 19 | 27 <sup>2</sup> 2   | 21 <sup>4</sup> 4   | 3 <sup>38</sup> 38 | S 23 |
| S 24 | 10 12 42 | 4 <sup>42</sup> 39  | 11 <sup>35</sup> 35 | 21 <sup>35</sup> 35 | 18 <sup>1</sup> 1   | 2 <sup>16</sup> 16  | 6 <sup>56</sup> 56 | 13 <sup>31</sup> 31 | 16 <sup>35</sup> 35 | 26 <sup>29</sup> 29 | 15 <sup>41</sup> 41 | 26 <sup>17</sup> 17 | 26 <sup>58</sup> 58 | 21 <sup>11</sup> 11 | 3 <sup>42</sup> 42 | S 24 |
| M 25 | 10 16 38 | 5 <sup>42</sup> 59  | 25 <sup>44</sup> 44 | 21 <sup>55</sup> 55 | 19 <sup>16</sup> 16 | 1 <sup>52</sup> 52  | 7 <sup>6</sup> 6   | 13 <sup>36</sup> 36 | 16 <sup>37</sup> 37 | 26 <sup>29</sup> 29 | 15 <sup>41</sup> 41 | 26 <sup>16</sup> 16 | 26 <sup>55</sup> 55 | 21 <sup>17</sup> 17 | 3 <sup>46</sup> 46 | M 25 |
| T 26 | 10 20 35 | 6 <sup>43</sup> 18  | 9 <sup>11</sup> 34  | 22 <sup>5</sup> 5   | 20 <sup>31</sup> 31 | 1 <sup>28</sup> 28  | 7 <sup>16</sup> 16 | 13 <sup>41</sup> 41 | 16 <sup>38</sup> 38 | 26 <sup>28</sup> 28 | 15 <sup>41</sup> 41 | 26 <sup>16</sup> 16 | 26 <sup>52</sup> 52 | 21 <sup>24</sup> 24 | 3 <sup>50</sup> 50 | T 26 |
| W 27 | 10 24 31 | 7 <sup>43</sup> 34  | 23 <sup>8</sup> 8   | 22 <sup>5</sup> 5   | 21 <sup>45</sup> 45 | 1 <sup>5</sup> 5    | 7 <sup>26</sup> 26 | 13 <sup>46</sup> 46 | 16 <sup>39</sup> 39 | 26 <sup>28</sup> 28 | 15 <sup>41</sup> 41 | 26 <sup>16</sup> 16 | 26 <sup>49</sup> 49 | 21 <sup>31</sup> 31 | 3 <sup>54</sup> 54 | W 27 |
| T 28 | 10 28 28 | 8 <sup>43</sup> 49  | 6 <sup>56</sup> 26  | 21 <sup>55</sup> 55 | 23 <sup>0</sup> 0   | 0 <sup>14</sup> 42  | 7 <sup>36</sup> 36 | 13 <sup>51</sup> 51 | 16 <sup>41</sup> 41 | 26 <sup>28</sup> 28 | 15 <sup>41</sup> 41 | 26 <sup>16</sup> 16 | 26 <sup>46</sup> 46 | 21 <sup>37</sup> 37 | 3 <sup>58</sup> 58 | T 28 |

| Day  | ☉     | ☾        | ♀        | ♀        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        |
|------|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|      | decl  | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat |
| F 1  | 17s21 | 19n51    | 3s16     | 17s 3    | 1s53     | 22s 8    | 0s 5     | 11n37    | 4n12     | 23s 9    | 0n16     | 22s24    | 0n34     | 22s42    | 0n 0     | 22n11    | 1s14     | 13n19    | 9s26     | 19s59    | 19s46    | 10s20    | 17s48    | 5n38     |
| S 2  | 17 4  | 17 31    | 4 4      | 16 26    | 1 49     | 22 0     | 0 7      | 11 44    | 4 13     | 23 9     | 0 16     | 22 24    | 0 34     | 22 42    | 0 0      | 22 11    | 1 14     | 13 19    | 9 26     | 19 57    | 19 45    | 10 22    | 17 48    | 5 38     |
| S 3  | 16 47 | 14 20    | 4 37     | 15 47    | 1 44     | 21 51    | 0 10     | 11 51    | 4 15     | 23 9     | 0 16     | 22 23    | 0 34     | 22 42    | 0 0      | 22 11    | 1 14     | 13 19    | 9 26     | 19 54    | 19 45    | 10 24    | 17 47    | 5 39     |
| M 4  | 16 29 | 10 32    | 4 56     | 15 7     | 1 39     | 21 41    | 0 13     | 11 58    | 4 16     | 23 9     | 0 16     | 22 23    | 0 34     | 22 43    | 0 0      | 22 11    | 1 14     | 13 19    | 9 26     | 19 52    | 19 44    | 10 26    | 17 47    | 5 39     |
| T 5  | 16 11 | 6 21     | 5 0      | 14 26    | 1 33     | 21 31    | 0 15     | 12 6     | 4 17     | 23 8     | 0 16     | 22 22    | 0 34     | 22 43    | 0 0      | 22 11    | 1 14     | 13 19    | 9 25     | 19 49    | 19 43    | 10 28    | 17 46    | 5 40     |
| W 6  | 15 53 | 1 58     | 4 50     | 13 43    | 1 27     | 21 20    | 0 18     | 12 14    | 4 18     | 23 8     | 0 16     | 22 22    | 0 34     | 22 43    | 0 0      | 22 11    | 1 14     | 13 19    | 9 25     | 19 46    | 19 42    | 10 30    | 17 46    | 5 40     |
| T 7  | 15 35 | 2s25     | 4 26     | 13 0     | 1 20     | 21 8     | 0 20     | 12 22    | 4 19     | 23 8     | 0 16     | 22 21    | 0 34     | 22 43    | 0 0      | 22 11    | 1 14     | 13 20    | 9 25     | 19 43    | 19 42    | 10 32    | 17 45    | 5 40     |
| F 8  | 15 16 | 6 39     | 3 51     | 12 15    | 1 12     | 20 56    | 0 23     | 12 30    | 4 20     | 23 8     | 0 16     | 22 21    | 0 34     | 22 44    | 0 0      | 22 11    | 1 14     | 13 20    | 9 25     | 19 41    | 19 41    | 10 33    | 17 45    | 5 41     |
| S 9  | 14 57 | 10 35    | 3 6      | 11 30    | 1 3      | 20 43    | 0 25     | 12 38    | 4 21     | 23 7     | 0 16     | 22 20    | 0 34     | 22 44    | 0 0      | 22 11    | 1 14     | 13 20    | 9 24     | 19 40    | 19 40    | 10 35    | 17 44    | 5 41     |
| S 10 | 14 38 | 14 6     | 2 14     | 10 43    | 0 54     | 20 29    | 0 28     | 12 47    | 4 22     | 23 7     | 0 16     | 22 20    | 0 34     | 22 44    | 0 0      | 22 11    | 1 14     | 13 20    | 9 24     | 19 39    | 19 40    | 10 37    | 17 44    | 5 42     |
| M11  | 14 19 | 17 2     | 1 15     | 9 57     | 0 44     | 20 15    | 0 30     | 12 55    | 4 23     | 23 7     | 0 15     | 22 19    | 0 34     | 22 44    | 0 0      | 22 11    | 1 14     | 13 20    | 9 24     | 19 39    | 19 39    | 10 39    | 17 43    | 5 42     |
| T 12 | 13 59 | 19 18    | 0 13     | 9 10     | 0 33     | 20 1     | 0 33     | 13 4     | 4 24     | 23 6     | 0 15     | 22 19    | 0 34     | 22 44    | 0 0      | 22 11    | 1 14     | 13 20    | 9 24     | 19 39    | 19 38    | 10 41    | 17 43    | 5 43     |
| W13  | 13 39 | 20 43    | 0n51     | 8 23     | 0 22     | 19 45    | 0 35     | 13 12    | 4 24     | 23 6     | 0 15     | 22 18    | 0 34     | 22 45    | 0 0      | 22 11    | 1 14     | 13 21    | 9 24     | 19 39    | 19 37    | 10 43    | 17 42    | 5 43     |
| T 14 | 13 19 | 21 9     | 1 55     | 7 36     | 0 10     | 19 30    | 0 37     | 13 21    | 4 25     | 23 6     | 0 15     | 22 18    | 0 34     | 22 45    | 0 0      | 22 11    | 1 13     | 13 21    | 9 23     | 19 38    | 19 37    | 10 45    | 17 42    | 5 44     |
| F 15 | 12 59 | 20 32    | 2 54     | 6 50     | 0n 3     | 19 13    | 0 39     | 13 30    | 4 25     | 23 5     | 0 15     | 22 17    | 0 34     | 22 45    | 0 0      | 22 11    | 1 13     | 13 21    | 9 23     | 19 37    | 19 36    | 10 47    | 17 41    | 5 44     |
| S 16 | 12 38 | 18 47    | 3 46     | 6 4      | 0 16     | 18 56    | 0 42     | 13 39    | 4 26     | 23 5     | 0 15     | 22 17    | 0 34     | 22 45    | 0s 0     | 22 11    | 1 13     | 13 21    | 9 23     | 19 36    | 19 35    | 10 49    | 17 40    | 5 45     |
| S 17 | 12 18 | 15 55    | 4 26     | 5 20     | 0 30     | 18 39    | 0 44     | 13 47    | 4 26     | 23 5     | 0 15     | 22 16    | 0 34     | 22 45    | 0 0      | 22 11    | 1 13     | 13 22    | 9 23     | 19 34    | 19 35    | 10 50    | 17 40    | 5 45     |
| M18  | 11 57 | 12 4     | 4 52     | 4 37     | 0 45     | 18 20    | 0 46     | 13 56    | 4 26     | 23 4     | 0 15     | 22 16    | 0 34     | 22 46    | 0 0      | 22 11    | 1 13     | 13 22    | 9 22     | 19 31    | 19 34    | 10 52    | 17 39    | 5 46     |
| T 19 | 11 35 | 7 26     | 5 0      | 3 56     | 1 0      | 18 2     | 0 48     | 14 5     | 4 26     | 23 4     | 0 15     | 22 15    | 0 34     | 22 46    | 0 0      | 22 11    | 1 13     | 13 22    | 9 22     | 19 29    | 19 33    | 10 54    | 17 39    | 5 46     |
| W20  | 11 14 | 2 18     | 4 49     | 3 18     | 1 15     | 17 43    | 0 50     | 14 13    | 4 26     | 23 3     | 0 15     | 22 15    | 0 34     | 22 46    | 0 0      | 22 11    | 1 13     | 13 22    | 9 22     | 19 26    | 19 32    | 10 56    | 17 38    | 5 47     |
| T 21 | 10 53 | 3n 1     | 4 18     | 2 42     | 1 30     | 17 23    | 0 52     | 14 22    | 4 25     | 23 3     | 0 15     | 22 14    | 0 34     | 22 46    | 0 0      | 22 11    | 1 13     | 13 22    | 9 22     | 19 23    | 19 32    | 10 58    | 17 37    | 5 47     |
| F 22 | 10 31 | 8 9      | 3 29     | 2 10     | 1 45     | 17 3     | 0 54     | 14 30    | 4 25     | 23 2     | 0 15     | 22 14    | 0 34     | 22 46    | 0 0      | 22 11    | 1 13     | 13 23    | 9 21     | 19 22    | 19 31    | 11 0     | 17 37    | 5 48     |
| S 23 | 10 9  | 12 46    | 2 27     | 1 41     | 2 0      | 16 42    | 0 56     | 14 38    | 4 25     | 23 2     | 0 15     | 22 13    | 0 33     | 22 46    | 0 0      | 22 11    | 1 13     | 13 23    | 9 21     | 19 20    | 19 30    | 11 2     | 17 36    | 5 48     |
| S 24 | 9 47  | 16 32    | 1 17     | 1 16     | 2 15     | 16 21    | 0 58     | 14 47    | 4 24     | 23 2     | 0 15     | 22 13    | 0 33     | 22 47    | 0 0      | 22 11    | 1 13     | 13 23    | 9 21     | 19 20    | 19 29    | 11 4     | 17 35    | 5 49     |
| M25  | 9 25  | 19 15    | 0 3      | 0 55     | 2 29     | 16 0     | 1 0      | 14 55    | 4 23     | 23 1     | 0 15     | 22 12    | 0 33     | 22 47    | 0 0      | 22 11    | 1 13     | 13 23    | 9 21     | 19 20    | 19 29    | 11 5     | 17 35    | 5 49     |
| T 26 | 9 3   | 20 45    | 1s10     | 0 39     | 2 43     | 15 38    | 1 2      | 15 2     | 4 23     | 23 1     | 0 14     | 22 12    | 0 33     | 22 47    | 0 0      | 22 11    | 1 13     | 13 24    | 9 20     | 19 20    | 19 28    | 11 7     | 17 34    | 5 50     |
| W27  | 8 41  | 20 59    | 2 17     | 0 27     | 2 56     | 15 16    | 1 3      | 15 10    | 4 22     | 23 0     | 0 14     | 22 11    | 0 33     | 22 47    | 0 0      | 22 11    | 1 13     | 13 24    | 9 20     | 19 20    | 19 27    | 11 9     | 17 33    | 5 50     |
| T 28 | 8s18  | 20n 2    | 3s16     | 0s20     | 3n 7     | 14s53    | 1s 5     | 15n18    | 4n21     | 23s 0    | 0n14     | 22s11    | 0n33     | 22s47    | 0s 0     | 22n11    | 1s13     | 13n24    | 9s20     | 19s19    | 19s27    | 11s11    | 17s33    | 5n51     |

ASTRODIENST EPHEMERIS for the year 1901  
geocentric

MARCH 1901

00:00 UT

| Day  | Sid.t    | ☉                     | ☽                   | ♂                   | ♀                  | ♂                  | ♂                  | ♂                   | ♂                   | ♂                    | ♂                    | ♂                     | ♂                    | ♂                   | ♂                 | Day  |
|------|----------|-----------------------|---------------------|---------------------|--------------------|--------------------|--------------------|---------------------|---------------------|----------------------|----------------------|-----------------------|----------------------|---------------------|-------------------|------|
| F 1  | 10 32 25 | 9 <sup>h</sup> 44'01  | 19 <sup>h</sup> 31  | 21 <sup>h</sup> R36 | 24 <sup>h</sup> 15 | 0 <sup>h</sup> R18 | 7 <sup>h</sup> 345 | 13 <sup>h</sup> 356 | 16 <sup>h</sup> 742 | 26 <sup>h</sup> R27  | 15 <sup>h</sup> D41  | 26 <sup>h</sup> R 8   | 26 <sup>h</sup> M43  | 21 <sup>h</sup> 444 | 4 <sup>h</sup> 2  | F 1  |
| S 2  | 10 36 21 | 10 <sup>h</sup> 44'11 | 2 <sup>h</sup> 24   | 21 <sup>h</sup> 9   | 25 <sup>h</sup> 30 | 29 <sup>h</sup> 56 | 7 <sup>h</sup> 55  | 14 <sup>h</sup> 1   | 16 <sup>h</sup> 43  | 26 <sup>h</sup> II27 | 15 <sup>h</sup> II41 | 25 <sup>h</sup> M59   | 26 <sup>h</sup> 39   | 21 <sup>h</sup> 51  | 4 <sup>h</sup> 6  | S 2  |
| S 3  | 10 40 18 | 11 <sup>h</sup> 44'20 | 15 <sup>h</sup> 6   | 20 <sup>h</sup> 33  | 26 <sup>h</sup> 44 | 29 <sup>h</sup> 33 | 8 <sup>h</sup> 4   | 14 <sup>h</sup> 6   | 16 <sup>h</sup> 44  | 26 <sup>h</sup> 27   | 15 <sup>h</sup> 41   | 25 <sup>h</sup> 48    | 26 <sup>h</sup> 36   | 21 <sup>h</sup> 57  | 4 <sup>h</sup> 9  | S 3  |
| M 4  | 10 44 14 | 12 <sup>h</sup> 44'26 | 27 <sup>h</sup> 37  | 19 <sup>h</sup> 50  | 27 <sup>h</sup> 59 | 29 <sup>h</sup> 11 | 8 <sup>h</sup> 14  | 14 <sup>h</sup> 11  | 16 <sup>h</sup> 45  | 26 <sup>h</sup> 27   | 15 <sup>h</sup> 41   | 25 <sup>h</sup> 36    | 26 <sup>h</sup> 33   | 22 <sup>h</sup> 4   | 4 <sup>h</sup> 13 | M 4  |
| T 5  | 10 48 11 | 13 <sup>h</sup> 44'30 | 9 <sup>h</sup> 18   | 19 <sup>h</sup> 1   | 29 <sup>h</sup> 14 | 28 <sup>h</sup> 50 | 8 <sup>h</sup> 23  | 14 <sup>h</sup> 15  | 16 <sup>h</sup> 46  | 26 <sup>h</sup> 27   | 15 <sup>h</sup> 41   | 25 <sup>h</sup> 22    | 26 <sup>h</sup> 30   | 22 <sup>h</sup> 11  | 4 <sup>h</sup> 16 | T 5  |
| W 6  | 10 52 7  | 14 <sup>h</sup> 44'33 | 22 <sup>h</sup> 9   | 18 <sup>h</sup> 7   | 0 <sup>h</sup> 28  | 28 <sup>h</sup> 28 | 8 <sup>h</sup> 32  | 14 <sup>h</sup> 20  | 16 <sup>h</sup> 47  | 26 <sup>h</sup> 27   | 15 <sup>h</sup> 41   | 25 <sup>h</sup> 9     | 26 <sup>h</sup> 27   | 22 <sup>h</sup> 17  | 4 <sup>h</sup> 20 | W 6  |
| T 7  | 10 56 4  | 15 <sup>h</sup> 44'33 | 4 <sup>h</sup> 12   | 17 <sup>h</sup> 10  | 1 <sup>h</sup> 43  | 28 <sup>h</sup> 8  | 8 <sup>h</sup> 41  | 14 <sup>h</sup> 25  | 16 <sup>h</sup> 48  | 26 <sup>h</sup> 27   | 15 <sup>h</sup> 42   | 24 <sup>h</sup> 58    | 26 <sup>h</sup> 23   | 22 <sup>h</sup> 24  | 4 <sup>h</sup> 23 | T 7  |
| F 8  | 11 0 0   | 16 <sup>h</sup> 44'32 | 16 <sup>h</sup> 7   | 16 <sup>h</sup> 10  | 2 <sup>h</sup> 58  | 27 <sup>h</sup> 47 | 8 <sup>h</sup> 50  | 14 <sup>h</sup> 29  | 16 <sup>h</sup> 48  | 26 <sup>h</sup> D27  | 15 <sup>h</sup> 42   | 24 <sup>h</sup> 49    | 26 <sup>h</sup> 20   | 22 <sup>h</sup> 31  | 4 <sup>h</sup> 26 | F 8  |
| S 9  | 11 3 57  | 17 <sup>h</sup> 44'29 | 27 <sup>h</sup> 56  | 15 <sup>h</sup> 10  | 4 <sup>h</sup> 12  | 27 <sup>h</sup> 28 | 8 <sup>h</sup> 59  | 14 <sup>h</sup> 33  | 16 <sup>h</sup> 49  | 26 <sup>h</sup> 27   | 15 <sup>h</sup> 42   | 24 <sup>h</sup> 43    | 26 <sup>h</sup> 17   | 22 <sup>h</sup> 37  | 4 <sup>h</sup> 30 | S 9  |
| S 10 | 11 7 54  | 18 <sup>h</sup> 44'24 | 9 <sup>h</sup> 14   | 14 <sup>h</sup> 11  | 5 <sup>h</sup> 27  | 27 <sup>h</sup> 9  | 9 <sup>h</sup> 7   | 14 <sup>h</sup> 38  | 16 <sup>h</sup> 50  | 26 <sup>h</sup> 27   | 15 <sup>h</sup> 42   | 24 <sup>h</sup> 40    | 26 <sup>h</sup> 14   | 22 <sup>h</sup> 44  | 4 <sup>h</sup> 33 | S 10 |
| M 11 | 11 11 50 | 19 <sup>h</sup> 44'18 | 21 <sup>h</sup> 33  | 13 <sup>h</sup> 13  | 6 <sup>h</sup> 42  | 26 <sup>h</sup> 50 | 9 <sup>h</sup> 16  | 14 <sup>h</sup> 42  | 16 <sup>h</sup> 51  | 26 <sup>h</sup> 27   | 15 <sup>h</sup> 42   | 24 <sup>h</sup> D38   | 26 <sup>h</sup> 11   | 22 <sup>h</sup> 51  | 4 <sup>h</sup> 36 | M 11 |
| T 12 | 11 15 47 | 20 <sup>h</sup> 44'10 | 3 <sup>h</sup> 28   | 12 <sup>h</sup> 19  | 7 <sup>h</sup> 56  | 26 <sup>h</sup> 32 | 9 <sup>h</sup> 24  | 14 <sup>h</sup> 46  | 16 <sup>h</sup> 51  | 26 <sup>h</sup> 27   | 15 <sup>h</sup> 42   | 24 <sup>h</sup> 39    | 26 <sup>h</sup> 8    | 22 <sup>h</sup> 57  | 4 <sup>h</sup> 39 | T 12 |
| W 13 | 11 19 43 | 21 <sup>h</sup> 44'00 | 15 <sup>h</sup> 34  | 11 <sup>h</sup> 28  | 9 <sup>h</sup> 11  | 26 <sup>h</sup> 15 | 9 <sup>h</sup> 32  | 14 <sup>h</sup> 50  | 16 <sup>h</sup> 52  | 26 <sup>h</sup> 27   | 15 <sup>h</sup> 43   | 24 <sup>h</sup> 39    | 26 <sup>h</sup> 4    | 23 <sup>h</sup> 4   | 4 <sup>h</sup> 41 | W 13 |
| T 14 | 11 23 40 | 22 <sup>h</sup> 43'49 | 27 <sup>h</sup> 56  | 10 <sup>h</sup> 42  | 10 <sup>h</sup> 26 | 25 <sup>h</sup> 58 | 9 <sup>h</sup> 40  | 14 <sup>h</sup> 54  | 16 <sup>h</sup> 52  | 26 <sup>h</sup> 27   | 15 <sup>h</sup> 43   | 24 <sup>h</sup> R39   | 26 <sup>h</sup> 1    | 23 <sup>h</sup> 11  | 4 <sup>h</sup> 44 | T 14 |
| F 15 | 11 27 36 | 23 <sup>h</sup> 43'35 | 10 <sup>h</sup> 340 | 10 <sup>h</sup> 2   | 11 <sup>h</sup> 40 | 25 <sup>h</sup> 42 | 9 <sup>h</sup> 48  | 14 <sup>h</sup> 58  | 16 <sup>h</sup> 53  | 26 <sup>h</sup> 27   | 15 <sup>h</sup> 43   | 24 <sup>h</sup> 38    | 25 <sup>h</sup> 58   | 23 <sup>h</sup> 17  | 4 <sup>h</sup> 47 | F 15 |
| S 16 | 11 31 33 | 24 <sup>h</sup> 43'21 | 23 <sup>h</sup> 50  | 9 <sup>h</sup> 27   | 12 <sup>h</sup> 55 | 25 <sup>h</sup> 27 | 9 <sup>h</sup> 56  | 15 <sup>h</sup> 2   | 16 <sup>h</sup> 53  | 26 <sup>h</sup> 28   | 15 <sup>h</sup> 44   | 24 <sup>h</sup> 34    | 25 <sup>h</sup> 55   | 23 <sup>h</sup> 24  | 4 <sup>h</sup> 50 | S 16 |
| S 17 | 11 35 29 | 25 <sup>h</sup> 43'04 | 7 <sup>h</sup> 29   | 8 <sup>h</sup> 59   | 14 <sup>h</sup> 10 | 25 <sup>h</sup> 13 | 10 <sup>h</sup> 4  | 15 <sup>h</sup> 6   | 16 <sup>h</sup> 53  | 26 <sup>h</sup> 28   | 15 <sup>h</sup> 44   | 24 <sup>h</sup> 28    | 25 <sup>h</sup> 52   | 23 <sup>h</sup> 31  | 4 <sup>h</sup> 52 | S 17 |
| M 18 | 11 39 26 | 26 <sup>h</sup> 42'46 | 21 <sup>h</sup> 38  | 8 <sup>h</sup> 37   | 15 <sup>h</sup> 24 | 24 <sup>h</sup> 59 | 10 <sup>h</sup> 11 | 15 <sup>h</sup> 10  | 16 <sup>h</sup> 54  | 26 <sup>h</sup> 28   | 15 <sup>h</sup> 44   | 24 <sup>h</sup> 20    | 25 <sup>h</sup> 48   | 23 <sup>h</sup> 37  | 4 <sup>h</sup> 55 | M 18 |
| T 19 | 11 43 22 | 27 <sup>h</sup> 42'25 | 6 <sup>h</sup> 12   | 8 <sup>h</sup> 21   | 16 <sup>h</sup> 39 | 24 <sup>h</sup> 46 | 10 <sup>h</sup> 19 | 15 <sup>h</sup> 13  | 16 <sup>h</sup> 54  | 26 <sup>h</sup> 29   | 15 <sup>h</sup> 45   | 24 <sup>h</sup> 11    | 25 <sup>h</sup> 45   | 23 <sup>h</sup> 44  | 4 <sup>h</sup> 57 | T 19 |
| W 20 | 11 47 19 | 28 <sup>h</sup> 42'03 | 21 <sup>h</sup> 8   | 8 <sup>h</sup> 11   | 17 <sup>h</sup> 53 | 24 <sup>h</sup> 34 | 10 <sup>h</sup> 26 | 15 <sup>h</sup> 17  | 16 <sup>h</sup> 54  | 26 <sup>h</sup> 29   | 15 <sup>h</sup> 45   | 24 <sup>h</sup> 2     | 25 <sup>h</sup> 42   | 23 <sup>h</sup> 51  | 4 <sup>h</sup> 59 | W 20 |
| T 21 | 11 51 16 | 29 <sup>h</sup> 41'39 | 6 <sup>h</sup> 15   | 8 <sup>h</sup> D 8  | 19 <sup>h</sup> 8  | 24 <sup>h</sup> 22 | 10 <sup>h</sup> 33 | 15 <sup>h</sup> 20  | 16 <sup>h</sup> 54  | 26 <sup>h</sup> 29   | 15 <sup>h</sup> 46   | 23 <sup>h</sup> 55    | 25 <sup>h</sup> 39   | 23 <sup>h</sup> 57  | 5 <sup>h</sup> 1  | T 21 |
| F 22 | 11 55 12 | 0 <sup>h</sup> 41'13  | 21 <sup>h</sup> 24  | 8 <sup>h</sup> 10   | 20 <sup>h</sup> 22 | 24 <sup>h</sup> 11 | 10 <sup>h</sup> 40 | 15 <sup>h</sup> 24  | 16 <sup>h</sup> R54 | 26 <sup>h</sup> 30   | 15 <sup>h</sup> 46   | 23 <sup>h</sup> 49    | 25 <sup>h</sup> 36   | 24 <sup>h</sup> 4   | 5 <sup>h</sup> 3  | F 22 |
| S 23 | 11 59 9  | 1 <sup>h</sup> 40'44  | 6 <sup>h</sup> 26   | 8 <sup>h</sup> 18   | 21 <sup>h</sup> 37 | 24 <sup>h</sup> 1  | 10 <sup>h</sup> 47 | 15 <sup>h</sup> 27  | 16 <sup>h</sup> 54  | 26 <sup>h</sup> 30   | 15 <sup>h</sup> 47   | 23 <sup>h</sup> 45    | 25 <sup>h</sup> 33   | 24 <sup>h</sup> 11  | 5 <sup>h</sup> 6  | S 23 |
| S 24 | 12 3 5   | 2 <sup>h</sup> 40'14  | 21 <sup>h</sup> 11  | 8 <sup>h</sup> 31   | 22 <sup>h</sup> 52 | 23 <sup>h</sup> 52 | 10 <sup>h</sup> 54 | 15 <sup>h</sup> 30  | 16 <sup>h</sup> 54  | 26 <sup>h</sup> 31   | 15 <sup>h</sup> 47   | 23 <sup>h</sup> D44   | 25 <sup>h</sup> 29   | 24 <sup>h</sup> 17  | 5 <sup>h</sup> 7  | S 24 |
| M 25 | 12 7 2   | 3 <sup>h</sup> 39'41  | 5 <sup>h</sup> 13   | 8 <sup>h</sup> 50   | 24 <sup>h</sup> 6  | 23 <sup>h</sup> 44 | 11 <sup>h</sup> 0  | 15 <sup>h</sup> 33  | 16 <sup>h</sup> 54  | 26 <sup>h</sup> 31   | 15 <sup>h</sup> 48   | 23 <sup>h</sup> 44    | 25 <sup>h</sup> 26   | 24 <sup>h</sup> 24  | 5 <sup>h</sup> 9  | M 25 |
| T 26 | 12 10 58 | 4 <sup>h</sup> 39'06  | 19 <sup>h</sup> 36  | 9 <sup>h</sup> 13   | 25 <sup>h</sup> 21 | 23 <sup>h</sup> 36 | 11 <sup>h</sup> 7  | 15 <sup>h</sup> 36  | 16 <sup>h</sup> 54  | 26 <sup>h</sup> 32   | 15 <sup>h</sup> 48   | 23 <sup>h</sup> 46    | 25 <sup>h</sup> 23   | 24 <sup>h</sup> 31  | 5 <sup>h</sup> 11 | T 26 |
| W 27 | 12 14 55 | 5 <sup>h</sup> 38'29  | 3 <sup>h</sup> 14   | 9 <sup>h</sup> 42   | 26 <sup>h</sup> 35 | 23 <sup>h</sup> 30 | 11 <sup>h</sup> 13 | 15 <sup>h</sup> 39  | 16 <sup>h</sup> 54  | 26 <sup>h</sup> 33   | 15 <sup>h</sup> 49   | 23 <sup>h</sup> R46   | 25 <sup>h</sup> 20   | 24 <sup>h</sup> 37  | 5 <sup>h</sup> 13 | W 27 |
| T 28 | 12 18 51 | 6 <sup>h</sup> 37'49  | 16 <sup>h</sup> 31  | 10 <sup>h</sup> 14  | 27 <sup>h</sup> 50 | 23 <sup>h</sup> 24 | 11 <sup>h</sup> 19 | 15 <sup>h</sup> 42  | 16 <sup>h</sup> 53  | 26 <sup>h</sup> 33   | 15 <sup>h</sup> 49   | 23 <sup>h</sup> 46    | 25 <sup>h</sup> 17   | 24 <sup>h</sup> 44  | 5 <sup>h</sup> 14 | T 28 |
| F 29 | 12 22 48 | 7 <sup>h</sup> 37'07  | 29 <sup>h</sup> 28  | 10 <sup>h</sup> 51  | 29 <sup>h</sup> 4  | 23 <sup>h</sup> 19 | 11 <sup>h</sup> 25 | 15 <sup>h</sup> 45  | 16 <sup>h</sup> 53  | 26 <sup>h</sup> 34   | 15 <sup>h</sup> 50   | 23 <sup>h</sup> 43    | 25 <sup>h</sup> 14   | 24 <sup>h</sup> 51  | 5 <sup>h</sup> 16 | F 29 |
| S 30 | 12 26 45 | 8 <sup>h</sup> 36'22  | 12 <sup>h</sup> 9   | 11 <sup>h</sup> 32  | 0 <sup>h</sup> 18  | 23 <sup>h</sup> 14 | 11 <sup>h</sup> 31 | 15 <sup>h</sup> 47  | 16 <sup>h</sup> 53  | 26 <sup>h</sup> 35   | 15 <sup>h</sup> 50   | 23 <sup>h</sup> 39    | 25 <sup>h</sup> 10   | 24 <sup>h</sup> 57  | 5 <sup>h</sup> 17 | S 30 |
| S 31 | 12 30 41 | 9 <sup>h</sup> 35'35  | 24 <sup>h</sup> 37  | 12 <sup>h</sup> 16  | 1 <sup>h</sup> 33  | 23 <sup>h</sup> 11 | 11 <sup>h</sup> 36 | 15 <sup>h</sup> 50  | 16 <sup>h</sup> 52  | 26 <sup>h</sup> II35 | 15 <sup>h</sup> II51 | 23 <sup>h</sup> III33 | 25 <sup>h</sup> II 7 | 25 <sup>h</sup> 4   | 5 <sup>h</sup> 18 | S 31 |

| Day  | ☉    | ☾     |      | ♂    |      | ♀     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |       | ♂     |       | ♂    |     | ♂    |     |
|------|------|-------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|-------|-------|-------|------|-----|------|-----|
|      | decl | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat   | decl  | lat   | decl | lat | decl | lat |
| F 1  | 7s55 | 18n 2 | 4s 3 | 0s19 | 3n17 | 14s29 | 1s 7 | 15n25 | 4n20 | 22s59 | 0n14 | 22s10 | 0n33 | 22s47 | 0s 0 | 22n11 | 1s13 | 13n24 | 9s20 | 19s18 | 19s26 | 11s13 | 17s32 | 5n51 |     |      |     |
| S 2  | 7 33 | 15 9  | 4 36 | 0 22 | 3 26 | 14 6  | 1 8  | 15 32 | 4 18 | 22 59 | 0 14 | 22 10 | 0 33 | 22 47 | 0 0  | 22 11 | 1 13 | 13 25 | 9 19 | 19 16 | 19 25 | 11 15 | 17 31 | 5 52 |     |      |     |
| S 3  | 7 10 | 11 36 | 4 56 | 0 29 | 3 32 | 13 42 | 1 10 | 15 39 | 4 17 | 22 58 | 0 14 | 22 9  | 0 33 | 22 48 | 0 0  | 22 12 | 1 13 | 13 25 | 9 19 | 19 13 | 19 24 | 11 16 | 17 31 | 5 53 |     |      |     |
| M 4  | 6 47 | 7 36  | 5 1  | 0 42 | 3 37 | 13 17 | 1 11 | 15 45 | 4 16 | 22 58 | 0 14 | 22 9  | 0 33 | 22 48 | 0 0  | 22 12 | 1 13 | 13 25 | 9 19 | 19 10 | 19 24 | 11 18 | 17 30 | 5 53 |     |      |     |
| T 5  | 6 24 | 3 20  | 4 52 | 0 58 | 3 40 | 12 53 | 1 12 | 15 52 | 4 14 | 22 57 | 0 14 | 22 8  | 0 33 | 22 48 | 0 0  | 22 12 | 1 13 | 13 25 | 9 19 | 19 7  | 19 23 | 11 20 | 17 29 | 5 54 |     |      |     |
| W 6  | 6 1  | 1s 0  | 4 29 | 1 18 | 3 41 | 12 28 | 1 14 | 15 58 | 4 13 | 22 57 | 0 14 | 22 8  | 0 33 | 22 48 | 0 0  | 22 12 | 1 13 | 13 26 | 9 18 | 19 4  | 19 22 | 11 22 | 17 29 | 5 54 |     |      |     |
| T 7  | 5 37 | 5 15  | 3 54 | 1 42 | 3 40 | 12 2  | 1 15 | 16 3  | 4 11 | 22 56 | 0 14 | 22 7  | 0 33 | 22 48 | 0 0  | 22 12 | 1 12 | 13 26 | 9 18 | 19 1  | 19 21 | 11 24 | 17 28 | 5 55 |     |      |     |
| F 8  | 5 14 | 9 16  | 3 10 | 2 8  | 3 36 | 11 36 | 1 16 | 16 9  | 4 10 | 22 56 | 0 14 | 22 7  | 0 33 | 22 48 | 0 0  | 22 12 | 1 12 | 13 26 | 9 18 | 18 59 | 19 21 | 11 26 | 17 27 | 5 55 |     |      |     |
| S 9  | 4 51 | 12 53 | 2 17 | 2 36 | 3 31 | 11 10 | 1 17 | 16 14 | 4 8  | 22 55 | 0 14 | 22 6  | 0 33 | 22 48 | 0 0  | 22 12 | 1 12 | 13 26 | 9 18 | 18 57 | 19 20 | 11 27 | 17 27 | 5 56 |     |      |     |
| S 10 | 4 27 | 15 59 | 1 19 | 3 6  | 3 24 | 10 44 | 1 19 | 16 19 | 4 6  | 22 55 | 0 14 | 22 6  | 0 33 | 22 48 | 0 0  | 22 12 | 1 12 | 13 27 | 9 17 | 18 57 | 19 19 | 11 29 | 17 26 | 5 57 |     |      |     |
| M 11 | 4 4  | 18 25 | 0 17 | 3 36 | 3 15 | 10 17 | 1 20 | 16 24 | 4 4  | 22 54 | 0 14 | 22 6  | 0 33 | 22 48 | 0 0  | 22 12 | 1 12 | 13 27 | 9 17 | 18 56 | 19 18 | 11 31 | 17 25 | 5 57 |     |      |     |
| T 12 | 3 40 | 20 5  | 0n47 | 4 6  | 3 5  | 9 50  | 1 20 | 16 28 | 4 2  | 22 54 | 0 14 | 22 5  | 0 33 | 22 48 | 0 0  | 22 12 | 1 12 | 13 27 | 9 17 | 18 56 | 19 18 | 11 33 | 17 25 | 5 58 |     |      |     |
| W 13 | 3 17 | 20 51 | 1 49 | 4 36 | 2 53 | 9 23  | 1 21 | 16 32 | 4 0  | 22 53 | 0 13 | 22 5  | 0 33 | 22 48 | 0 0  | 22 12 | 1 12 | 13 27 | 9 17 | 18 56 | 19 17 | 11 35 | 17 24 | 5 58 |     |      |     |
| T 14 | 2 53 | 20 38 | 2 48 | 5 5  | 2 40 | 8 56  | 1 22 | 16 36 | 3 58 | 22 52 | 0 13 | 22 4  | 0 33 | 22 48 | 0 0  | 22 12 | 1 12 | 13 28 | 9 16 | 18 56 | 19 16 | 11 36 | 17 23 | 5 59 |     |      |     |
| F 15 | 2 30 | 19 21 | 3 41 | 5 33 | 2 26 | 8 28  | 1 23 | 16 39 | 3 56 | 22 52 | 0 13 | 22 4  | 0 33 | 22 48 | 0 0  | 22 12 | 1 12 | 13 28 | 9 16 | 18 56 | 19 15 | 11 38 | 17 22 | 6 0  |     |      |     |
| S 16 | 2 6  | 17 2  | 4 23 | 5 59 | 2 12 | 8 0   | 1 24 | 16 43 | 3 54 | 22 51 | 0 13 | 22 3  | 0 33 | 22 49 | 0 0  | 22 12 | 1 12 | 13 28 | 9 16 | 18 55 | 19 15 | 11 40 | 17 22 | 6 0  |     |      |     |
| S 17 | 1 42 | 13 42 | 4 52 | 6 23 | 1 58 | 7 32  | 1 24 | 16 45 | 3 52 | 22 51 | 0 13 | 22 3  | 0 33 | 22 49 | 0 0  | 22 12 | 1 12 | 13 28 | 9 16 | 18 54 | 19 14 | 11 42 | 17 21 | 6 1  |     |      |     |
| M 18 | 1 18 | 9 29  | 5 5  | 6 45 | 1 43 | 7 4   | 1 25 | 16 48 | 3 49 | 22 50 | 0 13 | 22 3  | 0 33 | 22 49 | 0 0  | 22 12 | 1 12 | 13 29 | 9 15 | 18 52 | 19 13 | 11 44 | 17 20 | 6 2  |     |      |     |
| T 19 | 0 55 | 4 36  | 4 59 | 7 5  | 1 28 | 6 35  | 1 25 | 16 50 | 3 47 | 22 50 | 0 13 | 22 2  | 0 33 | 22 49 | 0 0  | 22 12 | 1 12 | 13 29 | 9 15 | 18 50 | 19 12 | 11 45 | 17 20 | 6 2  |     |      |     |
| W 20 | 0 31 | 0n39  | 4 32 | 7 23 | 1 13 | 6 6   | 1 26 | 16 52 | 3 45 | 22 49 | 0 13 | 22 2  | 0 33 | 22 49 | 0 0  | 22 12 | 1 12 | 13 29 | 9 15 | 18 47 | 19 12 | 11 47 | 17 19 | 6 3  |     |      |     |
| T 21 | 0 7  | 5 57  | 3 47 | 7 38 | 0 58 | 5 38  | 1 26 | 16 54 | 3 42 | 22 49 | 0 13 | 22 2  | 0 33 | 22 49 | 0 0  | 22 12 | 1 12 | 13 30 | 9 15 | 18 46 | 19 11 | 11 49 | 17 18 | 6 3  |     |      |     |
| F 22 | 0n16 | 10 54 | 2 45 | 7 51 | 0 43 | 5 9   | 1 27 | 16 55 | 3 40 | 22 48 | 0 13 | 22 1  | 0 33 | 22 49 | 0 0  | 22 13 | 1 12 | 13 30 | 9 15 | 18 44 | 19 10 | 11 51 | 17 17 | 6 4  |     |      |     |
| S 23 | 0 40 | 15 7  | 1 32 | 8 1  | 0 29 | 4 39  | 1 27 | 16 56 | 3 38 | 22 48 | 0 13 | 22 1  | 0 33 | 22 49 | 0 0  | 22 13 | 1 12 | 13 30 | 9 14 | 18 43 | 19 9  | 11 52 | 17 17 | 6 5  |     |      |     |
| S 24 | 1 4  | 18 17 | 0 14 | 8 9  | 0 15 | 4 10  | 1 27 | 16 57 | 3 35 | 22 48 | 0 13 | 22 0  | 0 33 | 22 49 | 0 0  | 22 13 | 1 12 | 13 30 | 9 14 | 18 43 | 19 9  | 11 54 | 17 16 | 6 5  |     |      |     |
| M 25 | 1 27 | 20 12 | 1s 4 | 8 14 | 0 2  | 3 41  | 1 27 | 16 57 | 3 33 | 22 47 | 0 13 | 22 0  | 0 33 | 22 49 | 0 0  | 22 13 | 1 12 | 13 31 | 9 14 | 18 43 | 19 8  | 11 56 | 17 15 | 6 6  |     |      |     |
| T 26 | 1 51 | 20 48 | 2 15 | 8 17 | 0s11 | 3 11  | 1 27 | 16 58 | 3 30 | 22 47 | 0 13 | 22 0  | 0 33 | 22 49 | 0 0  | 22 13 | 1 12 | 13 31 | 9 14 | 18 43 | 19 7  | 11 58 | 17 15 | 6 7  |     |      |     |
| W 27 | 2 15 | 20 8  | 3 17 | 8 18 | 0 24 | 2 42  | 1 27 | 16 58 | 3 28 | 22 46 | 0 12 | 21 59 | 0 33 | 22 49 | 0 0  | 22 13 | 1 11 | 13 31 | 9 13 | 18 43 | 19 6  | 12 0  | 17 14 | 6 7  |     |      |     |
| T 28 | 2 38 | 18 21 | 4 6  | 8 17 | 0 36 | 2 12  | 1 27 | 16 57 | 3 25 | 22 46 | 0 12 | 21 59 | 0 33 | 22 49 | 0 0  | 22 13 | 1 11 | 13 32 | 9 13 | 18 43 | 19 6  | 12 1  | 17 13 | 6 8  |     |      |     |
| F 29 | 3 1  | 15 41 | 4 42 | 8 14 | 0 47 | 1 42  | 1 27 | 16 57 | 3 23 | 22 45 | 0 12 | 21 59 | 0 33 | 22 49 | 0 0  | 22 13 | 1 11 | 13 32 | 9 13 | 18 43 | 19 5  | 12 3  | 17 12 | 6 8  |     |      |     |
| S 30 | 3 25 | 12 19 | 5 3  | 8 8  | 0 58 | 1 12  | 1 27 | 16 56 | 3 20 | 22 45 | 0 12 | 21 59 | 0 33 | 22 49 | 0 0  | 22 13 | 1 11 | 13 32 | 9 13 | 18 42 | 19 4  | 12 5  | 17 12 | 6 9  |     |      |     |
| S 31 | 3n48 | 8n28  | 5s 9 | 8s 1 | 1s 8 | 0s43  | 1s27 | 16n55 | 3n18 | 22s44 | 0n12 | 21s58 | 0n33 | 22s49 | 0s 0 | 22n13 | 1s11 | 13n32 | 9s12 | 18s40 | 19s 3 | 12s 7 | 17s11 | 6n10 |     |      |     |

# ASTRODIENST EPHEMERIS for the year 1901

## geocentric

APRIL 1901

00:00 UT

| Day | Sid.t    | ☉        | ☽     | ♀     | ♂     | ♂      | ♂      | ♂      | ♂      | ♂       | ♂       | ♂      | ♂      | ♂     | ♂     | Day |
|-----|----------|----------|-------|-------|-------|--------|--------|--------|--------|---------|---------|--------|--------|-------|-------|-----|
| M 1 | 12 34 38 | 10°34'46 | 6°53  | 13°4  | 2°47  | 23°R 8 | 11°342 | 15°53  | 16°R52 | 26°II36 | 15°II52 | 23°R25 | 25°M 4 | 25°11 | 5°20  | M 1 |
| T 2 | 12 38 34 | 11°33'55 | 19° 1 | 13°55 | 4° 2  | 23°R 6 | 11°47  | 15°55  | 16°R51 | 26°37   | 15°52   | 23°M17 | 25° 1  | 25°17 | 5°21  | T 2 |
| W 3 | 12 42 31 | 12°33'01 | 1°1   | 14°50 | 5°16  | 23° 4  | 11°52  | 15°57  | 16°51  | 26°38   | 15°53   | 23°10  | 24°58  | 25°24 | 5°22  | W 3 |
| T 4 | 12 46 27 | 13°32'06 | 12°56 | 15°47 | 6°30  | 23°D 4 | 11°57  | 15°59  | 16°50  | 26°39   | 15°54   | 23° 3  | 24°54  | 25°31 | 5°23  | T 4 |
| F 5 | 12 50 24 | 14°31'08 | 24°46 | 16°47 | 7°45  | 23° 4  | 12° 2  | 16° 2  | 16°49  | 26°40   | 15°55   | 22°58  | 24°51  | 25°37 | 5°24  | F 5 |
| S 6 | 12 54 20 | 15°30'09 | 6°M35 | 17°50 | 8°59  | 23° 5  | 12° 6  | 16° 4  | 16°49  | 26°41   | 15°55   | 22°55  | 24°48  | 25°44 | 5°25  | S 6 |
| S 7 | 12 58 17 | 16°29'07 | 18°23 | 18°55 | 10°13 | 23° 6  | 12°11  | 16° 5  | 16°48  | 26°42   | 15°56   | 22°D53 | 24°45  | 25°51 | 5°25  | S 7 |
| M 8 | 13 2 14  | 17°28'04 | 0°15  | 20° 3 | 11°28 | 23° 9  | 12°15  | 16° 7  | 16°47  | 26°43   | 15°57   | 22°53  | 24°42  | 25°57 | 5°26  | M 8 |
| T 9 | 13 6 10  | 18°26'59 | 12°12 | 21°13 | 12°42 | 23°12  | 12°19  | 16° 9  | 16°46  | 26°44   | 15°58   | 22°55  | 24°39  | 26° 4 | 5°26  | T 9 |
| W10 | 13 10 7  | 19°25'52 | 24°21 | 22°26 | 13°56 | 23°15  | 12°23  | 16°11  | 16°45  | 26°45   | 15°58   | 22°56  | 24°35  | 26°11 | 5°27  | W10 |
| T11 | 13 14 3  | 20°24'43 | 6°344 | 23°41 | 15°11 | 23°20  | 12°27  | 16°12  | 16°44  | 26°46   | 15°59   | 22°58  | 24°32  | 26°17 | 5°27  | T11 |
| F12 | 13 18 0  | 21°23'32 | 19°26 | 24°57 | 16°25 | 23°25  | 12°30  | 16°14  | 16°43  | 26°47   | 16° 0   | 22°R59 | 24°29  | 26°24 | 5°27  | F12 |
| S13 | 13 21 56 | 22°22'20 | 2°31  | 26°16 | 17°39 | 23°31  | 12°34  | 16°15  | 16°42  | 26°48   | 16° 1   | 22°58  | 24°26  | 26°31 | 5°28  | S13 |
| S14 | 13 25 53 | 23°21'06 | 16° 3 | 27°37 | 18°54 | 23°37  | 12°37  | 16°16  | 16°41  | 26°49   | 16° 2   | 22°56  | 24°23  | 26°37 | 5°R28 | S14 |
| M15 | 13 29 49 | 24°19'51 | 0°2   | 29° 0 | 20° 8 | 23°44  | 12°40  | 16°17  | 16°40  | 26°50   | 16° 3   | 22°53  | 24°19  | 26°44 | 5°28  | M15 |
| T16 | 13 33 46 | 25°18'33 | 14°29 | 0°24  | 21°22 | 23°52  | 12°43  | 16°18  | 16°39  | 26°52   | 16° 4   | 22°50  | 24°16  | 26°51 | 5°27  | T16 |
| W17 | 13 37 43 | 26°17'14 | 29°19 | 1°51  | 22°36 | 24° 0  | 12°45  | 16°19  | 16°38  | 26°53   | 16° 5   | 22°46  | 24°13  | 26°57 | 5°27  | W17 |
| T18 | 13 41 39 | 27°15'53 | 14°25 | 3°19  | 23°50 | 24° 9  | 12°48  | 16°20  | 16°36  | 26°54   | 16° 6   | 22°43  | 24°10  | 27° 4 | 5°27  | T18 |
| F19 | 13 45 36 | 28°14'30 | 29°39 | 4°49  | 25° 5 | 24°18  | 12°50  | 16°21  | 16°35  | 26°55   | 16° 7   | 22°40  | 24° 7  | 27°11 | 5°27  | F19 |
| S20 | 13 49 32 | 29°13'06 | 14°50 | 6°21  | 26°19 | 24°28  | 12°52  | 16°22  | 16°34  | 26°57   | 16° 8   | 22°39  | 24° 4  | 27°17 | 5°26  | S20 |
| S21 | 13 53 29 | 0°11'39  | 29°49 | 7°54  | 27°33 | 24°39  | 12°54  | 16°22  | 16°32  | 26°58   | 16° 9   | 22°D39 | 24° 0  | 27°24 | 5°26  | S21 |
| M22 | 13 57 25 | 1°10'10  | 14°28 | 9°30  | 28°47 | 24°50  | 12°56  | 16°23  | 16°31  | 27° 0   | 16°10   | 22°40  | 23°57  | 27°31 | 5°25  | M22 |
| T23 | 14 1 22  | 2° 8'40  | 28°43 | 11° 7 | 0°1   | 25° 2  | 12°58  | 16°23  | 16°29  | 27° 1   | 16°11   | 22°41  | 23°54  | 27°37 | 5°24  | T23 |
| W24 | 14 5 18  | 3° 7'07  | 12°32 | 12°45 | 1°15  | 25°14  | 12°59  | 16°23  | 16°28  | 27° 2   | 16°12   | 22°42  | 23°51  | 27°44 | 5°23  | W24 |
| T25 | 14 9 15  | 4° 5'32  | 25°55 | 14°26 | 2°30  | 25°27  | 13° 0  | 16°23  | 16°26  | 27° 4   | 16°13   | 22°43  | 23°48  | 27°51 | 5°23  | T25 |
| F26 | 14 13 12 | 5° 3'54  | 8°54  | 16° 8 | 3°44  | 25°40  | 13° 1  | 16°R24 | 16°25  | 27° 5   | 16°14   | 22°R43 | 23°45  | 27°57 | 5°22  | F26 |
| S27 | 14 17 8  | 6° 2'15  | 21°33 | 17°52 | 4°58  | 25°54  | 13° 2  | 16°24  | 16°23  | 27° 7   | 16°15   | 22°43  | 23°41  | 28° 4 | 5°21  | S27 |
| S28 | 14 21 5  | 7° 0'34  | 3°56  | 19°38 | 6°12  | 26° 8  | 13° 3  | 16°23  | 16°21  | 27° 9   | 16°16   | 22°41  | 23°38  | 28°11 | 5°19  | S28 |
| M29 | 14 25 1  | 7°58'50  | 16° 5 | 21°25 | 7°26  | 26°23  | 13° 3  | 16°23  | 16°19  | 27°10   | 16°17   | 22°40  | 23°35  | 28°17 | 5°18  | M29 |
| T30 | 14 28 58 | 8°57'04  | 28°4  | 23°14 | 8°40  | 26°238 | 13°3   | 16°23  | 16°18  | 27°12   | 16°18   | 22°M37 | 23°M32 | 28°24 | 5°17  | T30 |

| Day | ☉     | ☽     | ♀    | ♂    | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | Day   |
|-----|-------|-------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|
|     | decl  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  |       |
| M 1 | 4n11  | 4n20  | 5s 0 | 7s52 | 1s18 | 0s13  | 1s26 | 16n53 | 3n15 | 22s44 | 0n12 | 21s58 | 0n33 | 22s49 | 0s 0 | 22n13 |
| T 2 | 4 35  | 0 5   | 4 39 | 7 40 | 1 27 | 0n17  | 1 26 | 16 51 | 3 13 | 22 44 | 0 12 | 21 58 | 0 33 | 22 49 | 0 0  | 22 13 |
| W 3 | 4 58  | 4s 9  | 4 5  | 7 27 | 1 36 | 0 47  | 1 25 | 16 50 | 3 10 | 22 43 | 0 12 | 21 58 | 0 32 | 22 48 | 0 0  | 22 13 |
| T 4 | 5 21  | 8 11  | 3 20 | 7 12 | 1 44 | 1 17  | 1 25 | 16 47 | 3 8  | 22 43 | 0 12 | 21 57 | 0 32 | 22 48 | 0 0  | 22 13 |
| F 5 | 5 44  | 11 53 | 2 27 | 6 56 | 1 51 | 1 47  | 1 24 | 16 45 | 3 5  | 22 43 | 0 12 | 21 57 | 0 32 | 22 48 | 0 0  | 22 13 |
| S 6 | 6 6   | 15 6  | 1 28 | 6 38 | 1 58 | 2 17  | 1 24 | 16 42 | 3 3  | 22 42 | 0 12 | 21 57 | 0 32 | 22 48 | 0 0  | 22 14 |
| S 7 | 6 29  | 17 42 | 0 25 | 6 18 | 2 5  | 2 47  | 1 23 | 16 40 | 3 0  | 22 42 | 0 12 | 21 57 | 0 32 | 22 48 | 0 1  | 22 14 |
| M 8 | 6 52  | 19 33 | 0n40 | 5 57 | 2 11 | 3 16  | 1 22 | 16 36 | 2 58 | 22 42 | 0 12 | 21 56 | 0 32 | 22 48 | 0 1  | 22 14 |
| T 9 | 7 14  | 20 33 | 1 44 | 5 34 | 2 16 | 3 46  | 1 21 | 16 33 | 2 55 | 22 41 | 0 12 | 21 56 | 0 32 | 22 48 | 0 1  | 22 14 |
| W10 | 7 36  | 20 36 | 2 44 | 5 9  | 2 21 | 4 16  | 1 21 | 16 30 | 2 53 | 22 41 | 0 11 | 21 56 | 0 32 | 22 48 | 0 1  | 22 14 |
| T11 | 7 59  | 19 40 | 3 37 | 4 44 | 2 25 | 4 45  | 1 20 | 16 26 | 2 51 | 22 41 | 0 11 | 21 56 | 0 32 | 22 48 | 0 1  | 22 14 |
| F12 | 8 21  | 17 43 | 4 22 | 4 16 | 2 28 | 5 15  | 1 19 | 16 22 | 2 48 | 22 41 | 0 11 | 21 56 | 0 32 | 22 48 | 0 1  | 22 14 |
| S13 | 8 43  | 14 50 | 4 54 | 3 48 | 2 31 | 5 44  | 1 18 | 16 18 | 2 46 | 22 40 | 0 11 | 21 56 | 0 32 | 22 48 | 0 1  | 22 14 |
| S14 | 9 5   | 11 4  | 5 11 | 3 18 | 2 34 | 6 13  | 1 17 | 16 14 | 2 44 | 22 40 | 0 11 | 21 56 | 0 32 | 22 48 | 0 1  | 22 14 |
| M15 | 9 26  | 6 36  | 5 11 | 2 47 | 2 36 | 6 43  | 1 15 | 16 9  | 2 41 | 22 40 | 0 11 | 21 55 | 0 32 | 22 48 | 0 1  | 22 14 |
| T16 | 9 48  | 1 37  | 4 52 | 2 15 | 2 37 | 7 11  | 1 14 | 16 4  | 2 39 | 22 40 | 0 11 | 21 55 | 0 32 | 22 47 | 0 1  | 22 14 |
| W17 | 10 9  | 3n35  | 4 13 | 1 41 | 2 38 | 7 40  | 1 13 | 15 59 | 2 37 | 22 40 | 0 11 | 21 55 | 0 32 | 22 47 | 0 1  | 22 14 |
| T18 | 10 30 | 8 41  | 3 15 | 1 6  | 2 39 | 8 9   | 1 12 | 15 54 | 2 34 | 22 39 | 0 11 | 21 55 | 0 32 | 22 47 | 0 1  | 22 14 |
| F19 | 10 51 | 13 17 | 2 3  | 0 31 | 2 38 | 8 37  | 1 10 | 15 49 | 2 32 | 22 39 | 0 11 | 21 55 | 0 32 | 22 47 | 0 1  | 22 14 |
| S20 | 11 12 | 16 59 | 0 43 | 0n 6 | 2 38 | 9 6   | 1 9  | 15 44 | 2 30 | 22 39 | 0 11 | 21 55 | 0 32 | 22 47 | 0 1  | 22 15 |
| S21 | 11 33 | 19 29 | 0s39 | 0 44 | 2 37 | 9 34  | 1 7  | 15 38 | 2 28 | 22 39 | 0 10 | 21 55 | 0 32 | 22 47 | 0 1  | 22 15 |
| M22 | 11 53 | 20 36 | 1 58 | 1 23 | 2 35 | 10 1  | 1 6  | 15 32 | 2 25 | 22 39 | 0 10 | 21 55 | 0 32 | 22 47 | 0 1  | 22 15 |
| T23 | 12 13 | 20 20 | 3 6  | 2 4  | 2 32 | 10 29 | 1 4  | 15 26 | 2 23 | 22 39 | 0 10 | 21 55 | 0 32 | 22 47 | 0 1  | 22 15 |
| W24 | 12 34 | 18 51 | 4 2  | 2 45 | 2 30 | 10 56 | 1 3  | 15 20 | 2 21 | 22 39 | 0 10 | 21 55 | 0 32 | 22 46 | 0 1  | 22 15 |
| T25 | 12 53 | 16 21 | 4 42 | 3 27 | 2 26 | 11 23 | 1 1  | 15 13 | 2 19 | 22 39 | 0 10 | 21 55 | 0 32 | 22 46 | 0 1  | 22 15 |
| F26 | 13 13 | 13 6  | 5 7  | 4 9  | 2 22 | 11 50 | 0 59 | 15 7  | 2 17 | 22 39 | 0 10 | 21 55 | 0 32 | 22 46 | 0 1  | 22 15 |
| S27 | 13 12 | 9 20  | 5 16 | 4 53 | 2 18 | 12 17 | 0 57 | 15 0  | 2 15 | 22 39 | 0 10 | 21 55 | 0 32 | 22 46 | 0 1  | 22 15 |
| S28 | 13 52 | 5 15  | 5 10 | 5 38 | 2 13 | 12 43 | 0 56 | 14 53 | 2 13 | 22 39 | 0 10 | 21 55 | 0 32 | 22 46 | 0 1  | 22 15 |
| M29 | 14 11 | 1 2   | 4 50 | 6 23 | 2 8  | 13 9  | 0 54 | 14 46 | 2 11 | 22 39 | 0 10 | 21 55 | 0 32 | 22 46 | 0 1  | 22 15 |
| T30 | 14n29 | 3s11  | 4s18 | 7n 9 | 2s 2 | 13n35 | 0s52 | 14n39 | 2n 9 | 22s39 | 0n10 | 21s55 | 0n32 | 22s45 | 0s 1 | 22n15 |

Julian Day Number = 2415475.5, Delta T = -0.43 sec  
 Ecliptic obliquity = 23°27'03, Nutation = 0°00'14, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 23°21'40, Lahiri = 22°28'41

ASTRODIENST EPHEMERIS for the year 1901  
geocentric

MAY 1901

00:00 UT

| Day  | Sid.t    | ☉        | ☽     | ♂     | ♀     | ♂     | ♂      | ♂      | ♂      | ♂     | ♂     | ♂      | ♂     | ♂     | ♂     | Day  |
|------|----------|----------|-------|-------|-------|-------|--------|--------|--------|-------|-------|--------|-------|-------|-------|------|
| W 1  | 14 32 54 | 9♂55'17  | 9♂57  | 25♂ 5 | 9♂54  | 26♂54 | 13°R 4 | 16°R22 | 16°R16 | 27♂13 | 16♂19 | 22°R35 | 23♂29 | 28♂30 | 5°R15 | W 1  |
| T 2  | 14 36 51 | 10°53'27 | 21°46 | 26°58 | 11° 8 | 27°10 | 13♂ 3  | 16♂22  | 16♂14  | 27°15 | 16°21 | 22♂34  | 23°25 | 28°37 | 5♂14  | T 2  |
| F 3  | 14 40 47 | 11°51'36 | 3♂35  | 28°53 | 12°22 | 27°27 | 13° 3  | 16°21  | 16°12  | 27°17 | 16°22 | 22°33  | 23°22 | 28°44 | 5°12  | F 3  |
| S 4  | 14 44 44 | 12°49'43 | 15°24 | 0♂49  | 13°36 | 27°44 | 13° 3  | 16°21  | 16°10  | 27°18 | 16°23 | 22°32  | 23°19 | 28°50 | 5°11  | S 4  |
| S 5  | 14 48 40 | 13°47'49 | 27°17 | 2°47  | 14°50 | 28° 1 | 13° 2  | 16°20  | 16° 8  | 27°20 | 16°24 | 22°D32 | 23°16 | 28°57 | 5° 9  | S 5  |
| M 6  | 14 52 37 | 14°45'53 | 9♂16  | 4°47  | 16° 4 | 28°19 | 13° 1  | 16°19  | 16° 6  | 27°22 | 16°25 | 22°32  | 23°13 | 29° 4 | 5° 7  | M 6  |
| T 7  | 14 56 34 | 15°43'55 | 21°22 | 6°48  | 17°18 | 28°38 | 13° 0  | 16°18  | 16° 4  | 27°24 | 16°27 | 22°33  | 23°10 | 29°10 | 5° 5  | T 7  |
| W 8  | 15 0 30  | 16°41'56 | 3♂39  | 8°51  | 18°32 | 28°56 | 12°59  | 16°17  | 16° 2  | 27°25 | 16°28 | 22°34  | 23° 6 | 29°17 | 5° 3  | W 8  |
| T 9  | 15 4 27  | 17°39'55 | 16°10 | 10°55 | 19°46 | 29°16 | 12°57  | 16°16  | 16° 0  | 27°27 | 16°29 | 22°34  | 23° 3 | 29°24 | 5° 1  | T 9  |
| F 10 | 15 8 23  | 18°37'53 | 28°56 | 13° 1 | 21° 0 | 29°35 | 12°56  | 16°14  | 15°58  | 27°29 | 16°30 | 22°35  | 23° 0 | 29°30 | 4°59  | F 10 |
| S 11 | 15 12 20 | 19°35'50 | 12♂ 2 | 15° 9 | 22°13 | 29°55 | 12°54  | 16°13  | 15°56  | 27°31 | 16°32 | 22°35  | 22°57 | 29°37 | 4°57  | S 11 |
| S 12 | 15 16 16 | 20°33'45 | 25°29 | 17°17 | 23°27 | 0♂15  | 12°52  | 16°12  | 15°54  | 27°33 | 16°33 | 22°R35 | 22°54 | 29°44 | 4°55  | S 12 |
| M13  | 15 20 13 | 21°31'39 | 9♂19  | 19°26 | 24°41 | 0°36  | 12°50  | 16°10  | 15°52  | 27°34 | 16°34 | 22°35  | 22°51 | 29°50 | 4°53  | M13  |
| T 14 | 15 24 9  | 22°29'32 | 23°32 | 21°37 | 25°55 | 0°57  | 12°47  | 16° 8  | 15°50  | 27°36 | 16°35 | 22°D35 | 22°47 | 29°57 | 4°50  | T 14 |
| W15  | 15 28 6  | 23°27'24 | 8♂ 6  | 23°48 | 27° 9 | 1°18  | 12°45  | 16° 7  | 15°48  | 27°38 | 16°37 | 22°35  | 22°44 | 0♂ 4  | 4°48  | W15  |
| T 16 | 15 32 3  | 24°25'15 | 22°57 | 25°59 | 28°23 | 1°40  | 12°42  | 16° 5  | 15°45  | 27°40 | 16°38 | 22°35  | 22°41 | 0°10  | 4°45  | T 16 |
| F 17 | 15 35 59 | 25°23'04 | 7♂59  | 28°10 | 29°37 | 2° 2  | 12°39  | 16° 3  | 15°43  | 27°42 | 16°39 | 22°35  | 22°38 | 0°17  | 4°43  | F 17 |
| S 18 | 15 39 56 | 26°20'52 | 23° 3 | 0♂21  | 0♂51  | 2°24  | 12°36  | 16° 1  | 15°41  | 27°44 | 16°41 | 22°R35 | 22°35 | 0°24  | 4°40  | S 18 |
| S 19 | 15 43 52 | 27°18'39 | 8♂ 1  | 2°32  | 2° 4  | 2°47  | 12°33  | 15°59  | 15°39  | 27°46 | 16°42 | 22°35  | 22°31 | 0°30  | 4°37  | S 19 |
| M20  | 15 47 49 | 28°16'24 | 22♂ 4 | 4°42  | 3°18  | 3°10  | 12°29  | 15°57  | 15°36  | 27°48 | 16°43 | 22°35  | 22°28 | 0°37  | 4°35  | M20  |
| T 21 | 15 51 45 | 29°14'08 | 7♂ 6  | 6°50  | 4°32  | 3°33  | 12°26  | 15°54  | 15°34  | 27°50 | 16°45 | 22°34  | 22°25 | 0°44  | 4°32  | T 21 |
| W22  | 15 55 42 | 0♂11'50  | 21° 4 | 8°58  | 5°46  | 3°57  | 12°22  | 15°52  | 15°32  | 27°52 | 16°46 | 22°33  | 22°22 | 0°50  | 4°29  | W22  |
| T 23 | 15 59 38 | 1° 9'31  | 4♂35  | 11° 4 | 7° 0  | 4°21  | 12°18  | 15°50  | 15°29  | 27°54 | 16°47 | 22°32  | 22°19 | 0°57  | 4°26  | T 23 |
| F 24 | 16 3 35  | 2° 7'10  | 17°40 | 13° 8 | 8°13  | 4°45  | 12°14  | 15°47  | 15°27  | 27°56 | 16°49 | 22°32  | 22°16 | 1° 4  | 4°23  | F 24 |
| S 25 | 16 7 32  | 3° 4'47  | 0♂22  | 15°10 | 9°27  | 5° 9  | 12°10  | 15°45  | 15°24  | 27°58 | 16°50 | 22°D31 | 22°12 | 1°10  | 4°20  | S 25 |
| S 26 | 16 11 28 | 4° 2'24  | 12°44 | 17°10 | 10°41 | 5°34  | 12° 5  | 15°42  | 15°22  | 28° 0 | 16°51 | 22°31  | 22° 9 | 1°17  | 4°17  | S 26 |
| M27  | 16 15 25 | 4°59'58  | 24°51 | 19° 8 | 11°55 | 5°59  | 12° 1  | 15°39  | 15°20  | 28° 2 | 16°53 | 22°32  | 22° 6 | 1°24  | 4°14  | M27  |
| T 28 | 16 19 21 | 5°57'31  | 6♂48  | 21° 4 | 13° 8 | 6°24  | 11°56  | 15°36  | 15°17  | 28° 4 | 16°54 | 22°33  | 22° 3 | 1°30  | 4°10  | T 28 |
| W29  | 16 23 18 | 6°55'03  | 18°38 | 22°57 | 14°22 | 6°50  | 11°51  | 15°33  | 15°15  | 28° 7 | 16°55 | 22°34  | 22° 0 | 1°37  | 4° 7  | W29  |
| T 30 | 16 27 14 | 7°52'34  | 0♂26  | 24°47 | 15°36 | 7°16  | 11°46  | 15°30  | 15°12  | 28° 9 | 16°57 | 22°36  | 21°57 | 1°44  | 4° 4  | T 30 |
| F 31 | 16 31 11 | 8♂50'03  | 12♂15 | 26♂35 | 16♂50 | 7♂42  | 11♂41  | 15♂27  | 15♂10  | 28♂11 | 16♂58 | 22♂37  | 21♂53 | 1♂50  | 4♂ 1  | F 31 |

| Day  | ☉     | ☽     | ♂    | ♀     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | lat   |
| W 1  | 14n48 | 7s14  | 3s35 | 7n55  | 1s56 | 14n 0 | 0s50 | 14n32 | 2n 7 | 22s39 | 0n10 | 21s55 | 0n32 | 22s45 | 0s 1 | 22n15 |
| T 2  | 15 6  | 11 0  | 2 42 | 8 42  | 1 49 | 14 25 | 0 48 | 14 25 | 2 5  | 22 39 | 0 9  | 21 55 | 0 32 | 22 45 | 0 1  | 22 15 |
| F 3  | 15 24 | 14 20 | 1 43 | 9 30  | 1 41 | 14 49 | 0 46 | 14 17 | 2 3  | 22 39 | 0 9  | 21 55 | 0 32 | 22 45 | 0 1  | 22 15 |
| S 4  | 15 42 | 17 6  | 0 39 | 10 18 | 1 34 | 15 14 | 0 44 | 14 9  | 2 1  | 22 39 | 0 9  | 21 56 | 0 32 | 22 45 | 0 1  | 22 16 |
| S 5  | 15 59 | 19 8  | 0n26 | 11 6  | 1 25 | 15 38 | 0 42 | 14 1  | 1 59 | 22 40 | 0 9  | 21 56 | 0 32 | 22 45 | 0 1  | 22 16 |
| M 6  | 16 16 | 20 20 | 1 32 | 11 55 | 1 17 | 16 1  | 0 40 | 13 53 | 1 57 | 22 40 | 0 9  | 21 56 | 0 32 | 22 44 | 0 1  | 22 16 |
| T 7  | 16 33 | 20 37 | 2 34 | 12 43 | 1 8  | 16 24 | 0 38 | 13 45 | 1 55 | 22 40 | 0 9  | 21 56 | 0 32 | 22 44 | 0 1  | 22 16 |
| W 8  | 16 50 | 19 55 | 3 29 | 13 32 | 0 58 | 16 47 | 0 36 | 13 37 | 1 53 | 22 40 | 0 9  | 21 56 | 0 32 | 22 44 | 0 1  | 22 16 |
| T 9  | 17 7  | 18 14 | 4 16 | 14 20 | 0 49 | 17 9  | 0 33 | 13 28 | 1 51 | 22 40 | 0 9  | 21 56 | 0 32 | 22 44 | 0 1  | 22 16 |
| F 10 | 17 23 | 15 38 | 4 51 | 15 8  | 0 39 | 17 31 | 0 31 | 13 20 | 1 49 | 22 41 | 0 9  | 21 56 | 0 31 | 22 44 | 0 1  | 22 16 |
| S 11 | 17 38 | 12 11 | 5 13 | 15 56 | 0 29 | 17 52 | 0 29 | 13 11 | 1 48 | 22 41 | 0 9  | 21 57 | 0 31 | 22 43 | 0 1  | 22 16 |
| S 12 | 17 54 | 8 3   | 5 17 | 16 43 | 0 18 | 18 13 | 0 27 | 13 2  | 1 46 | 22 41 | 0 8  | 21 57 | 0 31 | 22 43 | 0 1  | 22 16 |
| M13  | 18 9  | 3 23  | 5 4  | 17 28 | 0 8  | 18 33 | 0 24 | 12 53 | 1 44 | 22 42 | 0 8  | 21 57 | 0 31 | 22 43 | 0 1  | 22 16 |
| T 14 | 18 24 | 1n36  | 4 33 | 18 13 | 0n 3 | 18 53 | 0 22 | 12 44 | 1 42 | 22 42 | 0 8  | 21 57 | 0 31 | 22 43 | 0 1  | 22 16 |
| W15  | 18 39 | 6 38  | 3 43 | 18 57 | 0 13 | 19 13 | 0 20 | 12 35 | 1 41 | 22 42 | 0 8  | 21 58 | 0 31 | 22 42 | 0 1  | 22 16 |
| T 16 | 18 53 | 11 22 | 2 37 | 19 39 | 0 24 | 19 31 | 0 17 | 12 26 | 1 39 | 22 43 | 0 8  | 21 58 | 0 31 | 22 42 | 0 1  | 22 16 |
| F 17 | 19 7  | 15 27 | 1 20 | 20 19 | 0 34 | 19 50 | 0 15 | 12 16 | 1 37 | 22 43 | 0 8  | 21 58 | 0 31 | 22 42 | 0 1  | 22 16 |
| S 18 | 19 21 | 18 30 | 0s 3 | 20 57 | 0 44 | 20 8  | 0 13 | 12 6  | 1 35 | 22 43 | 0 8  | 21 58 | 0 31 | 22 42 | 0 1  | 22 16 |
| S 19 | 19 34 | 20 16 | 1 25 | 21 33 | 0 54 | 20 25 | 0 10 | 11 57 | 1 34 | 22 44 | 0 8  | 21 59 | 0 31 | 22 42 | 0 1  | 22 17 |
| M20  | 19 47 | 20 35 | 2 40 | 22 7  | 1 3  | 20 42 | 0 8  | 11 47 | 1 32 | 22 44 | 0 8  | 21 59 | 0 31 | 22 41 | 0 1  | 22 17 |
| T 21 | 20 0  | 19 33 | 3 43 | 22 39 | 1 12 | 20 58 | 0 6  | 11 37 | 1 30 | 22 45 | 0 7  | 21 59 | 0 31 | 22 41 | 0 1  | 22 17 |
| W22  | 20 12 | 17 20 | 4 31 | 23 8  | 1 21 | 21 13 | 0 3  | 11 27 | 1 29 | 22 45 | 0 7  | 22 0  | 0 31 | 22 41 | 0 1  | 22 17 |
| T 23 | 20 24 | 14 14 | 5 2  | 23 35 | 1 29 | 21 28 | 0 1  | 11 17 | 1 27 | 22 46 | 0 7  | 22 0  | 0 31 | 22 41 | 0 1  | 22 17 |
| F 24 | 20 36 | 10 31 | 5 16 | 23 59 | 1 36 | 21 43 | 0n 2 | 11 6  | 1 26 | 22 46 | 0 7  | 22 0  | 0 31 | 22 40 | 0 1  | 22 17 |
| S 25 | 20 47 | 6 26  | 5 14 | 24 20 | 1 43 | 21 57 | 0 4  | 10 56 | 1 24 | 22 47 | 0 7  | 22 1  | 0 31 | 22 40 | 0 1  | 22 17 |
| S 26 | 20 58 | 2 12  | 4 58 | 24 38 | 1 49 | 22 10 | 0 6  | 10 45 | 1 23 | 22 47 | 0 7  | 22 1  | 0 31 | 22 40 | 0 1  | 22 17 |
| M27  | 21 8  | 2s 4  | 4 28 | 24 54 | 1 54 | 22 22 | 0 9  | 10 35 | 1 21 | 22 48 | 0 7  | 22 1  | 0 31 | 22 40 | 0 1  | 22 17 |
| T 28 | 21 19 | 6 11  | 3 48 | 25 7  | 1 59 | 22 34 | 0 11 | 10 24 | 1 20 | 22 48 | 0 7  | 22 2  | 0 31 | 22 39 | 0 1  | 22 17 |
| W29  | 21 29 | 10 2  | 2 57 | 25 18 | 2 2  | 22 46 | 0 14 | 10 13 | 1 18 | 22 49 | 0 7  | 22 2  | 0 31 | 22 39 | 0 1  | 22 17 |
| T 30 | 21 38 | 13 30 | 2 0  | 25 26 | 2 5  | 22 56 | 0 16 | 10 2  | 1 17 | 22 49 | 0 6  | 22 2  | 0 31 | 22 39 | 0 1  | 22 17 |
| F 31 | 21n47 | 16s26 | 0s57 | 25n32 | 2n 7 | 23n 6 | 0n18 | 9n51  | 1n15 | 22s50 | 0n 6 | 22s 3 | 0n31 | 22s39 | 0s 1 | 22n17 |

Julian Day Number = 2415505.5, Delta T = -0.32 sec  
Ecliptic obliquity = 23°27'02, Nutation = 0°00'13, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 23°21'44, Lahiri = 22°28'45

## ASTRODIENST EPHEMERIS for the year 1901

geocentric

JUNE 1901

00:00 UT

| Day  | Sid.t    | ☉        | ☽      | ♀      | ♂      | ♂      | ♂      | ♂      | ♂      | ♂      | ♂      | ♂      | ♂      | ♂     | ♂     | Day  |
|------|----------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|------|
| S 1  | 16 35 7  | 9II4731  | 24II 9 | 28II20 | 18II 3 | 8II 8  | 11°R35 | 15°R24 | 15°R 7 | 28II13 | 17II 0 | 22°R37 | 21II50 | 1II57 | 3°R57 | S 1  |
| S 2  | 16 39 4  | 10°44'59 | 6♂ 9   | 0♂ 2   | 19°17  | 8°35   | 11°30  | 15°21  | 15° 5  | 28°15  | 17° 1  | 22II36 | 21°47  | 2° 3  | 3°54  | S 2  |
| M 3  | 16 43 1  | 11°42'25 | 18°19  | 1°41   | 20°31  | 9° 2   | 11°24  | 15°18  | 15° 3  | 28°17  | 17° 2  | 22°35  | 21°44  | 2°10  | 3°50  | M 3  |
| T 4  | 16 46 57 | 12°39'50 | 0♂40   | 3°18   | 21°44  | 9°29   | 11°19  | 15°15  | 15° 0  | 28°19  | 17° 4  | 22°32  | 21°41  | 2°17  | 3°47  | T 4  |
| W 5  | 16 50 54 | 13°37'15 | 13°12  | 4°52   | 22°58  | 9°56   | 11°13  | 15°11  | 14°58  | 28°22  | 17° 5  | 22°30  | 21°37  | 2°23  | 3°43  | W 5  |
| T 6  | 16 54 50 | 14°34'38 | 25°58  | 6°22   | 24°11  | 10°23  | 11° 7  | 15° 8  | 14°55  | 28°24  | 17° 7  | 22°26  | 21°34  | 2°30  | 3°40  | T 6  |
| F 7  | 16 58 47 | 15°32'01 | 8♂58   | 7°50   | 25°25  | 10°51  | 11° 1  | 15° 4  | 14°53  | 28°26  | 17° 8  | 22°23  | 21°31  | 2°37  | 3°36  | F 7  |
| S 8  | 17 2 43  | 16°29'23 | 22°12  | 9°15   | 26°39  | 11°19  | 10°54  | 15° 1  | 14°50  | 28°28  | 17° 9  | 22°21  | 21°28  | 2°43  | 3°32  | S 8  |
| S 9  | 17 6 40  | 17°26'45 | 5♂42   | 10°38  | 27°52  | 11°47  | 10°48  | 14°57  | 14°48  | 28°30  | 17°11  | 22°19  | 21°25  | 2°50  | 3°29  | S 9  |
| M10  | 17 10 36 | 18°24'06 | 19°29  | 11°57  | 29° 6  | 12°16  | 10°41  | 14°54  | 14°45  | 28°33  | 17°12  | 22°D19 | 21°22  | 2°57  | 3°25  | M10  |
| T 11 | 17 14 33 | 19°21'27 | 3°Y31  | 13°13  | 0♂20   | 12°44  | 10°35  | 14°50  | 14°43  | 28°35  | 17°13  | 22°19  | 21°18  | 3° 3  | 3°21  | T 11 |
| W12  | 17 18 30 | 20°18'47 | 17°49  | 14°26  | 1°33   | 13°13  | 10°28  | 14°46  | 14°40  | 28°37  | 17°15  | 22°20  | 21°15  | 3°10  | 3°17  | W12  |
| T 13 | 17 22 26 | 21°16'07 | 2♂20   | 15°36  | 2°47   | 13°42  | 10°21  | 14°42  | 14°38  | 28°39  | 17°16  | 22°22  | 21°12  | 3°17  | 3°13  | T 13 |
| F 14 | 17 26 23 | 22°13'27 | 17° 0  | 16°42  | 4° 0   | 14°11  | 10°15  | 14°38  | 14°35  | 28°41  | 17°18  | 22°R23 | 21° 9  | 3°23  | 3°10  | F 14 |
| S 15 | 17 30 19 | 23°10'46 | 1II44  | 17°46  | 5°14   | 14°40  | 10° 8  | 14°34  | 14°33  | 28°44  | 17°19  | 22°22  | 21° 6  | 3°30  | 3° 6  | S 15 |
| S 16 | 17 34 16 | 24° 8'05 | 16°26  | 18°46  | 6°28   | 15°10  | 10° 1  | 14°30  | 14°31  | 28°46  | 17°20  | 22°21  | 21° 2  | 3°37  | 3° 2  | S 16 |
| M17  | 17 38 12 | 25° 5'23 | 0♂59   | 19°42  | 7°41   | 15°40  | 9°53   | 14°26  | 14°28  | 28°48  | 17°22  | 22°18  | 20°59  | 3°43  | 2°58  | M17  |
| T 18 | 17 42 9  | 26° 2'41 | 15°16  | 20°35  | 8°55   | 16°10  | 9°46   | 14°22  | 14°26  | 28°50  | 17°23  | 22°13  | 20°56  | 3°50  | 2°54  | T 18 |
| W19  | 17 46 6  | 26°59'58 | 29°12  | 21°25  | 10° 8  | 16°40  | 9°39   | 14°18  | 14°23  | 28°53  | 17°25  | 22° 8  | 20°53  | 3°57  | 2°50  | W19  |
| T 20 | 17 50 2  | 27°57'14 | 12♂45  | 22°11  | 11°22  | 17°10  | 9°32   | 14°14  | 14°21  | 28°55  | 17°26  | 22° 3  | 20°50  | 4° 3  | 2°46  | T 20 |
| F 21 | 17 53 59 | 28°54'30 | 25°53  | 22°52  | 12°35  | 17°41  | 9°24   | 14°10  | 14°19  | 28°57  | 17°27  | 21°58  | 20°47  | 4°10  | 2°43  | F 21 |
| S 22 | 17 57 55 | 29°51'44 | 8II38  | 23°30  | 13°49  | 18°11  | 9°17   | 14° 6  | 14°16  | 28°59  | 17°29  | 21°54  | 20°43  | 4°17  | 2°39  | S 22 |
| S 23 | 18 1 52  | 0♂48'59  | 21° 2  | 24° 4  | 15° 2  | 18°42  | 9° 9   | 14° 2  | 14°14  | 29° 1  | 17°30  | 21°52  | 20°40  | 4°23  | 2°35  | S 23 |
| M24  | 18 5 48  | 1°46'12  | 3♂10   | 24°34  | 16°16  | 19°13  | 9° 2   | 13°57  | 14°12  | 29° 4  | 17°31  | 21°D52 | 20°37  | 4°30  | 2°31  | M24  |
| T 25 | 18 9 45  | 2°43'25  | 15° 6  | 25° 0  | 17°29  | 19°44  | 8°54   | 13°53  | 14° 9  | 29° 6  | 17°33  | 21°52  | 20°34  | 4°36  | 2°27  | T 25 |
| W26  | 18 13 41 | 3°40'38  | 26°56  | 25°21  | 18°43  | 20°16  | 8°46   | 13°49  | 14° 7  | 29° 8  | 17°34  | 21°54  | 20°31  | 4°43  | 2°23  | W26  |
| T 27 | 18 17 38 | 4°37'50  | 8II44  | 25°37  | 19°56  | 20°47  | 8°39   | 13°44  | 14° 5  | 29°10  | 17°35  | 21°55  | 20°28  | 4°50  | 2°19  | T 27 |
| F 28 | 18 21 35 | 5°35'02  | 20°36  | 25°50  | 21°10  | 21°19  | 8°31   | 13°40  | 14° 3  | 29°13  | 17°37  | 21°R56 | 20°24  | 4°56  | 2°15  | F 28 |
| S 29 | 18 25 31 | 6°32'13  | 2♂35   | 25°57  | 22°23  | 21°51  | 8°23   | 13°36  | 14° 0  | 29°15  | 17°38  | 21°55  | 20°21  | 5° 3  | 2°11  | S 29 |
| S 30 | 18 29 28 | 7♂29'24  | 14♂45  | 26°R 0 | 23♂37  | 22II23 | 8♂16   | 13♂31  | 13♂58  | 29II17 | 17II39 | 21II53 | 20II18 | 5II10 | 2♂ 7  | S 30 |

| Day  | ☉     | ☾     |      | ♀     |      | ♀     |      | ♂    |      | ♂     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |      | ♂     |       | ♂     |       | ♂    |     |
|------|-------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|-------|-------|-------|------|-----|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat   | decl  | lat   | decl | lat |
| S 1  | 21n56 | 18s41 | 0n 8 | 25n35 | 2n 9 | 23n15 | 0n21 | 9n40 | 1n14 | 22s51 | 0n 6 | 22s 3 | 0n31 | 22s38 | 0s 1 | 22n17 | 1s 9 | 13n48 | 9s 3 | 18s26 | 18s14 | 13s48 | 16s39 | 6n45 |     |
| S 2  | 22 4  | 20 8  | 1 14 | 25 37 | 2 10 | 23 24 | 0 23 | 9 28 | 1 12 | 22 51 | 0 6  | 22 4  | 0 30 | 22 38 | 0 1  | 22 17 | 1 9  | 13 49 | 9 3  | 18 26 | 18 13 | 13 50 | 16 39 | 6 45 |     |
| M 3  | 22 12 | 20 39 | 2 17 | 25 36 | 2 9  | 23 32 | 0 25 | 9 17 | 1 11 | 22 52 | 0 6  | 22 4  | 0 30 | 22 38 | 0 1  | 22 17 | 1 9  | 13 49 | 9 3  | 18 25 | 18 12 | 13 51 | 16 38 | 6 45 |     |
| T 4  | 22 20 | 20 12 | 3 15 | 25 33 | 2 8  | 23 39 | 0 28 | 9 5  | 1 9  | 22 52 | 0 6  | 22 5  | 0 30 | 22 37 | 0 1  | 22 17 | 1 9  | 13 49 | 9 3  | 18 25 | 18 12 | 13 53 | 16 38 | 6 46 |     |
| W 5  | 22 27 | 18 45 | 4 4  | 25 28 | 2 7  | 23 46 | 0 30 | 8 54 | 1 8  | 22 53 | 0 6  | 22 5  | 0 30 | 22 37 | 0 1  | 22 17 | 1 9  | 13 49 | 9 3  | 18 24 | 18 11 | 13 54 | 16 38 | 6 46 |     |
| T 6  | 22 34 | 16 21 | 4 42 | 25 22 | 2 4  | 23 52 | 0 32 | 8 42 | 1 7  | 22 54 | 0 6  | 22 5  | 0 30 | 22 37 | 0 1  | 22 17 | 1 9  | 13 49 | 9 3  | 18 23 | 18 10 | 13 56 | 16 38 | 6 46 |     |
| F 7  | 22 40 | 13 6  | 5 6  | 25 14 | 2 1  | 23 57 | 0 35 | 8 30 | 1 5  | 22 54 | 0 5  | 22 6  | 0 30 | 22 37 | 0 1  | 22 18 | 1 9  | 13 50 | 9 2  | 18 22 | 18 9  | 13 57 | 16 38 | 6 47 |     |
| S 8  | 22 46 | 9 9   | 5 15 | 25 4  | 1 57 | 24 1  | 0 37 | 8 18 | 1 4  | 22 55 | 0 5  | 22 6  | 0 30 | 22 36 | 0 1  | 22 18 | 1 9  | 13 50 | 9 2  | 18 22 | 18 8  | 13 59 | 16 37 | 6 47 |     |
| S 9  | 22 51 | 4 40  | 5 6  | 24 53 | 1 52 | 24 5  | 0 39 | 8 6  | 1 2  | 22 56 | 0 5  | 22 7  | 0 30 | 22 36 | 0 1  | 22 18 | 1 9  | 13 50 | 9 2  | 18 21 | 18 7  | 14 0  | 16 37 | 6 47 |     |
| M10  | 22 57 | 0n 8  | 4 40 | 24 41 | 1 47 | 24 8  | 0 41 | 7 54 | 1 1  | 22 56 | 0 5  | 22 7  | 0 30 | 22 36 | 0 1  | 22 18 | 1 9  | 13 50 | 9 2  | 18 21 | 18 7  | 14 2  | 16 37 | 6 47 |     |
| T 11 | 23 1  | 5 2   | 3 57 | 24 28 | 1 41 | 24 11 | 0 44 | 7 42 | 1 0  | 22 57 | 0 5  | 22 8  | 0 30 | 22 36 | 0 1  | 22 18 | 1 9  | 13 50 | 9 2  | 18 21 | 18 6  | 14 3  | 16 37 | 6 48 |     |
| W12  | 23 6  | 9 45  | 2 59 | 24 13 | 1 34 | 24 12 | 0 46 | 7 30 | 0 59 | 22 57 | 0 5  | 22 8  | 0 30 | 22 35 | 0 1  | 22 18 | 1 9  | 13 50 | 9 2  | 18 22 | 18 5  | 14 5  | 16 37 | 6 48 |     |
| T 13 | 23 10 | 13 59 | 1 48 | 23 58 | 1 26 | 24 13 | 0 48 | 7 18 | 0 57 | 22 58 | 0 5  | 22 9  | 0 30 | 22 35 | 0 1  | 22 18 | 1 9  | 13 51 | 9 2  | 18 22 | 18 4  | 14 6  | 16 37 | 6 48 |     |
| F 14 | 23 13 | 17 24 | 0 29 | 23 41 | 1 18 | 24 13 | 0 50 | 7 5  | 0 56 | 22 59 | 0 4  | 22 9  | 0 30 | 22 35 | 0 1  | 22 18 | 1 9  | 13 51 | 9 2  | 18 22 | 18 3  | 14 8  | 16 36 | 6 48 |     |
| S 15 | 23 16 | 19 41 | 0s51 | 23 24 | 1 9  | 24 13 | 0 52 | 6 53 | 0 55 | 22 59 | 0 4  | 22 10 | 0 30 | 22 35 | 0 1  | 22 18 | 1 9  | 13 51 | 9 2  | 18 22 | 18 2  | 14 9  | 16 36 | 6 49 |     |
| S 16 | 23 19 | 20 38 | 2 8  | 23 7  | 0 59 | 24 12 | 0 54 | 6 40 | 0 53 | 23 0  | 0 4  | 22 10 | 0 30 | 22 34 | 0 1  | 22 18 | 1 9  | 13 51 | 9 2  | 18 22 | 18 2  | 14 11 | 16 36 | 6 49 |     |
| M17  | 23 22 | 20 11 | 3 16 | 22 48 | 0 49 | 24 10 | 0 56 | 6 27 | 0 52 | 23 1  | 0 4  | 22 11 | 0 30 | 22 34 | 0 1  | 22 18 | 1 9  | 13 51 | 9 2  | 18 21 | 18 1  | 14 12 | 16 36 | 6 49 |     |
| T 18 | 23 23 | 18 27 | 4 10 | 22 30 | 0 38 | 24 7  | 0 58 | 6 15 | 0 51 | 23 1  | 0 4  | 22 11 | 0 30 | 22 34 | 0 1  | 22 18 | 1 9  | 13 51 | 9 2  | 18 20 | 18 0  | 14 14 | 16 36 | 6 49 |     |
| W19  | 23 25 | 15 38 | 4 47 | 22 10 | 0 26 | 24 4  | 1 0  | 6 2  | 0 50 | 23 2  | 0 4  | 22 12 | 0 29 | 22 33 | 0 1  | 22 18 | 1 9  | 13 51 | 9 2  | 18 19 | 17 59 | 14 15 | 16 36 | 6 49 |     |
| T 20 | 23 26 | 12 4  | 5 8  | 21 51 | 0 14 | 23 59 | 1 2  | 5 49 | 0 48 | 23 3  | 0 4  | 22 12 | 0 29 | 22 33 | 0 1  | 22 18 | 1 9  | 13 52 | 9 2  | 18 17 | 17 58 | 14 17 | 16 36 | 6 50 |     |
| F 21 | 23 27 | 8 1   | 5 11 | 21 32 | 0 1  | 23 55 | 1 4  | 5 36 | 0 47 | 23 3  | 0 4  | 22 13 | 0 29 | 22 33 | 0 1  | 22 18 | 1 9  | 13 52 | 9 2  | 18 16 | 17 57 | 14 18 | 16 36 | 6 50 |     |
| S 22 | 23 27 | 3 43  | 4 59 | 21 12 | 0s12 | 23 49 | 1 5  | 5 23 | 0 46 | 23 4  | 0 3  | 22 13 | 0 29 | 22 33 | 0 1  | 22 18 | 1 9  | 13 52 | 9 2  | 18 15 | 17 57 | 14 20 | 16 36 | 6 50 |     |
| S 23 | 23 27 | 0s37  | 4 32 | 20 53 | 0 26 | 23 43 | 1 7  | 5 9  | 0 45 | 23 5  | 0 3  | 22 14 | 0 29 | 22 32 | 0 1  | 22 18 | 1 9  | 13 52 | 9 2  | 18 15 | 17 56 | 14 21 | 16 36 | 6 50 |     |
| M24  | 23 26 | 4 51  | 3 54 | 20 34 | 0 40 | 23 36 | 1 9  | 4 56 | 0 44 | 23 5  | 0 3  | 22 14 | 0 29 | 22 32 | 0 1  | 22 18 | 1 9  | 13 52 | 9 2  | 18 14 | 17 55 | 14 22 | 16 36 | 6 50 |     |
| T 25 | 23 25 | 8 49  | 3 7  | 20 15 | 0 55 | 23 28 | 1 11 | 4 43 | 0 42 | 23 6  | 0 3  | 22 15 | 0 29 | 22 32 | 0 1  | 22 18 | 1 9  | 13 52 | 9 2  | 18 15 | 17 54 | 14 24 | 16 36 | 6 50 |     |
| W26  | 23 24 | 12 26 | 2 12 | 19 56 | 1 10 | 23 20 | 1 12 | 4 30 | 0 41 | 23 7  | 0 3  | 22 15 | 0 29 | 22 32 | 0 1  | 22 18 | 1 9  | 13 52 | 9 2  | 18 15 | 17 53 | 14 25 | 16 36 | 6 50 |     |
| T 27 | 23 22 | 15 33 | 1 11 | 19 38 | 1 25 | 23 11 | 1 14 | 4 16 | 0 40 | 23 7  | 0 3  | 22 16 | 0 29 | 22 31 | 0 1  | 22 18 | 1 9  | 13 52 | 9 2  | 18 15 | 17 52 | 14 27 | 16 36 | 6 50 |     |
| F 28 | 23 20 | 18 2  | 0 7  | 19 20 | 1 41 | 23 1  | 1 15 | 4 3  | 0 39 | 23 8  | 0 3  | 22 16 | 0 29 | 22 31 | 0 1  | 22 18 | 1 9  | 13 52 | 9 2  | 18 16 | 17 51 | 14 28 | 16 36 | 6 50 |     |
| S 29 | 23 17 | 19 45 | 0n57 | 19 4  | 1 56 | 22 51 | 1 17 | 3 49 | 0 38 | 23 9  | 0 2  | 22 17 | 0 29 | 22 31 | 0 1  | 22 18 | 1 9  | 13 53 | 9 2  | 18 15 | 17 51 | 14 30 | 16 36 | 6 50 |     |
| S 30 | 23n14 | 20s35 | 2n 0 | 18n48 | 2s12 | 22n40 | 1n18 | 3n35 | 0n37 | 23s 9 | 0n 2 | 22s17 | 0n29 | 22s31 | 0s 1 | 22n18 | 1s 9 | 13n53 | 9s 2 | 18s15 | 17s50 | 14s31 | 16s36 | 6n50 |     |

# ASTRODIENST EPHEMERIS for the year 1901

## geocentric

JULY 1901

00:00 UT

| Day  | Sid.t    | ☉        | ☽     | ♂      | ♀     | ♂     | ♂     | ♂      | ♂      | ♂       | ♂       | ♂      | ♂      | ♂     | ♂     | Day  |
|------|----------|----------|-------|--------|-------|-------|-------|--------|--------|---------|---------|--------|--------|-------|-------|------|
| M 1  | 18 33 24 | 8°26'35  | 27°7  | 25°R58 | 24°50 | 22°55 | 8°R 8 | 13°R27 | 13°R56 | 29°II19 | 17°II41 | 21°R49 | 20°M15 | 5°M16 | 2°R 3 | M 1  |
| T 2  | 18 37 21 | 9°23'46  | 9°345 | 25°52  | 26° 3 | 23°27 | 8° 0  | 13°323 | 13°354 | 29°22   | 17°42   | 21°M42 | 20°12  | 5°23  | 2° 0  | T 2  |
| W 3  | 18 41 17 | 10°20'56 | 22°37 | 25°41  | 27°17 | 24° 0 | 7°53  | 13°18  | 13°52  | 29°24   | 17°43   | 21°34  | 20° 8  | 5°30  | 1°56  | W 3  |
| T 4  | 18 45 14 | 11°18'07 | 5°44  | 25°26  | 28°30 | 24°32 | 7°45  | 13°14  | 13°50  | 29°26   | 17°45   | 21°26  | 20° 5  | 5°36  | 1°52  | T 4  |
| F 5  | 18 49 10 | 12°15'17 | 19° 5 | 25° 6  | 29°44 | 25° 5 | 7°37  | 13° 9  | 13°48  | 29°28   | 17°46   | 21°18  | 20° 2  | 5°43  | 1°48  | F 5  |
| S 6  | 18 53 7  | 13°12'28 | 2°38  | 24°43  | 0°57  | 25°38 | 7°30  | 13° 5  | 13°45  | 29°30   | 17°47   | 21°11  | 19°59  | 5°50  | 1°44  | S 6  |
| S 7  | 18 57 4  | 14° 9'39 | 16°21 | 24°15  | 2°10  | 26°11 | 7°22  | 13° 1  | 13°43  | 29°32   | 17°49   | 21° 6  | 19°56  | 5°56  | 1°40  | S 7  |
| M 8  | 19 1 0   | 15° 6'51 | 0°14  | 23°45  | 3°24  | 26°44 | 7°15  | 12°56  | 13°41  | 29°35   | 17°50   | 21° 3  | 19°53  | 6° 3  | 1°37  | M 8  |
| T 9  | 19 4 57  | 16° 4'03 | 14°15 | 23°12  | 4°37  | 27°17 | 7° 7  | 12°52  | 13°39  | 29°37   | 17°51   | 21°D 2 | 19°49  | 6°10  | 1°33  | T 9  |
| W10  | 19 8 53  | 17° 1'15 | 28°23 | 22°36  | 5°50  | 27°51 | 6°59  | 12°47  | 13°38  | 29°39   | 17°52   | 21° 2  | 19°46  | 6°16  | 1°29  | W10  |
| T 11 | 19 12 50 | 17°58'28 | 12°37 | 21°59  | 7° 4  | 28°24 | 6°52  | 12°43  | 13°36  | 29°41   | 17°54   | 21° 3  | 19°43  | 6°23  | 1°26  | T 11 |
| F 12 | 19 16 46 | 18°55'42 | 26°55 | 21°20  | 8°17  | 28°58 | 6°45  | 12°39  | 13°34  | 29°43   | 17°55   | 21°R 3 | 19°40  | 6°30  | 1°22  | F 12 |
| S 13 | 19 20 43 | 19°52'56 | 11°15 | 20°41  | 9°30  | 29°32 | 6°37  | 12°34  | 13°32  | 29°45   | 17°56   | 21° 2  | 19°37  | 6°36  | 1°18  | S 13 |
| S 14 | 19 24 39 | 20°50'10 | 25°33 | 20° 2  | 10°44 | 0° 6  | 6°30  | 12°30  | 13°30  | 29°48   | 17°57   | 20°58  | 19°34  | 6°43  | 1°15  | S 14 |
| M15  | 19 28 36 | 21°47'26 | 9°44  | 19°24  | 11°57 | 0°40  | 6°23  | 12°25  | 13°28  | 29°50   | 17°58   | 20°51  | 19°30  | 6°49  | 1°11  | M15  |
| T 16 | 19 32 33 | 22°44'41 | 23°44 | 18°47  | 13°10 | 1°14  | 6°16  | 12°21  | 13°27  | 29°52   | 18° 0   | 20°43  | 19°27  | 6°56  | 1° 8  | T 16 |
| W17  | 19 36 29 | 23°41'57 | 7°28  | 18°12  | 14°23 | 1°48  | 6° 9  | 12°17  | 13°25  | 29°54   | 18° 1   | 20°33  | 19°24  | 7° 3  | 1° 4  | W17  |
| T 18 | 19 40 26 | 24°39'13 | 20°52 | 17°41  | 15°37 | 2°23  | 6° 2  | 12°13  | 13°23  | 29°56   | 18° 2   | 20°22  | 19°21  | 7° 9  | 1° 1  | T 18 |
| F 19 | 19 44 22 | 25°36'29 | 3°56  | 17°12  | 16°50 | 2°58  | 5°55  | 12° 8  | 13°22  | 29°58   | 18° 3   | 20°12  | 19°18  | 7°16  | 0°57  | F 19 |
| S 20 | 19 48 19 | 26°33'46 | 16°38 | 16°48  | 18° 3 | 3°32  | 5°48  | 12° 4  | 13°20  | 0° 0    | 18° 4   | 20° 4  | 19°14  | 7°23  | 0°54  | S 20 |
| S 21 | 19 52 15 | 27°31'03 | 29° 2 | 16°27  | 19°16 | 4° 7  | 5°41  | 12° 0  | 13°19  | 0° 2    | 18° 5   | 19°59  | 19°11  | 7°29  | 0°51  | S 21 |
| M22  | 19 56 12 | 28°28'20 | 11° 9 | 16°12  | 20°30 | 4°42  | 5°35  | 11°56  | 13°17  | 0° 4    | 18° 6   | 19°55  | 19° 8  | 7°36  | 0°48  | M22  |
| T 23 | 20 0 8   | 29°25'38 | 23° 5 | 16° 2  | 21°43 | 5°17  | 5°28  | 11°52  | 13°16  | 0° 6    | 18° 8   | 19°54  | 19° 5  | 7°43  | 0°44  | T 23 |
| W24  | 20 4 5   | 0°22'56  | 4°M55 | 15°D57 | 22°56 | 5°52  | 5°22  | 11°48  | 13°14  | 0° 8    | 18° 9   | 19°D53 | 19° 2  | 7°49  | 0°41  | W24  |
| T 25 | 20 8 2   | 1°20'14  | 16°44 | 15°58  | 24° 9 | 6°28  | 5°16  | 11°44  | 13°13  | 0°10    | 18°10   | 19°R54 | 18°59  | 7°56  | 0°38  | T 25 |
| F 26 | 20 11 58 | 2°17'33  | 28°38 | 16° 5  | 25°22 | 7° 3  | 5° 9  | 11°40  | 13°11  | 0°12    | 18°11   | 19°54  | 18°55  | 8° 3  | 0°35  | F 26 |
| S 27 | 20 15 55 | 3°14'52  | 10°40 | 16°18  | 26°35 | 7°39  | 5° 3  | 11°36  | 13°10  | 0°14    | 18°12   | 19°52  | 18°52  | 8° 9  | 0°32  | S 27 |
| S 28 | 20 19 51 | 4°12'12  | 22°57 | 16°36  | 27°48 | 8°15  | 4°58  | 11°32  | 13° 9  | 0°16    | 18°13   | 19°48  | 18°49  | 8°16  | 0°29  | S 28 |
| M29  | 20 23 48 | 5° 9'33  | 5°30  | 17° 1  | 29° 2 | 8°50  | 4°52  | 11°28  | 13° 8  | 0°18    | 18°14   | 19°41  | 18°46  | 8°23  | 0°27  | M29  |
| T 30 | 20 27 44 | 6° 6'54  | 18°23 | 17°33  | 0°15  | 9°26  | 4°46  | 11°24  | 13° 7  | 0°20    | 18°15   | 19°32  | 18°43  | 8°29  | 0°24  | T 30 |
| W31  | 20 31 41 | 7°2'41   | 1°35  | 18°10  | 1°28  | 10° 2 | 4°31  | 11°20  | 13° 5  | 0°22    | 18°16   | 19°M21 | 18°M40 | 8°M36 | 0°21  | W31  |

| Day  | ☉     | ☽     | ♂    | ♀     | ♂    | ♂     | ♂    | ♂    | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | Day  |
|------|-------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|-------|------|-------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  |
| M 1  | 23n11 | 20s27 | 2n59 | 18n32 | 2s28 | 22n28 | 1n20 | 3n22 | 0n36 | 23s10 | 0n 2 | 22s18 | 0n29 | 22s30 | 0s 1 | 22n18 | 1s 9 |
| T 2  | 23 7  | 19 17 | 3 49 | 18 18 | 2 44 | 22 16 | 1 21 | 3 8  | 0 35 | 23 10 | 0 2  | 22 18 | 0 28 | 22 30 | 0 1  | 22 18 | 1 9  |
| W 3  | 23 3  | 17 8  | 4 29 | 18 5  | 2 59 | 22 3  | 1 22 | 2 54 | 0 33 | 23 11 | 0 2  | 22 19 | 0 28 | 22 30 | 0 1  | 22 18 | 1 9  |
| T 4  | 22 58 | 14 4  | 4 56 | 17 53 | 3 14 | 21 50 | 1 23 | 2 40 | 0 32 | 23 12 | 0 2  | 22 19 | 0 28 | 22 30 | 0 1  | 22 18 | 1 9  |
| F 5  | 22 53 | 10 15 | 5 7  | 17 42 | 3 28 | 21 36 | 1 24 | 2 26 | 0 31 | 23 12 | 0 2  | 22 20 | 0 28 | 22 29 | 0 1  | 22 18 | 1 9  |
| S 6  | 22 48 | 5 52  | 5 1  | 17 33 | 3 42 | 21 21 | 1 25 | 2 12 | 0 30 | 23 13 | 0 1  | 22 20 | 0 28 | 22 29 | 0 1  | 22 18 | 1 9  |
| S 7  | 22 42 | 1 7   | 4 38 | 17 25 | 3 55 | 21 5  | 1 26 | 1 58 | 0 29 | 23 13 | 0 1  | 22 21 | 0 28 | 22 29 | 0 1  | 22 18 | 1 9  |
| M 8  | 22 36 | 3n44  | 3 58 | 17 18 | 4 7  | 20 49 | 1 27 | 1 44 | 0 28 | 23 14 | 0 1  | 22 21 | 0 28 | 22 29 | 0 1  | 22 18 | 1 9  |
| T 9  | 22 29 | 8 27  | 3 4  | 17 13 | 4 18 | 20 33 | 1 28 | 1 30 | 0 27 | 23 15 | 0 1  | 22 22 | 0 28 | 22 28 | 0 1  | 22 18 | 1 9  |
| W10  | 22 22 | 12 45 | 1 59 | 17 9  | 4 28 | 20 16 | 1 29 | 1 15 | 0 26 | 23 15 | 0 1  | 22 22 | 0 28 | 22 28 | 0 1  | 22 18 | 1 9  |
| T 11 | 22 15 | 16 21 | 0 45 | 17 6  | 4 37 | 19 58 | 1 30 | 1 1  | 0 25 | 23 16 | 0 1  | 22 23 | 0 28 | 22 28 | 0 1  | 22 18 | 1 9  |
| F 12 | 22 7  | 18 58 | 0s31 | 17 5  | 4 44 | 19 40 | 1 31 | 0 47 | 0 24 | 23 16 | 0 1  | 22 23 | 0 28 | 22 28 | 0 1  | 22 18 | 1 9  |
| S 13 | 21 59 | 20 23 | 1 46 | 17 6  | 4 49 | 19 21 | 1 31 | 0 32 | 0 23 | 23 17 | 0 0  | 22 24 | 0 28 | 22 28 | 0 1  | 22 18 | 1 9  |
| S 14 | 21 50 | 20 29 | 2 54 | 17 8  | 4 53 | 19 1  | 1 32 | 0 18 | 0 22 | 23 17 | 0 0  | 22 24 | 0 27 | 22 27 | 0 2  | 22 18 | 1 9  |
| M15  | 21 41 | 19 16 | 3 50 | 17 11 | 4 55 | 18 42 | 1 32 | 0 3  | 0 21 | 23 18 | 0 0  | 22 25 | 0 27 | 22 27 | 0 2  | 22 18 | 1 9  |
| T 16 | 21 32 | 16 55 | 4 31 | 17 15 | 4 54 | 18 21 | 1 33 | 0s11 | 0 20 | 23 18 | 0 0  | 22 25 | 0 27 | 22 27 | 0 2  | 22 18 | 1 9  |
| W17  | 21 22 | 13 38 | 4 56 | 17 21 | 4 55 | 18 0  | 1 33 | 0 26 | 0 19 | 23 19 | 0s 0 | 22 26 | 0 27 | 22 27 | 0 2  | 22 18 | 1 9  |
| T 18 | 21 12 | 9 45  | 5 4  | 17 28 | 4 51 | 17 39 | 1 33 | 0 40 | 0 18 | 23 19 | 0 0  | 22 26 | 0 27 | 22 27 | 0 2  | 22 18 | 1 9  |
| F 19 | 21 2  | 5 29  | 4 55 | 17 36 | 4 47 | 17 17 | 1 34 | 0 55 | 0 17 | 23 19 | 0 0  | 22 27 | 0 27 | 22 26 | 0 2  | 22 18 | 1 9  |
| S 20 | 20 51 | 1 6   | 4 32 | 17 45 | 4 41 | 16 55 | 1 34 | 1 10 | 0 16 | 23 20 | 0 1  | 22 27 | 0 27 | 22 26 | 0 2  | 22 18 | 1 9  |
| S 21 | 20 40 | 3s14  | 3 57 | 17 55 | 4 33 | 16 32 | 1 34 | 1 25 | 0 15 | 23 20 | 0 1  | 22 28 | 0 27 | 22 26 | 0 2  | 22 18 | 1 9  |
| M22  | 20 29 | 7 21  | 3 11 | 18 5  | 4 25 | 16 9  | 1 34 | 1 39 | 0 14 | 23 21 | 0 1  | 22 28 | 0 27 | 22 26 | 0 2  | 22 18 | 1 9  |
| T 23 | 20 17 | 11 7  | 2 18 | 18 16 | 4 15 | 15 45 | 1 34 | 1 54 | 0 13 | 23 21 | 0 1  | 22 29 | 0 27 | 22 26 | 0 2  | 22 18 | 1 9  |
| W24  | 20 5  | 14 24 | 1 19 | 18 28 | 4 3  | 15 21 | 1 34 | 2 9  | 0 12 | 23 22 | 0 1  | 22 29 | 0 26 | 22 25 | 0 2  | 22 18 | 1 9  |
| T 25 | 19 52 | 17 7  | 0 17 | 18 40 | 3 51 | 14 57 | 1 33 | 2 24 | 0 11 | 23 22 | 0 1  | 22 30 | 0 26 | 22 25 | 0 2  | 22 18 | 1 9  |
| F 26 | 19 39 | 19 7  | 0n46 | 18 52 | 3 39 | 14 32 | 1 33 | 2 39 | 0 10 | 23 22 | 0 1  | 22 30 | 0 26 | 22 25 | 0 2  | 22 18 | 1 9  |
| S 27 | 19 26 | 20 16 | 1 48 | 19 4  | 3 25 | 14 7  | 1 33 | 2 54 | 0 9  | 23 23 | 0 1  | 22 31 | 0 26 | 22 25 | 0 2  | 22 18 | 1 9  |
| S 28 | 19 13 | 20 30 | 2 46 | 19 16 | 3 11 | 13 41 | 1 32 | 3 8  | 0 8  | 23 23 | 0 2  | 22 31 | 0 26 | 22 25 | 0 2  | 22 18 | 1 9  |
| M29  | 18 59 | 19 43 | 3 37 | 19 27 | 2 56 | 13 15 | 1 32 | 3 23 | 0 8  | 23 23 | 0 2  | 22 32 | 0 26 | 22 25 | 0 2  | 22 18 | 1 9  |
| T 30 | 18 45 | 17 55 | 4 18 | 19 39 | 2 41 | 12 49 | 1 31 | 3 38 | 0 7  | 23 24 | 0 2  | 22 32 | 0 26 | 22 25 | 0 2  | 22 18 | 1 9  |
| W31  | 18n31 | 15s 9 | 4n47 | 19n49 | 2s25 | 12n22 | 1n31 | 3s53 | 0n 6 | 23s24 | 0s 2 | 22s32 | 0n26 | 22s24 | 0s 2 | 22n18 | 1s 9 |

Julian Day Number = 2415566.5, Delta T = -0.10 sec

Ecliptic obliquity = 23°27'01, Nutation = 0°00'14, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 23°21'53, Lahiri = 22°28'53



ASTRODIENST EPHEMERIS for the year 1901  
geocentric

AUGUST 1901

00:00 UT

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

| Day  | ☉           | ☽          | ♂          | ♀          | ♂          | ♂          | ♂          | ♂          | ♂          | ♂          | ♂           | ♂           | ♂        | ♂        | ♂        | ♂        |
|------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|----------|----------|----------|----------|
|      | decl        | decl lat   | decl lat   | decl lat   | decl lat   | decl lat   | decl lat   | decl lat   | decl lat   | decl lat   | decl lat    | decl lat    | decl lat | decl lat | decl lat | decl lat |
| T 1  | 18n16       | 11s32 5n 0 | 19n59 2s10 | 11n55 1n30 | 4s 8 0n 5  | 23s24 0s 2 | 22s33 0n26 | 22s24 0s 2 | 22n18 1s 9 | 13n54 9s 4 | 17s31 17s22 | 15s15 16s42 | 6n45     |          |          |          |
| F 2  | 18 1 7 14   | 4 57 20 7  | 1 54 11 28 | 1 29 4 23  | 0 4 23 25  | 0 2 22 33  | 0 25 22 24 | 0 2 22 18  | 1 9 13 54  | 9 4 17 28  | 17 21 15 16 | 16 42 6 45  |          |          |          |          |
| S 3  | 17 46 2 31  | 4 35 20 15 | 1 38 11 1  | 1 28 4 38  | 0 3 23 25  | 0 2 22 34  | 0 25 22 24 | 0 2 22 18  | 1 9 13 54  | 9 5 17 25  | 17 20 15 18 | 16 42 6 45  |          |          |          |          |
| S 4  | 17 30 2n24  | 3 57 20 21 | 1 23 10 33 | 1 27 4 53  | 0 2 23 25  | 0 3 22 34  | 0 25 22 24 | 0 2 22 18  | 1 9 13 54  | 9 5 17 23  | 17 20 15 19 | 16 42 6 45  |          |          |          |          |
| M 5  | 17 15 7 12  | 3 4 20 25  | 1 7 10 5   | 1 26 5 8   | 0 1 23 26  | 0 3 22 34  | 0 25 22 24 | 0 2 22 18  | 1 9 13 53  | 9 5 17 22  | 17 19 15 20 | 16 43 6 44  |          |          |          |          |
| T 6  | 16 58 11 37 | 2 0 20 28  | 0 52 9 36  | 1 25 5 24  | 0 0 23 26  | 0 3 22 35  | 0 25 22 24 | 0 2 22 18  | 1 9 13 53  | 9 5 17 21  | 17 18 15 22 | 16 43 6 44  |          |          |          |          |
| W 7  | 16 42 15 23 | 0 48 20 29 | 0 37 9 8   | 1 24 5 39  | 0s 0 23 26 | 0 3 22 35  | 0 25 22 24 | 0 2 22 18  | 1 9 13 53  | 9 5 17 21  | 17 17 15 23 | 16 44 6 43  |          |          |          |          |
| T 8  | 16 25 18 14 | 0s26 20 27 | 0 23 8 39  | 1 23 5 54  | 0 1 23 26  | 0 3 22 36  | 0 25 22 24 | 0 2 22 18  | 1 9 13 53  | 9 5 17 21  | 17 16 15 24 | 16 44 6 43  |          |          |          |          |
| F 9  | 16 8 19 57  | 1 39 20 23 | 0 9 8 10   | 1 21 6 9   | 0 2 23 27  | 0 3 22 36  | 0 25 22 24 | 0 2 22 18  | 1 9 13 53  | 9 5 17 21  | 17 15 15 25 | 16 44 6 43  |          |          |          |          |
| S 10 | 15 51 20 26 | 2 45 20 17 | 0n 4 7 41  | 1 20 6 24  | 0 3 23 27  | 0 3 22 36  | 0 25 22 23 | 0 2 22 18  | 1 9 13 53  | 9 5 17 20  | 17 14 15 27 | 16 45 6 42  |          |          |          |          |
| S 11 | 15 34 19 40 | 3 41 20 9  | 0 16 7 11  | 1 19 6 39  | 0 4 23 27  | 0 3 22 37  | 0 25 22 23 | 0 2 22 18  | 1 9 13 53  | 9 6 17 19  | 17 13 15 28 | 16 45 6 42  |          |          |          |          |
| M 12 | 15 16 17 44 | 4 23 19 58 | 0 28 6 41  | 1 17 6 54  | 0 4 23 27  | 0 4 22 37  | 0 24 22 23 | 0 2 22 18  | 1 9 13 53  | 9 6 17 16  | 17 13 15 29 | 16 45 6 42  |          |          |          |          |
| T 13 | 14 58 14 50 | 4 50 19 44 | 0 39 6 12  | 1 15 7 9   | 0 5 23 28  | 0 4 22 37  | 0 24 22 23 | 0 2 22 18  | 1 9 13 53  | 9 6 17 13  | 17 12 15 31 | 16 46 6 41  |          |          |          |          |
| W 14 | 14 40 11 13 | 5 0 19 27  | 0 50 5 42  | 1 14 7 24  | 0 6 23 28  | 0 4 22 38  | 0 24 22 23 | 0 2 22 18  | 1 9 13 53  | 9 6 17 10  | 17 11 15 32 | 16 46 6 41  |          |          |          |          |
| T 15 | 14 22 7 7   | 4 54 19 8  | 0 59 5 11  | 1 12 7 39  | 0 7 23 28  | 0 4 22 38  | 0 24 22 23 | 0 2 22 18  | 1 9 13 53  | 9 6 17 7   | 17 10 15 33 | 16 47 6 40  |          |          |          |          |
| F 16 | 14 3 2 47   | 4 34 18 46 | 1 8 4 41   | 1 10 7 54  | 0 8 23 28  | 0 4 22 38  | 0 24 22 23 | 0 2 22 18  | 1 9 13 53  | 9 6 17 3   | 17 9 15 34  | 16 47 6 40  |          |          |          |          |
| S 17 | 13 44 1s34  | 4 0 18 21  | 1 16 4 11  | 1 8 8 9    | 0 9 23 28  | 0 4 22 39  | 0 24 22 23 | 0 2 22 18  | 1 9 13 53  | 9 6 17 0   | 17 8 15 36  | 16 47 6 40  |          |          |          |          |
| S 18 | 13 25 5 46  | 3 15 17 54 | 1 22 3 40  | 1 6 8 24   | 0 9 23 29  | 0 4 22 39  | 0 24 22 23 | 0 2 22 18  | 1 9 13 53  | 9 6 16 58  | 17 7 15 37  | 16 48 6 39  |          |          |          |          |
| M 19 | 13 6 9 41   | 2 22 17 25 | 1 28 3 10  | 1 4 8 39   | 0 10 23 29 | 0 4 22 39  | 0 24 22 23 | 0 2 22 18  | 1 9 13 53  | 9 7 16 57  | 17 6 15 38  | 16 48 6 39  |          |          |          |          |
| T 20 | 12 46 13 8  | 1 24 16 53 | 1 33 2 39  | 1 2 8 54   | 0 11 23 29 | 0 5 22 40  | 0 23 22 23 | 0 2 22 18  | 1 9 13 53  | 9 7 16 56  | 17 5 15 39  | 16 49 6 38  |          |          |          |          |
| W 21 | 12 26 16 3  | 0 22 16 19 | 1 37 2 8   | 1 0 9 9    | 0 12 23 29 | 0 5 22 40  | 0 23 22 23 | 0 2 22 18  | 1 9 13 52  | 9 7 16 55  | 17 4 15 41  | 16 49 6 38  |          |          |          |          |
| T 22 | 12 7 18 17  | 0n40 15 44 | 1 41 1 37  | 0 58 9 24  | 0 13 23 29 | 0 5 22 40  | 0 23 22 23 | 0 2 22 17  | 1 9 13 52  | 9 7 16 56  | 17 4 15 42  | 16 49 6 37  |          |          |          |          |
| F 23 | 11 46 19 44 | 1 42 15 6  | 1 43 1 6   | 0 56 9 39  | 0 13 23 29 | 0 5 22 40  | 0 23 22 23 | 0 2 22 17  | 1 9 13 52  | 9 7 16 55  | 17 3 15 43  | 16 50 6 37  |          |          |          |          |
| S 24 | 11 26 20 19 | 2 39 14 27 | 1 45 0 35  | 0 54 9 53  | 0 14 23 30 | 0 5 22 41  | 0 23 22 23 | 0 2 22 17  | 1 9 13 52  | 9 7 16 55  | 17 2 15 44  | 16 50 6 37  |          |          |          |          |
| S 25 | 11 6 19 56  | 3 31 13 47 | 1 46 0 4   | 0 51 10 8  | 0 15 23 30 | 0 5 22 41  | 0 23 22 23 | 0 2 22 17  | 1 9 13 52  | 9 7 16 54  | 17 1 15 45  | 16 51 6 36  |          |          |          |          |
| M 26 | 10 45 18 34 | 4 13 13 5  | 1 46 0s27  | 0 49 10 23 | 0 16 23 30 | 0 5 22 41  | 0 23 22 23 | 0 2 22 17  | 1 9 13 52  | 9 8 16 52  | 17 0 15 47  | 16 51 6 36  |          |          |          |          |
| T 27 | 10 24 16 12 | 4 44 12 22 | 1 46 0 58  | 0 46 10 38 | 0 16 23 30 | 0 5 22 41  | 0 23 22 23 | 0 2 22 17  | 1 9 13 52  | 9 8 16 50  | 16 59 15 48 | 16 52 6 35  |          |          |          |          |
| W 28 | 10 3 12 56  | 5 0 11 39  | 1 45 1 29  | 0 44 10 52 | 0 17 23 30 | 0 5 22 42  | 0 23 22 23 | 0 2 22 17  | 1 9 13 52  | 9 8 16 47  | 16 58 15 49 | 16 52 6 35  |          |          |          |          |
| T 29 | 9 42 8 52   | 5 0 10 54  | 1 43 2 0   | 0 41 11 7  | 0 18 23 30 | 0 6 22 42  | 0 22 22 23 | 0 2 22 17  | 1 10 13 52 | 9 8 16 44  | 16 57 15 50 | 16 53 6 34  |          |          |          |          |
| F 30 | 9 21 4 15   | 4 41 10 9  | 1 41 2 31  | 0 38 11 22 | 0 19 23 30 | 0 6 22 42  | 0 22 22 23 | 0 2 22 17  | 1 10 13 51 | 9 8 16 41  | 16 56 15 52 | 16 53 6 34  |          |          |          |          |
| S 31 | 9n 0 0n41   | 4n 4 9n23  | 1n38 3s 2  | 0n36 11s36 | 0s19 23s30 | 0s 6 22s42 | 0n22 22s23 | 0s 2 22n17 | 1s10 13n51 | 9s 8 16s38 | 16s56 15s53 | 16s54 6n33  |          |          |          |          |

Julian Day Number = 2415597.5, Delta T = 0.02 sec  
Ecliptic obliquity = 23°27'01, Nutation = 0°00'14, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 23°21'57, Lahiri = 22°28'57



ASTRODIENST EPHEMERIS for the year 1901  
geocentric

OCTOBER 1901

00:00 UT

| Day  | Sid.t   | ☉        | ☽     | ♀      | ♂     | ♂     | ♂    | ♂     | ♂     | ♂     | ♂      | ♂      | ♂     | ♂     | ♂    | Day  |
|------|---------|----------|-------|--------|-------|-------|------|-------|-------|-------|--------|--------|-------|-------|------|------|
| T 1  | 0 36 7  | 7♂ 6'29  | 15♂38 | 29♂45  | 16♂ 5 | 20♂27 | 4♂43 | 10♂ 0 | 13♂32 | 1♂29  | 18°R40 | 14°D 0 | 15♂23 | 15♂28 | 0♂ 2 | T 1  |
| W 2  | 0 40 4  | 8° 5'30  | 0♂20  | 1♂ 4   | 17°16 | 21° 9 | 4°49 | 10° 2 | 13°34 | 1°29  | 18♂40  | 14♂ 1  | 15°19 | 15°34 | 0° 5 | W 2  |
| T 3  | 0 44 0  | 9° 4'34  | 14°46 | 2°22   | 18°27 | 21°51 | 4°55 | 10° 4 | 13°36 | 1°29  | 18°40  | 14° 2  | 15°16 | 15°41 | 0° 7 | T 3  |
| F 4  | 0 47 57 | 10° 3'40 | 28°54 | 3°39   | 19°38 | 22°33 | 5° 1 | 10° 6 | 13°38 | 1°30  | 18°39  | 14° 4  | 15°13 | 15°48 | 0° 9 | F 4  |
| S 5  | 0 51 53 | 11° 2'48 | 12♂42 | 4°54   | 20°49 | 23°15 | 5° 7 | 10° 8 | 13°40 | 1°R30 | 18°39  | 14°R 4 | 15°10 | 15°54 | 0°12 | S 5  |
| S 6  | 0 55 50 | 12° 1'59 | 26°12 | 6° 7   | 22° 0 | 23°57 | 5°13 | 10°10 | 13°42 | 1°30  | 18°39  | 14° 3  | 15° 7 | 16° 1 | 0°15 | S 6  |
| M 7  | 0 59 47 | 13° 1'12 | 9♂23  | 7°20   | 23°11 | 24°39 | 5°20 | 10°12 | 13°45 | 1°30  | 18°38  | 14° 1  | 15° 3 | 16° 8 | 0°17 | M 7  |
| T 8  | 1 3 43  | 14° 0'27 | 22°19 | 8°30   | 24°21 | 25°21 | 5°26 | 10°14 | 13°47 | 1°29  | 18°38  | 13°57  | 15° 0 | 16°14 | 0°20 | T 8  |
| W 9  | 1 7 40  | 14°59'44 | 5♂ 1  | 9°39   | 25°32 | 26° 4 | 5°33 | 10°16 | 13°49 | 1°29  | 18°37  | 13°53  | 14°57 | 16°21 | 0°23 | W 9  |
| T 10 | 1 11 36 | 15°59'04 | 17°30 | 10°45  | 26°43 | 26°46 | 5°40 | 10°19 | 13°51 | 1°29  | 18°37  | 13°48  | 14°54 | 16°28 | 0°26 | T 10 |
| F 11 | 1 15 33 | 16°58'25 | 29°47 | 11°49  | 27°53 | 27°29 | 5°47 | 10°21 | 13°54 | 1°29  | 18°37  | 13°43  | 14°51 | 16°34 | 0°29 | F 11 |
| S 12 | 1 19 29 | 17°57'49 | 11♂54 | 12°52  | 29° 4 | 28°12 | 5°54 | 10°24 | 13°56 | 1°29  | 18°36  | 13°39  | 14°48 | 16°41 | 0°32 | S 12 |
| S 13 | 1 23 26 | 18°57'15 | 23°54 | 13°51  | 0♂14  | 28°54 | 6° 2 | 10°27 | 13°59 | 1°29  | 18°36  | 13°37  | 14°44 | 16°48 | 0°35 | S 13 |
| M14  | 1 27 22 | 19°56'43 | 5♂46  | 14°48  | 1°24  | 29°37 | 6° 9 | 10°29 | 14° 1 | 1°28  | 18°35  | 13°35  | 14°41 | 16°54 | 0°38 | M14  |
| T 15 | 1 31 19 | 20°56'13 | 17°34 | 15°41  | 2°35  | 0♂20  | 6°17 | 10°32 | 14° 4 | 1°28  | 18°35  | 13°D35 | 14°38 | 17° 1 | 0°41 | T 15 |
| W16  | 1 35 15 | 21°55'45 | 29°20 | 16°32  | 3°45  | 1° 3  | 6°25 | 10°35 | 14° 6 | 1°28  | 18°34  | 13°36  | 14°35 | 17° 7 | 0°45 | W16  |
| T 17 | 1 39 12 | 22°55'19 | 11♂ 7 | 17°18  | 4°55  | 1°46  | 6°33 | 10°38 | 14° 9 | 1°27  | 18°33  | 13°37  | 14°32 | 17°14 | 0°48 | T 17 |
| F 18 | 1 43 9  | 23°54'55 | 23° 0 | 18° 1  | 6° 5  | 2°29  | 6°41 | 10°41 | 14°11 | 1°27  | 18°33  | 13°39  | 14°28 | 17°21 | 0°52 | F 18 |
| S 19 | 1 47 5  | 24°54'33 | 5♂ 1  | 18°39  | 7°15  | 3°12  | 6°49 | 10°45 | 14°14 | 1°26  | 18°32  | 13°40  | 14°25 | 17°27 | 0°55 | S 19 |
| S 20 | 1 51 2  | 25°54'12 | 17°17 | 19°12  | 8°25  | 3°56  | 6°57 | 10°48 | 14°17 | 1°26  | 18°32  | 13°41  | 14°22 | 17°34 | 0°59 | S 20 |
| M21  | 1 54 58 | 26°53'53 | 29°51 | 19°39  | 9°35  | 4°39  | 7° 6 | 10°51 | 14°19 | 1°25  | 18°31  | 13°R41 | 14°19 | 17°41 | 1° 3 | M21  |
| T 22 | 1 58 55 | 27°53'36 | 12♂47 | 20° 1  | 10°44 | 5°22  | 7°15 | 10°55 | 14°22 | 1°25  | 18°30  | 13°41  | 14°16 | 17°47 | 1° 7 | T 22 |
| W23  | 2 2 51  | 28°53'20 | 26° 9 | 20°15  | 11°54 | 6° 6  | 7°23 | 10°58 | 14°25 | 1°24  | 18°30  | 13°40  | 14°13 | 17°54 | 1°10 | W23  |
| T 24 | 2 6 48  | 29°53'06 | 9♂59  | 20°23  | 13° 3 | 6°49  | 7°32 | 11° 2 | 14°28 | 1°24  | 18°29  | 13°38  | 14° 9 | 18° 1 | 1°14 | T 24 |
| F 25 | 2 10 44 | 0♂52'54  | 24°16 | 20°R23 | 14°13 | 7°33  | 7°41 | 11° 6 | 14°31 | 1°23  | 18°28  | 13°36  | 14° 6 | 18° 7 | 1°18 | F 25 |
| S 26 | 2 14 41 | 1°52'43  | 8♂58  | 20°15  | 15°22 | 8°16  | 7°50 | 11°10 | 14°34 | 1°22  | 18°27  | 13°35  | 14° 3 | 18°14 | 1°22 | S 26 |
| S 27 | 2 18 38 | 2°52'35  | 23°58 | 19°58  | 16°31 | 9° 0  | 8° 0 | 11°13 | 14°37 | 1°22  | 18°27  | 13°34  | 14° 0 | 18°21 | 1°26 | S 27 |
| M28  | 2 22 34 | 3°52'28  | 9♂ 8  | 19°32  | 17°40 | 9°44  | 8° 9 | 11°17 | 14°40 | 1°21  | 18°26  | 13°D33 | 13°57 | 18°27 | 1°31 | M28  |
| T 29 | 2 26 31 | 4°52'23  | 24°19 | 18°56  | 18°49 | 10°28 | 8°18 | 11°21 | 14°43 | 1°20  | 18°25  | 13°33  | 13°54 | 18°34 | 1°35 | T 29 |
| W30  | 2 30 27 | 5°52'21  | 9♂22  | 18°12  | 19°58 | 11°12 | 8°28 | 11°26 | 14°46 | 1°19  | 18°24  | 13°34  | 13°50 | 18°41 | 1°39 | W30  |
| T 31 | 2 34 24 | 6♂52'20  | 24♂ 8 | 17♂18  | 21♂ 7 | 11♂56 | 8♂38 | 11♂30 | 14♂49 | 1♂19  | 18♂23  | 13♂35  | 13♂47 | 18♂47 | 1♂43 | 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 | decl lat |
| T 1  | 2s49  | 16n23    | 0s 9     | 13s 0    | 1s44     | 17s42    | 1s 5     | 18s30    | 0s40     | 23s31    | 0s 9     | 22s46    | 0n19     | 22s28    | 0s 2     | 22n16    |
| W 2  | 3 13  | 18 48    | 1 28     | 13 35    | 1 51     | 18 6     | 1 9      | 18 42    | 0 40     | 23 31    | 0 9      | 22 46    | 0 19     | 22 28    | 0 2      | 22 16    |
| T 3  | 3 36  | 19 56    | 2 40     | 14 9     | 1 58     | 18 29    | 1 12     | 18 53    | 0 41     | 23 31    | 0 9      | 22 46    | 0 18     | 22 29    | 0 2      | 22 16    |
| F 4  | 3 59  | 19 46    | 3 41     | 14 41    | 2 5      | 18 52    | 1 16     | 19 5     | 0 41     | 23 30    | 0 9      | 22 46    | 0 18     | 22 29    | 0 2      | 22 16    |
| S 5  | 4 22  | 18 24    | 4 28     | 15 13    | 2 11     | 19 14    | 1 19     | 19 16    | 0 42     | 23 30    | 0 9      | 22 46    | 0 18     | 22 29    | 0 2      | 22 16    |
| S 6  | 4 46  | 16 2     | 4 58     | 15 44    | 2 18     | 19 36    | 1 23     | 19 27    | 0 42     | 23 30    | 0 9      | 22 46    | 0 18     | 22 30    | 0 2      | 22 16    |
| M 7  | 5 9   | 12 53    | 5 12     | 16 14    | 2 24     | 19 58    | 1 26     | 19 38    | 0 43     | 23 30    | 0 9      | 22 46    | 0 18     | 22 30    | 0 2      | 22 16    |
| T 8  | 5 32  | 9 11     | 5 10     | 16 42    | 2 30     | 20 19    | 1 29     | 19 49    | 0 43     | 23 30    | 0 9      | 22 45    | 0 18     | 22 30    | 0 2      | 22 16    |
| W 9  | 5 55  | 5 8      | 4 52     | 17 10    | 2 35     | 20 39    | 1 33     | 19 59    | 0 44     | 23 30    | 0 10     | 22 45    | 0 18     | 22 30    | 0 2      | 22 16    |
| T 10 | 6 18  | 0 56     | 4 21     | 17 36    | 2 41     | 20 59    | 1 36     | 20 10    | 0 44     | 23 29    | 0 10     | 22 45    | 0 18     | 22 31    | 0 2      | 22 16    |
| F 11 | 6 40  | 3s15     | 3 38     | 18 1     | 2 46     | 21 19    | 1 39     | 20 20    | 0 45     | 23 29    | 0 10     | 22 45    | 0 18     | 22 31    | 0 2      | 22 16    |
| S 12 | 7 3   | 7 15     | 2 46     | 18 25    | 2 51     | 21 38    | 1 43     | 20 30    | 0 45     | 23 29    | 0 10     | 22 45    | 0 18     | 22 31    | 0 2      | 22 16    |
| S 13 | 7 26  | 10 55    | 1 46     | 18 47    | 2 55     | 21 56    | 1 46     | 20 40    | 0 46     | 23 29    | 0 10     | 22 45    | 0 17     | 22 32    | 0 2      | 22 16    |
| M14  | 7 48  | 14 8     | 0 43     | 19 8     | 2 59     | 22 14    | 1 49     | 20 50    | 0 47     | 23 28    | 0 10     | 22 45    | 0 17     | 22 32    | 0 2      | 22 16    |
| T 15 | 8 11  | 16 44    | 0n22     | 19 27    | 3 2      | 22 31    | 1 52     | 21 0     | 0 47     | 23 28    | 0 10     | 22 45    | 0 17     | 22 32    | 0 2      | 22 16    |
| W16  | 8 33  | 18 37    | 1 26     | 19 45    | 3 5      | 22 48    | 1 55     | 21 9     | 0 48     | 23 28    | 0 10     | 22 45    | 0 17     | 22 32    | 0 2      | 22 16    |
| T 17 | 8 55  | 19 42    | 2 27     | 20 0     | 3 8      | 23 4     | 1 58     | 21 18    | 0 48     | 23 28    | 0 10     | 22 44    | 0 17     | 22 33    | 0 2      | 22 16    |
| F 18 | 9 17  | 19 55    | 3 21     | 20 14    | 3 9      | 23 20    | 2 1      | 21 28    | 0 48     | 23 27    | 0 10     | 22 44    | 0 17     | 22 33    | 0 2      | 22 16    |
| S 19 | 9 39  | 19 14    | 4 8      | 20 25    | 3 10     | 23 34    | 2 4      | 21 36    | 0 49     | 23 27    | 0 10     | 22 44    | 0 17     | 22 33    | 0 2      | 22 15    |
| S 20 | 10 1  | 17 38    | 4 44     | 20 35    | 3 10     | 23 49    | 2 7      | 21 45    | 0 49     | 23 26    | 0 10     | 22 44    | 0 17     | 22 34    | 0 2      | 22 15    |
| M21  | 10 22 | 15 10    | 5 8      | 20 41    | 3 9      | 24 3     | 2 10     | 21 54    | 0 50     | 23 26    | 0 11     | 22 44    | 0 17     | 22 34    | 0 2      | 22 15    |
| T 22 | 10 44 | 11 55    | 5 17     | 20 46    | 3 8      | 24 16    | 2 13     | 22 2     | 0 50     | 23 26    | 0 11     | 22 44    | 0 16     | 22 34    | 0 2      | 22 15    |
| W23  | 11 5  | 7 57     | 5 10     | 20 47    | 3 5      | 24 28    | 2 16     | 22 10    | 0 51     | 23 25    | 0 11     | 22 43    | 0 16     | 22 35    | 0 2      | 22 15    |
| T 24 | 11 26 | 3 26     | 4 44     | 20 45    | 3 1      | 24 40    | 2 18     | 22 18    | 0 51     | 23 25    | 0 11     | 22 43    | 0 16     | 22 35    | 0 2      | 22 15    |
| F 25 | 11 47 | 1n25     | 4 1      | 20 40    | 2 55     | 24 51    | 2 21     | 22 26    | 0 52     | 23 24    | 0 11     | 22 43    | 0 16     | 22 35    | 0 2      | 22 15    |
| S 26 | 12 8  | 6 19     | 3 1      | 20 31    | 2 48     | 25 2     | 2 24     | 22 33    | 0 52     | 23 24    | 0 11     | 22 43    | 0 16     | 22 36    | 0 2      | 22 15    |
| S 27 | 12 29 | 10 57    | 1 47     | 20 18    | 2 40     | 25 11    | 2 26     | 22 41    | 0 53     | 23 24    | 0 11     | 22 43    | 0 16     | 22 36    | 0 2      | 22 15    |
| M28  | 12 49 | 14 56    | 0 25     | 20 1     | 2 30     | 25 21    | 2 29     | 22 48    | 0 53     | 23 23    | 0 11     | 22 42    | 0 16     | 22 36    | 0 2      | 22 15    |
| T 29 | 13 9  | 17 54    | 1s 0     | 19 40    | 2 18     | 25 29    | 2 31     | 22 55    | 0 53     | 23 23    | 0 11     | 22 42    | 0 16     | 22 37    | 0 2      | 22 15    |
| W30  | 13 29 | 19 35    | 2 19     | 19 15    | 2 4      | 25 37    | 2 33     | 23 1     | 0 54     | 23 22    | 0 11     | 22 42    | 0 16     | 22 37    | 0 2      | 22 15    |
| T 31 | 13s49 | 19n52    | 3s27     | 18s45    | 1s49     | 25s44    | 2s35     | 23s 8    | 0s54     | 23s21    | 0s11     | 22s42    | 0n16     | 22s37    | 0s 2     | 22n15    |

Julian Day Number = 2415658.5, Delta T = 0.25 sec  
Ecliptic obliquity = 23°27'02, Nutation = 0°00'12, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 23°22'05, Lahiri = 22°29'06

# ASTRODIENST EPHEMERIS for the year 1901

## geocentric

NOVEMBER 1901

00:00 UT

| Day  | Sid.t   | ☉        | ☽     | ♂      | ♀     | ♂     | ♂     | ♂     | ♂     | ♂     | ♂      | ♂      | ♂     | ♂     | ♂    | Day  |
|------|---------|----------|-------|--------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|------|------|
| F 1  | 2 38 20 | 7♈52°22  | 8♉32  | 16°R16 | 22♊16 | 12♋40 | 8♌48  | 11♍34 | 14♎52 | 1°R18 | 18°R23 | 13♏35  | 13♐44 | 18♑54 | 1♒48 | F 1  |
| S 2  | 2 42 17 | 8°52'26  | 22°31 | 15♈ 8  | 23°24 | 13°24 | 8°58  | 11°38 | 14°55 | 1♉17  | 18♊22  | 13°36  | 13°41 | 19° 0 | 1°52 | S 2  |
| S 3  | 2 46 13 | 9°52'32  | 6♈ 5  | 13°53  | 24°33 | 14° 8 | 9° 8  | 11°43 | 14°58 | 1°16  | 18°21  | 13°R36 | 13°38 | 19° 7 | 1°57 | S 3  |
| M 4  | 2 50 10 | 10°52'40 | 19°15 | 12°36  | 25°41 | 14°52 | 9°18  | 11°47 | 15° 1 | 1°15  | 18°20  | 13°36  | 13°34 | 19°14 | 2° 1 | M 4  |
| T 5  | 2 54 7  | 11°52'50 | 2♈ 4  | 11°17  | 26°49 | 15°37 | 9°28  | 11°52 | 15° 4 | 1°14  | 18°19  | 13°36  | 13°31 | 19°20 | 2° 6 | T 5  |
| W 6  | 2 58 3  | 12°53'02 | 14°34 | 10° 0  | 27°57 | 16°21 | 9°39  | 11°57 | 15° 8 | 1°13  | 18°18  | 13°35  | 13°28 | 19°27 | 2°11 | W 6  |
| T 7  | 3 2 0   | 13°53'16 | 26°50 | 8°46   | 29° 5 | 17° 6 | 9°49  | 12° 1 | 15°11 | 1°12  | 18°17  | 13°D35 | 13°25 | 19°34 | 2°15 | T 7  |
| F 8  | 3 5 56  | 14°53'32 | 8♉55  | 7°39   | 0♊13  | 17°50 | 10° 0 | 12° 6 | 15°14 | 1°11  | 18°16  | 13°36  | 13°22 | 19°40 | 2°20 | F 8  |
| S 9  | 3 9 53  | 15°53'50 | 20°52 | 6°40   | 1°21  | 18°35 | 10°10 | 12°11 | 15°17 | 1°10  | 18°15  | 13°36  | 13°19 | 19°47 | 2°25 | S 9  |
| S 10 | 3 13 49 | 16°54'10 | 2♈43  | 5°50   | 2°28  | 19°19 | 10°21 | 12°16 | 15°21 | 1° 9  | 18°14  | 13°36  | 13°15 | 19°54 | 2°30 | S 10 |
| M 11 | 3 17 46 | 17°54'32 | 14°31 | 5°12   | 3°35  | 20° 4 | 10°32 | 12°21 | 15°24 | 1° 8  | 18°14  | 13°R36 | 13°12 | 20° 0 | 2°35 | M 11 |
| T 12 | 3 21 42 | 18°54'55 | 26°18 | 4°45   | 4°43  | 20°49 | 10°43 | 12°26 | 15°27 | 1° 7  | 18°13  | 13°36  | 13° 9 | 20° 7 | 2°40 | T 12 |
| W 13 | 3 25 39 | 19°55'20 | 8♊ 6  | 4°30   | 5°50  | 21°34 | 10°54 | 12°31 | 15°31 | 1° 5  | 18°12  | 13°35  | 13° 6 | 20°14 | 2°45 | W 13 |
| T 14 | 3 29 36 | 20°55'47 | 19°58 | 4°D26  | 6°56  | 22°19 | 11° 6 | 12°36 | 15°34 | 1° 4  | 18°11  | 13°35  | 13° 3 | 20°20 | 2°50 | T 14 |
| F 15 | 3 33 32 | 21°56'15 | 1♊56  | 4°34   | 8° 3  | 23° 4 | 11°17 | 12°42 | 15°38 | 1° 3  | 18° 9  | 13°33  | 13° 0 | 20°27 | 2°55 | F 15 |
| S 16 | 3 37 29 | 22°56'45 | 14° 2 | 4°51   | 9° 9  | 23°49 | 11°28 | 12°47 | 15°41 | 1° 2  | 18° 8  | 13°32  | 12°56 | 20°33 | 3° 0 | S 16 |
| S 17 | 3 41 25 | 23°57'16 | 26°20 | 5°19   | 10°16 | 24°34 | 11°40 | 12°52 | 15°44 | 1° 1  | 18° 7  | 13°31  | 12°53 | 20°40 | 3° 5 | S 17 |
| M 18 | 3 45 22 | 24°57'48 | 8♈53  | 5°55   | 11°22 | 25°19 | 11°51 | 12°58 | 15°48 | 0°59  | 18° 6  | 13°30  | 12°50 | 20°47 | 3°11 | M 18 |
| T 19 | 3 49 18 | 25°58'22 | 21°45 | 6°38   | 12°28 | 26° 4 | 12° 3 | 13° 3 | 15°51 | 0°58  | 18° 5  | 13°D29 | 12°47 | 20°53 | 3°16 | T 19 |
| W 20 | 3 53 15 | 26°58'56 | 4♈58  | 7°29   | 13°33 | 26°49 | 12°15 | 13° 9 | 15°55 | 0°57  | 18° 4  | 13°29  | 12°44 | 21° 0 | 3°21 | W 20 |
| T 21 | 3 57 11 | 27°59'32 | 18°36 | 8°25   | 14°39 | 27°35 | 12°26 | 13°15 | 15°58 | 0°55  | 18° 3  | 13°30  | 12°40 | 21° 7 | 3°27 | T 21 |
| F 22 | 4 1 8   | 29° 0'09 | 2♈39  | 9°27   | 15°44 | 28°20 | 12°38 | 13°20 | 16° 2 | 0°54  | 18° 2  | 13°31  | 12°37 | 21°13 | 3°32 | F 22 |
| S 23 | 4 5 5   | 0♊ 0'47  | 17° 7 | 10°34  | 16°49 | 29° 6 | 12°50 | 13°26 | 16° 6 | 0°52  | 18° 1  | 13°32  | 12°34 | 21°20 | 3°38 | S 23 |
| S 24 | 4 9 1   | 1° 1'27  | 1♊57  | 11°44  | 17°54 | 29°51 | 13° 2 | 13°32 | 16° 9 | 0°51  | 18° 0  | 13°33  | 12°31 | 21°27 | 3°43 | S 24 |
| M 25 | 4 12 58 | 2° 2'08  | 17° 3 | 12°58  | 18°58 | 0♊37  | 13°14 | 13°38 | 16°13 | 0°50  | 17°59  | 13°R34 | 12°28 | 21°33 | 3°49 | M 25 |
| T 26 | 4 16 54 | 3° 2'50  | 2♈17  | 14°14  | 20° 2 | 1°22  | 13°27 | 13°44 | 16°16 | 0°48  | 17°58  | 13°33  | 12°25 | 21°40 | 3°54 | T 26 |
| W 27 | 4 20 51 | 4° 3'33  | 17°28 | 15°33  | 21° 6 | 2° 8  | 13°39 | 13°50 | 16°20 | 0°47  | 17°57  | 13°31  | 12°21 | 21°47 | 4° 0 | W 27 |
| T 28 | 4 24 47 | 5° 4'18  | 2♉27  | 16°55  | 22°10 | 2°53  | 13°51 | 13°56 | 16°23 | 0°45  | 17°55  | 13°28  | 12°18 | 21°53 | 4° 5 | T 28 |
| F 29 | 4 28 44 | 6° 5'04  | 17° 7 | 18°18  | 23°13 | 3°39  | 14° 4 | 14° 2 | 16°27 | 0°44  | 17°54  | 13°25  | 12°15 | 22° 0 | 4°11 | F 29 |
| S 30 | 4 32 40 | 7♊ 5'51  | 1♈20  | 19♈42  | 24♊16 | 4♋25  | 14♌16 | 14♍ 8 | 16♎31 | 0♎42  | 17♏53  | 13♐22  | 12♑12 | 22♒ 7 | 4♓17 | S 30 |

| Day  | ☉     | ☾     | ♂    | ♀     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂    | ♂     | ♂     | ♂     | ♂     | ♂    |      |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|-------|-------|-------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat   | decl  | lat   | decl | lat  |
| F 1  | 14s 8 | 18n50 | 4s21 | 18s11 | 1s32 | 25s51 | 2s37 | 23s14 | 0s55 | 23s21 | 0s11 | 22s41 | 0n15 | 22s38 | 0s 2 | 22n15 | 1s11 | 13n41 | 9s17 | 15s55 | 15s58 | 17s 0 | 17s20 | 6n 6 | 6n 6 |
| S 2  | 14 28 | 16 41 | 4 57 | 17 34 | 1 14 | 25 56 | 2 39 | 23 20 | 0 55 | 23 20 | 0 11 | 22 41 | 0 15 | 22 38 | 0 2  | 22 15 | 1 11 | 13 41 | 9 17 | 15 56 | 15 57 | 17 1  | 17 21 | 6 6  | 6 6  |
| S 3  | 14 47 | 13 40 | 5 15 | 16 53 | 0 55 | 26 1  | 2 41 | 23 26 | 0 55 | 23 20 | 0 12 | 22 41 | 0 15 | 22 39 | 0 2  | 22 15 | 1 11 | 13 41 | 9 17 | 15 56 | 15 56 | 17 2  | 17 21 | 6 5  | 6 5  |
| M 4  | 15 6  | 10 2  | 5 17 | 16 10 | 0 35 | 26 6  | 2 43 | 23 31 | 0 56 | 23 19 | 0 12 | 22 40 | 0 15 | 22 39 | 0 2  | 22 15 | 1 11 | 13 41 | 9 17 | 15 56 | 15 55 | 17 3  | 17 21 | 6 5  | 6 5  |
| T 5  | 15 24 | 6 3   | 5 2  | 15 27 | 0 14 | 26 10 | 2 45 | 23 36 | 0 56 | 23 18 | 0 12 | 22 40 | 0 15 | 22 39 | 0 2  | 22 15 | 1 12 | 13 41 | 9 17 | 15 56 | 15 54 | 17 4  | 17 22 | 6 5  | 6 5  |
| W 6  | 15 43 | 1 53  | 4 33 | 14 43 | 0n 7 | 26 13 | 2 47 | 23 41 | 0 57 | 23 18 | 0 12 | 22 40 | 0 15 | 22 40 | 0 2  | 22 15 | 1 12 | 13 41 | 9 18 | 15 56 | 15 53 | 17 5  | 17 22 | 6 4  | 6 4  |
| T 7  | 16 1  | 2s17  | 3 52 | 14 0  | 0 27 | 26 15 | 2 48 | 23 46 | 0 57 | 23 17 | 0 12 | 22 40 | 0 15 | 22 40 | 0 2  | 22 15 | 1 12 | 13 40 | 9 18 | 15 56 | 15 52 | 17 6  | 17 22 | 6 4  | 6 4  |
| F 8  | 16 19 | 6 19  | 3 1  | 13 20 | 0 46 | 26 16 | 2 49 | 23 51 | 0 57 | 23 16 | 0 12 | 22 39 | 0 15 | 22 40 | 0 2  | 22 15 | 1 12 | 13 40 | 9 18 | 15 56 | 15 51 | 17 7  | 17 22 | 6 4  | 6 4  |
| S 9  | 16 36 | 10 3  | 2 3  | 12 44 | 1 4  | 26 17 | 2 51 | 23 55 | 0 58 | 23 16 | 0 12 | 22 39 | 0 15 | 22 41 | 0 2  | 22 15 | 1 12 | 13 40 | 9 18 | 15 56 | 15 50 | 17 8  | 17 22 | 6 3  | 6 3  |
| S 10 | 16 54 | 13 22 | 1 0  | 12 13 | 1 20 | 26 18 | 2 52 | 23 59 | 0 58 | 23 15 | 0 12 | 22 38 | 0 15 | 22 41 | 0 2  | 22 15 | 1 12 | 13 40 | 9 18 | 15 56 | 15 50 | 17 9  | 17 23 | 6 3  | 6 3  |
| M 11 | 17 11 | 16 7  | 0n 5 | 11 46 | 1 35 | 26 17 | 2 53 | 24 3  | 0 58 | 23 14 | 0 12 | 22 38 | 0 15 | 22 41 | 0 2  | 22 15 | 1 12 | 13 40 | 9 18 | 15 56 | 15 49 | 17 10 | 17 23 | 6 3  | 6 3  |
| T 12 | 17 27 | 18 12 | 1 10 | 11 26 | 1 47 | 26 16 | 2 54 | 24 7  | 0 59 | 23 13 | 0 12 | 22 38 | 0 14 | 22 42 | 0 2  | 22 15 | 1 12 | 13 40 | 9 18 | 15 56 | 15 48 | 17 11 | 17 23 | 6 2  | 6 2  |
| W 13 | 17 44 | 19 30 | 2 12 | 11 10 | 1 58 | 26 14 | 2 55 | 24 10 | 0 59 | 23 12 | 0 12 | 22 37 | 0 14 | 22 42 | 0 2  | 22 15 | 1 12 | 13 40 | 9 18 | 15 56 | 15 47 | 17 12 | 17 23 | 6 2  | 6 2  |
| T 14 | 18 0  | 19 56 | 3 9  | 11 1  | 2 7  | 26 12 | 2 56 | 24 13 | 0 59 | 23 12 | 0 12 | 22 37 | 0 14 | 22 43 | 0 3  | 22 15 | 1 12 | 13 39 | 9 18 | 15 55 | 15 46 | 17 12 | 17 23 | 6 2  | 6 2  |
| F 15 | 18 16 | 19 29 | 3 58 | 10 57 | 2 13 | 26 8  | 2 56 | 24 16 | 1 0  | 23 11 | 0 12 | 22 37 | 0 14 | 22 43 | 0 3  | 22 15 | 1 12 | 13 39 | 9 18 | 15 55 | 15 45 | 17 13 | 17 23 | 6 2  | 6 2  |
| S 16 | 18 31 | 18 8  | 4 36 | 10 58 | 2 18 | 26 4  | 2 57 | 24 18 | 1 0  | 23 10 | 0 13 | 22 36 | 0 14 | 22 43 | 0 3  | 22 15 | 1 12 | 13 39 | 9 18 | 15 55 | 15 44 | 17 14 | 17 24 | 6 1  | 6 1  |
| S 17 | 18 46 | 15 56 | 5 3  | 11 4  | 2 22 | 26 0  | 2 57 | 24 21 | 1 0  | 23 9  | 0 13 | 22 36 | 0 14 | 22 44 | 0 3  | 22 15 | 1 12 | 13 39 | 9 18 | 15 54 | 15 43 | 17 15 | 17 24 | 6 1  | 6 1  |
| M 18 | 19 1  | 12 57 | 5 16 | 11 14 | 2 24 | 25 55 | 2 58 | 24 23 | 1 1  | 23 8  | 0 13 | 22 35 | 0 14 | 22 44 | 0 3  | 22 15 | 1 12 | 13 39 | 9 18 | 15 54 | 15 42 | 17 16 | 17 24 | 6 1  | 6 1  |
| T 19 | 19 15 | 9 18  | 5 14 | 11 27 | 2 25 | 25 49 | 2 58 | 24 24 | 1 1  | 23 7  | 0 13 | 22 35 | 0 14 | 22 44 | 0 3  | 22 15 | 1 12 | 13 39 | 9 18 | 15 54 | 15 41 | 17 17 | 17 24 | 6 1  | 6 1  |
| W 20 | 19 30 | 5 6   | 4 55 | 11 44 | 2 24 | 25 42 | 2 58 | 24 26 | 1 1  | 23 6  | 0 13 | 22 34 | 0 14 | 22 45 | 0 3  | 22 15 | 1 12 | 13 39 | 9 18 | 15 54 | 15 40 | 17 18 | 17 24 | 6 1  | 6 1  |
| T 21 | 19 43 | 0 32  | 4 20 | 12 4  | 2 23 | 25 35 | 2 58 | 24 27 | 1 2  | 23 5  | 0 13 | 22 34 | 0 14 | 22 45 | 0 3  | 22 15 | 1 12 | 13 39 | 9 18 | 15 54 | 15 39 | 17 19 | 17 24 | 6 0  | 6 0  |
| F 22 | 19 57 | 4n14  | 3 28 | 12 26 | 2 20 | 25 27 | 2 57 | 24 28 | 1 2  | 23 4  | 0 13 | 22 33 | 0 14 | 22 46 | 0 3  | 22 15 | 1 12 | 13 38 | 9 18 | 15 54 | 15 38 | 17 20 | 17 24 | 6 0  | 6 0  |
| S 23 | 20 10 | 8 54  | 2 21 | 12 49 | 2 17 | 25 19 | 2 57 | 24 29 | 1 2  | 23 3  | 0 13 | 22 33 | 0 13 | 22 46 | 0 3  | 22 15 | 1 12 | 13 38 | 9 18 | 15 55 | 15 37 | 17 21 | 17 24 | 6 0  | 6 0  |
| S 24 | 20 22 | 13 9  | 1 4  | 13 15 | 2 13 | 25 10 | 2 56 | 24 29 | 1 2  | 23 2  | 0 13 | 22 32 | 0 13 | 22 46 | 0 3  | 22 15 | 1 12 | 13 38 | 9 18 | 15 55 | 15 36 | 17 21 | 17 24 | 6 0  | 6 0  |
| M 25 | 20 35 | 16 38 | 0s19 | 13 41 | 2 9  | 25 0  | 2 56 | 24 30 | 1 3  | 23 1  | 0 13 | 22 32 | 0 13 | 22 47 | 0 3  | 22 15 | 1 12 | 13 38 | 9 18 | 15 55 | 15 35 | 17 22 | 17 24 | 6 0  | 6 0  |
| T 26 | 20 47 | 18 58 | 1 42 | 14 9  | 2 4  | 24 50 | 2 55 | 24 29 | 1 3  | 22 59 | 0 13 | 22 31 | 0 13 | 22 47 | 0 3  | 22 15 | 1 12 | 13 38 | 9 18 | 15 55 | 15 34 | 17 23 | 17 24 | 5 59 | 5 59 |
| W 27 | 20 58 | 19 56 | 2 57 | 14 37 | 1 58 | 24 39 | 2 54 | 24 29 | 1 3  | 22 58 | 0 13 | 22 31 | 0 13 | 22 47 | 0 3  | 22 15 | 1 12 | 13 38 | 9 18 | 15 54 | 15 33 | 17 24 | 17 24 | 5 59 | 5 59 |
| T 28 | 21 9  | 19 27 | 3 58 | 15 6  | 1 53 | 24 28 | 2 52 | 24 28 | 1 3  | 22 57 | 0 13 | 22 30 | 0 13 | 22 48 | 0 3  | 22 15 | 1 12 | 13 38 | 9 18 | 15 53 | 15 32 | 17 25 | 17 24 | 5 59 | 5 59 |
| F 29 | 21 20 | 17 41 | 4 43 | 15 35 | 1 46 | 24 16 | 2 51 | 24 28 | 1 4  | 22 56 | 0 14 | 22 30 | 0 13 | 22 48 | 0 3  | 22 15 | 1 12 | 13 38 | 9 18 | 15 52 | 15 31 | 17 26 | 17 24 | 5 59 | 5 59 |
| S 30 | 21s30 | 14n51 | 5s 8 | 16s 4 | 1n40 | 24s 3 | 2s50 | 24s26 | 1s 4 | 22s55 | 0s14 | 22s29 | 0n13 | 22s49 | 0s 3 | 22n15 | 1s12 | 13n38 | 9s18 | 15s52 | 15s30 | 17s27 | 17s24 | 5n59 | 5n59 |

# ASTRODIENST EPHEMERIS for the year 1901

## geocentric

DECEMBER 1901

00:00 UT

| Day  | Sid.t   | ☉         | ☽      | ♂      | ♀      | ♂      | ♂      | ♂      | ♂      | ♂      | ♂      | ♂       | ♂      | ♂      | ♂     | Day  |
|------|---------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|-------|------|
| S 1  | 4 36 37 | 8♂ 6'40   | 15♂ 4  | 21♂ 8  | 25♂ 18 | 5♂ 11  | 14♂ 29 | 14♂ 14 | 16♂ 34 | 0♂ 41  | 17♂ 52 | 13♂ 19  | 12♂ 9  | 22♂ 13 | 4♂ 22 | S 1  |
| M 2  | 4 40 34 | 9° 7'31   | 28° 21 | 22° 35 | 26° 21 | 5° 57  | 14° 41 | 14° 20 | 16° 38 | 0♂ 39  | 17♂ 51 | 13♂ 18  | 12° 6  | 22° 20 | 4° 28 | M 2  |
| T 3  | 4 44 30 | 10° 8'22  | 11♂ 12 | 24° 3  | 27° 23 | 6° 43  | 14° 54 | 14° 26 | 16° 42 | 0° 38  | 17° 50 | 13° D17 | 12° 2  | 22° 26 | 4° 34 | T 3  |
| W 4  | 4 48 27 | 11° 9'16  | 23° 40 | 25° 32 | 28° 24 | 7° 29  | 15° 7  | 14° 33 | 16° 45 | 0° 36  | 17° 49 | 13° 18  | 11° 59 | 22° 33 | 4° 40 | W 4  |
| T 5  | 4 52 23 | 12° 10'10 | 5♂ 52  | 27° 1  | 29° 26 | 8° 15  | 15° 20 | 14° 39 | 16° 49 | 0° 34  | 17° 47 | 13° 19  | 11° 56 | 22° 40 | 4° 46 | T 5  |
| F 6  | 4 56 20 | 13° 11'06 | 17° 51 | 28° 31 | 0♂ 27  | 9° 1   | 15° 32 | 14° 45 | 16° 53 | 0° 33  | 17° 46 | 13° 21  | 11° 53 | 22° 46 | 4° 52 | F 6  |
| S 7  | 5 0 16  | 14° 12'03 | 29° 41 | 0♂ 1   | 1° 27  | 9° 47  | 15° 45 | 14° 52 | 16° 56 | 0° 31  | 17° 45 | 13° 23  | 11° 50 | 22° 53 | 4° 57 | S 7  |
| S 8  | 5 4 13  | 15° 13'01 | 11♂ 28 | 1° 32  | 2° 27  | 10° 33 | 15° 58 | 14° 58 | 17° 0  | 0° 30  | 17° 44 | 13° R24 | 11° 46 | 23° 0  | 5° 3  | S 8  |
| M 9  | 5 8 9   | 16° 14'00 | 23° 14 | 3° 3   | 3° 27  | 11° 19 | 16° 11 | 15° 5  | 17° 4  | 0° 28  | 17° 43 | 13° 23  | 11° 43 | 23° 6  | 5° 9  | M 9  |
| T 10 | 5 12 6  | 17° 15'01 | 5♂ 3   | 4° 35  | 4° 26  | 12° 6  | 16° 25 | 15° 11 | 17° 7  | 0° 26  | 17° 42 | 13° 21  | 11° 40 | 23° 13 | 5° 15 | T 10 |
| W 11 | 5 16 3  | 18° 16'02 | 16° 57 | 6° 6   | 5° 25  | 12° 52 | 16° 38 | 15° 18 | 17° 11 | 0° 25  | 17° 40 | 13° 17  | 11° 37 | 23° 20 | 5° 21 | W 11 |
| T 12 | 5 19 59 | 19° 17'04 | 28° 58 | 7° 38  | 6° 23  | 13° 38 | 16° 51 | 15° 24 | 17° 15 | 0° 23  | 17° 39 | 13° 11  | 11° 34 | 23° 26 | 5° 27 | T 12 |
| F 13 | 5 23 56 | 20° 18'07 | 11♂ 7  | 9° 10  | 7° 21  | 14° 25 | 17° 4  | 15° 31 | 17° 18 | 0° 21  | 17° 38 | 13° 5   | 11° 31 | 23° 33 | 5° 33 | F 13 |
| S 14 | 5 27 52 | 21° 19'11 | 23° 25 | 10° 42 | 8° 18  | 15° 11 | 17° 17 | 15° 38 | 17° 22 | 0° 20  | 17° 37 | 12° 57  | 11° 27 | 23° 40 | 5° 39 | S 14 |
| S 15 | 5 31 49 | 22° 20'15 | 5♂ 54  | 12° 15 | 9° 15  | 15° 58 | 17° 31 | 15° 44 | 17° 25 | 0° 18  | 17° 36 | 12° 50  | 11° 24 | 23° 46 | 5° 45 | S 15 |
| M 16 | 5 35 45 | 23° 21'19 | 18° 36 | 13° 47 | 10° 11 | 16° 44 | 17° 44 | 15° 51 | 17° 29 | 0° 16  | 17° 35 | 12° 44  | 11° 21 | 23° 53 | 5° 51 | M 16 |
| T 17 | 5 39 42 | 24° 22'24 | 1♂ 31  | 15° 20 | 11° 7  | 17° 31 | 17° 58 | 15° 58 | 17° 33 | 0° 15  | 17° 33 | 12° 40  | 11° 18 | 24° 0  | 5° 57 | T 17 |
| W 18 | 5 43 38 | 25° 23'30 | 14° 43 | 16° 53 | 12° 2  | 18° 17 | 18° 11 | 16° 5  | 17° 36 | 0° 13  | 17° 32 | 12° 37  | 11° 15 | 24° 6  | 6° 3  | W 18 |
| T 19 | 5 47 35 | 26° 24'35 | 28° 12 | 18° 26 | 12° 56 | 19° 4  | 18° 25 | 16° 12 | 17° 40 | 0° 11  | 17° 31 | 12° D37 | 11° 11 | 24° 13 | 6° 9  | T 19 |
| F 20 | 5 51 32 | 27° 25'41 | 12♂ 1  | 19° 59 | 13° 50 | 19° 51 | 18° 38 | 16° 18 | 17° 44 | 0° 9   | 17° 30 | 12° 37  | 11° 8  | 24° 19 | 6° 16 | F 20 |
| S 21 | 5 55 28 | 28° 26'47 | 26° 11 | 21° 33 | 14° 43 | 20° 37 | 18° 52 | 16° 25 | 17° 47 | 0° 8   | 17° 29 | 12° 39  | 11° 5  | 24° 26 | 6° 22 | S 21 |
| S 22 | 5 59 25 | 29° 27'54 | 10♂ 40 | 23° 6  | 15° 35 | 21° 24 | 19° 5  | 16° 32 | 17° 51 | 0° 6   | 17° 28 | 12° R39 | 11° 2  | 24° 33 | 6° 28 | S 22 |
| M 23 | 6 3 21  | 0♂ 29'00  | 25° 26 | 24° 40 | 16° 27 | 22° 11 | 19° 19 | 16° 39 | 17° 55 | 0° 4   | 17° 27 | 12° 39  | 10° 59 | 24° 39 | 6° 34 | M 23 |
| T 24 | 6 7 18  | 1° 30'07  | 10♂ 12 | 26° 14 | 17° 18 | 22° 58 | 19° 33 | 16° 46 | 17° 58 | 0° 3   | 17° 26 | 12° 36  | 10° 56 | 24° 46 | 6° 40 | T 24 |
| W 25 | 6 11 14 | 2° 31'14  | 25° 24 | 27° 48 | 18° 8  | 23° 44 | 19° 47 | 16° 53 | 18° 2  | 0° 1   | 17° 24 | 12° 31  | 10° 52 | 24° 53 | 6° 46 | W 25 |
| T 26 | 6 15 11 | 3° 32'21  | 10♂ 19 | 29° 22 | 18° 57 | 24° 31 | 20° 0  | 17° 0  | 18° 5  | 29♂ 59 | 17° 23 | 12° 24  | 10° 49 | 24° 59 | 6° 52 | T 26 |
| F 27 | 6 19 7  | 4° 33'29  | 25° 0  | 0♂ 57  | 19° 45 | 25° 18 | 20° 14 | 17° 7  | 18° 9  | 29° 58 | 17° 22 | 12° 15  | 10° 46 | 25° 6  | 6° 58 | F 27 |
| S 28 | 6 23 4  | 5° 34'37  | 9♂ 19  | 2° 32  | 20° 33 | 26° 5  | 20° 28 | 17° 14 | 18° 12 | 29° 56 | 17° 21 | 12° 6   | 10° 43 | 25° 13 | 7° 4  | S 28 |
| S 29 | 6 27 1  | 6° 35'45  | 23° 12 | 4° 7   | 21° 19 | 26° 52 | 20° 42 | 17° 21 | 18° 16 | 29° 54 | 17° 20 | 11° 58  | 10° 40 | 25° 19 | 7° 11 | S 29 |
| M 30 | 6 30 57 | 7° 36'54  | 6♂ 36  | 5° 43  | 22° 5  | 27° 39 | 20° 56 | 17° 28 | 18° 19 | 29° 52 | 17° 19 | 11° 52  | 10° 37 | 25° 26 | 7° 17 | M 30 |
| T 31 | 6 34 54 | 8♂ 38'03  | 19♂ 33 | 7♂ 19  | 22° 49 | 28♂ 26 | 21♂ 10 | 17♂ 35 | 18♂ 23 | 29♂ 51 | 17♂ 18 | 11♂ 47  | 10♂ 33 | 25♂ 33 | 7♂ 23 | 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 |
| S 1  | 21s40 | 11n18 | 5s15 | 16s33 | 1n33 | 23s50 | 2s48 | 24s25 | 1s 4 | 22s53 | 0s14 | 22s29 | 0n13 | 22s49 | 0s 3 | 22n15 | 1s12 | 13n38 | 9s18 | 15s51 | 15s29 | 17s28 | 17s24 | 5n59 |     |
| M 2  | 21 50 | 7 17  | 5 4  | 17 2  | 1 27 | 23 37 | 2 46 | 24 23 | 1 4  | 22 52 | 0 14 | 22 28 | 0 13 | 22 49 | 0 3  | 22 15 | 1 12 | 13 37 | 9 18 | 15 50 | 15 28 | 17 28 | 17 24 | 5 58 |     |
| T 3  | 21 59 | 3 4   | 4 39 | 17 30 | 1 20 | 23 22 | 2 44 | 24 21 | 1 4  | 22 51 | 0 14 | 22 28 | 0 13 | 22 50 | 0 3  | 22 15 | 1 12 | 13 37 | 9 18 | 15 50 | 15 27 | 17 29 | 17 24 | 5 58 |     |
| W 4  | 22 7  | 1s10  | 4 0  | 17 59 | 1 12 | 23 8  | 2 42 | 24 19 | 1 5  | 22 49 | 0 14 | 22 27 | 0 13 | 22 50 | 0 3  | 22 15 | 1 12 | 13 37 | 9 18 | 15 50 | 15 26 | 17 30 | 17 24 | 5 58 |     |
| T 5  | 22 16 | 5 16  | 3 12 | 18 26 | 1 5  | 22 53 | 2 39 | 24 16 | 1 5  | 22 48 | 0 14 | 22 26 | 0 12 | 22 50 | 0 3  | 22 15 | 1 12 | 13 37 | 9 18 | 15 51 | 15 25 | 17 31 | 17 24 | 5 58 |     |
| F 6  | 22 24 | 9 6   | 2 16 | 18 54 | 0 58 | 22 37 | 2 37 | 24 13 | 1 5  | 22 47 | 0 14 | 22 26 | 0 12 | 22 51 | 0 3  | 22 15 | 1 12 | 13 37 | 9 18 | 15 51 | 15 24 | 17 32 | 17 24 | 5 58 |     |
| S 7  | 22 31 | 12 32 | 1 15 | 19 20 | 0 51 | 22 21 | 2 34 | 24 10 | 1 5  | 22 45 | 0 14 | 22 25 | 0 12 | 22 51 | 0 3  | 22 15 | 1 12 | 13 37 | 9 18 | 15 52 | 15 23 | 17 33 | 17 24 | 5 58 |     |
| S 8  | 22 38 | 15 27 | 0 11 | 19 46 | 0 43 | 22 5  | 2 31 | 24 7  | 1 5  | 22 44 | 0 14 | 22 24 | 0 12 | 22 52 | 0 3  | 22 15 | 1 12 | 13 37 | 9 18 | 15 52 | 15 22 | 17 33 | 17 24 | 5 58 |     |
| M 9  | 22 44 | 17 43 | 0n54 | 20 11 | 0 36 | 21 48 | 2 28 | 24 3  | 1 6  | 22 42 | 0 14 | 22 24 | 0 12 | 22 52 | 0 3  | 22 15 | 1 12 | 13 37 | 9 18 | 15 52 | 15 21 | 17 34 | 17 24 | 5 58 |     |
| T 10 | 22 50 | 19 15 | 1 56 | 20 35 | 0 29 | 21 30 | 2 25 | 23 59 | 1 6  | 22 41 | 0 14 | 22 23 | 0 12 | 22 52 | 0 3  | 22 15 | 1 12 | 13 37 | 9 18 | 15 51 | 15 20 | 17 35 | 17 24 | 5 57 |     |
| W 11 | 22 56 | 19 56 | 2 53 | 20 59 | 0 22 | 21 13 | 2 21 | 23 55 | 1 6  | 22 39 | 0 14 | 22 22 | 0 12 | 22 53 | 0 3  | 22 15 | 1 12 | 13 37 | 9 18 | 15 50 | 15 19 | 17 36 | 17 23 | 5 57 |     |
| T 12 | 23 1  | 19 44 | 3 43 | 21 21 | 0 14 | 20 54 | 2 18 | 23 51 | 1 6  | 22 38 | 0 15 | 22 22 | 0 12 | 22 53 | 0 3  | 22 15 | 1 12 | 13 37 | 9 18 | 15 48 | 15 18 | 17 37 | 17 23 | 5 57 |     |
| F 13 | 23 6  | 18 36 | 4 24 | 21 43 | 0 7  | 20 36 | 2 14 | 23 46 | 1 6  | 22 36 | 0 15 | 22 21 | 0 12 | 22 53 | 0 3  | 22 15 | 1 12 | 13 37 | 9 18 | 15 46 | 15 18 | 17 38 | 17 23 | 5 57 |     |
| S 14 | 23 10 | 16 37 | 4 53 | 22 3  | 0 0  | 20 17 | 2 10 | 23 41 | 1 6  | 22 34 | 0 15 | 22 20 | 0 12 | 22 54 | 0 3  | 22 15 | 1 12 | 13 37 | 9 18 | 15 44 | 15 17 | 17 38 | 17 23 | 5 57 |     |
| S 15 | 23 14 | 13 50 | 5 8  | 22 23 | 0s 7 | 19 58 | 2 5  | 23 36 | 1 6  | 22 33 | 0 15 | 22 20 | 0 12 | 22 54 | 0 3  | 22 15 | 1 12 | 13 37 | 9 18 | 15 42 | 15 16 | 17 39 | 17 23 | 5 57 |     |
| M 16 | 23 17 | 10 22 | 5 9  | 22 41 | 0 14 | 19 38 | 2 1  | 23 30 | 1 7  | 22 31 | 0 15 | 22 19 | 0 12 | 22 54 | 0 3  | 22 15 | 1 12 | 13 37 | 9 18 | 15 40 | 15 15 | 17 40 | 17 22 | 5 57 |     |
| T 17 | 23 20 | 6 22  | 4 54 | 22 59 | 0 20 | 19 19 | 1 56 | 23 24 | 1 7  | 22 29 | 0 15 | 22 18 | 0 11 | 22 55 | 0 3  | 22 15 | 1 12 | 13 37 | 9 18 | 15 39 | 15 14 | 17 41 | 17 22 | 5 57 |     |
| W 18 | 23 22 | 1 59  | 4 23 | 23 15 | 0 27 | 18 58 | 1 51 | 23 18 | 1 7  | 22 28 | 0 15 | 22 18 | 0 11 | 22 55 | 0 3  | 22 15 | 1 12 | 13 36 | 9 18 | 15 38 | 15 13 | 17 42 | 17 22 | 5 57 |     |
| T 19 | 23 24 | 2n37  | 3 37 | 23 30 | 0 34 | 18 38 | 1 46 | 23 12 | 1 7  | 22 26 | 0 15 | 22 17 | 0 11 | 22 55 | 0 3  | 22 15 | 1 12 | 13 36 | 9 18 | 15 38 | 15 12 | 17 42 | 17 22 | 5 57 |     |
| F 20 | 23 26 | 7 11  | 2 38 | 23 44 | 0 40 | 18 17 | 1 41 | 23 5  | 1 7  | 22 24 | 0 15 | 22 16 | 0 11 | 22 56 | 0 3  | 22 15 | 1 12 | 13 36 | 9 18 | 15 38 | 15 11 | 17 43 | 17 21 | 5 57 |     |
| S 21 | 23 26 | 11 29 | 1 28 | 23 57 | 0 46 | 17 57 | 1 35 | 22 58 | 1 7  | 22 22 | 0 15 | 22 15 | 0 11 | 22 56 | 0 3  | 22 15 | 1 12 | 13 36 | 9 18 | 15 38 | 15 10 | 17 44 | 17 21 | 5 57 |     |
| S 22 | 23 27 | 15 12 | 0 11 | 24 9  | 0 52 | 17 36 | 1 29 | 22 51 | 1 7  | 22 21 | 0 15 | 22 15 | 0 11 | 22 56 | 0 3  | 22 15 | 1 12 | 13 36 | 9 17 | 15 39 | 15 9  | 17 45 | 17 21 | 5 57 |     |
| M 23 | 23 27 | 18 1  | 1s 9 | 24 19 | 0 58 | 17 14 | 1 23 | 22 44 | 1 7  | 22 19 | 0 15 | 22 14 | 0 11 | 22 57 | 0 3  | 22 15 | 1 12 | 13 36 | 9 17 | 15 38 | 15 8  | 17 46 | 17 21 | 5 57 |     |
| T 24 | 23 26 | 19 38 | 2 24 | 24 28 | 1 4  | 16 53 | 1 17 | 22 36 | 1 7  | 22 17 | 0 16 | 22 13 | 0 11 | 22 57 | 0 3  | 22 15 | 1 12 | 13 36 | 9 17 | 15 38 | 15 7  | 17 46 | 17 20 | 5 57 |     |
| W 25 | 23 26 | 19 53 | 3 30 | 24 36 | 1 10 | 16 31 | 1 11 | 22 28 | 1 7  | 22 15 | 0 16 | 22 12 | 0 11 | 22 57 | 0 3  | 22 15 | 1 12 | 13 36 | 9 17 | 15 36 | 15 6  | 17 47 | 17 20 | 5 57 |     |
| T 26 | 23 24 | 18 43 | 4 20 | 24 42 | 1 15 | 16 10 | 1 4  | 22 20 | 1 7  | 22 13 | 0 16 | 22 11 | 0 11 | 22 58 | 0 3  | 22 15 | 1 12 | 13 36 | 9 17 | 15 34 | 15 5  | 17 48 | 17 20 | 5 57 |     |
| F 27 | 23 22 | 16 20 | 4 53 | 24 47 | 1 20 | 15 48 | 0 57 | 22 11 | 1 7  | 22 11 | 0 16 | 22 11 | 0 11 | 22 58 | 0 3  | 22 15 | 1 12 | 13 36 | 9 17 | 15 31 | 15 4  | 17 49 | 17 19 | 5 57 |     |
| S 28 | 23 20 | 13 0  | 5 6  | 24 51 | 1 25 | 15 26 | 0 50 | 22 3  | 1 7  | 22 9  | 0 16 | 22 10 | 0 11 | 22 58 | 0 3  | 22 15 | 1 12 | 13 36 | 9 17 | 15 28 | 15 3  | 17 49 | 17 19 | 5 57 |     |
| S 29 | 23 17 | 9 3   | 5 1  | 24 53 | 1 30 | 15 4  | 0 42 | 21 54 | 1 7  | 22 7  | 0 16 | 22 9  | 0 11 | 22 59 | 0 3  | 22 15 | 1 12 | 13 36 | 9 17 | 15 26 | 15 2  | 17 50 | 17 19 | 5 57 |     |
| M 30 | 23 14 | 4 46  | 4 39 | 24 54 | 1 34 | 14 42 | 0 34 | 21 44 | 1 7  | 22 5  | 0 16 | 22 8  | 0 10 | 22 59 | 0 3  | 22 15 | 1 12 | 13 36 | 9 17 | 15 24 | 15 1  | 17 51 | 17 18 | 5 57 |     |
| T 31 | 23s10 | 0n25  | 4s 3 | 24s53 | 1s39 | 14s20 | 0s26 | 21s35 | 1s 7 | 22s 3 | 0s16 | 22s 7 | 0n10 | 22s59 | 0s 3 | 22n15 | 1s12 | 13n36 | 9s17 | 15s23 | 15s 0 | 17s52 | 17s18 | 5n57 |     |