



Astrodienst Ephemeris Tables for the year 1790

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 1790
geocentric

JANUARY 1790

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♂ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|---------|-----------------------|---------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|--------------------|----------------------|------|
| F 1 | 6 43 17 | 10 ³ 52'11 | 7 ⁵ 5 5 | 8 ³ 58 | 27 ⁵ 58 | 1 ¹ 58 | 0 ⁰ R53 | 18 ¹ 4 4 | 8 ⁰ R36 | 25 ¹ 18 | 17 ¹ 42 | 18 ⁰ R 8 | 16 ¹ 38 | 28 ¹ 43 | 25 ⁰ R16 | F 1 |
| S 2 | 6 47 13 | 11 ⁰ 53'20 | 21 ⁰ 2 | 10 ⁰ 34 | 29 ⁰ 1 | 1 ⁰ R58 | 0 ⁰ 50 | 18 ⁰ 8 | 8 ⁰ 34 | 25 ⁰ 19 | 17 ⁰ 43 | 18 ⁰ 0 | 16 ⁰ 35 | 28 ⁰ 50 | 25 ⁰ II13 | S 2 |
| S 3 | 6 51 10 | 12 ⁰ 54'29 | 5 ⁰ 14 | 12 ⁰ 11 | 0 ⁰ 4 3 | 1 ⁰ 57 | 0 ⁰ 47 | 18 ⁰ 13 | 8 ⁰ 32 | 25 ⁰ 20 | 17 ⁰ 45 | 17 ⁰ 50 | 16 ⁰ 32 | 28 ⁰ 57 | 25 ⁰ 9 | S 3 |
| M 4 | 6 55 7 | 13 ⁰ 55'37 | 19 ⁰ 35 | 13 ⁰ 49 | 1 ⁰ 5 | 1 ⁰ 56 | 0 ⁰ 43 | 18 ⁰ 17 | 8 ⁰ 30 | 25 ⁰ 20 | 17 ⁰ 46 | 17 ⁰ 41 | 16 ⁰ 29 | 29 ⁰ 3 | 25 ⁰ 5 | M 4 |
| T 5 | 6 59 3 | 14 ⁰ 56'46 | 4 ⁰ 10 | 15 ⁰ 26 | 2 ⁰ 7 | 1 ⁰ 53 | 0 ⁰ 40 | 18 ⁰ 22 | 8 ⁰ 27 | 25 ⁰ 21 | 17 ⁰ 48 | 17 ⁰ 33 | 16 ⁰ 26 | 29 ⁰ 10 | 25 ⁰ 2 | T 5 |
| W 6 | 7 3 0 | 15 ⁰ 57'54 | 18 ⁰ 23 | 17 ⁰ 5 | 3 ⁰ 8 | 1 ⁰ 50 | 0 ⁰ 36 | 18 ⁰ 26 | 8 ⁰ 25 | 25 ⁰ 22 | 17 ⁰ 49 | 17 ⁰ 28 | 16 ⁰ 22 | 29 ⁰ 17 | 24 ⁰ 58 | W 6 |
| T 7 | 7 6 56 | 16 ⁰ 59'02 | 2 ⁰ 40 | 18 ⁰ 43 | 4 ⁰ 9 | 1 ⁰ 47 | 0 ⁰ 32 | 18 ⁰ 31 | 8 ⁰ 23 | 25 ⁰ 23 | 17 ⁰ 51 | 17 ⁰ 25 | 16 ⁰ 19 | 29 ⁰ 23 | 24 ⁰ 55 | T 7 |
| F 8 | 7 10 53 | 18 ⁰ 0'11 | 16 ⁰ 48 | 20 ⁰ 22 | 5 ⁰ 10 | 1 ⁰ 42 | 0 ⁰ 28 | 18 ⁰ 36 | 8 ⁰ 20 | 25 ⁰ 23 | 17 ⁰ 53 | 17 ⁰ D24 | 16 ⁰ 16 | 29 ⁰ 30 | 24 ⁰ 51 | F 8 |
| S 9 | 7 14 49 | 19 ⁰ 1'20 | 0 ⁰ 47 | 22 ⁰ 2 | 6 ⁰ 10 | 1 ⁰ 37 | 0 ⁰ 24 | 18 ⁰ 41 | 8 ⁰ 18 | 25 ⁰ 24 | 17 ⁰ 54 | 17 ⁰ 24 | 16 ⁰ 13 | 29 ⁰ 37 | 24 ⁰ 48 | S 9 |
| S 10 | 7 18 46 | 20 ⁰ 2'28 | 14 ⁰ 36 | 23 ⁰ 42 | 7 ⁰ 9 | 1 ⁰ 30 | 0 ⁰ 19 | 18 ⁰ 46 | 8 ⁰ 15 | 25 ⁰ 24 | 17 ⁰ 56 | 17 ⁰ R25 | 16 ⁰ 10 | 29 ⁰ 43 | 24 ⁰ 44 | S 10 |
| M 11 | 7 22 42 | 21 ⁰ 3'37 | 28 ⁰ 15 | 25 ⁰ 22 | 8 ⁰ 8 | 1 ⁰ 23 | 0 ⁰ 14 | 18 ⁰ 51 | 8 ⁰ 13 | 25 ⁰ 25 | 17 ⁰ 57 | 17 ⁰ 24 | 16 ⁰ 6 | 29 ⁰ 50 | 24 ⁰ 41 | M 11 |
| T 12 | 7 26 39 | 22 ⁰ 4'45 | 11 ⁰ 44 | 27 ⁰ 3 | 9 ⁰ 7 | 1 ⁰ 15 | 0 ⁰ 10 | 18 ⁰ 56 | 8 ⁰ 10 | 25 ⁰ 25 | 17 ⁰ 59 | 17 ⁰ 22 | 16 ⁰ 3 | 29 ⁰ 57 | 24 ⁰ 37 | T 12 |
| W 13 | 7 30 36 | 23 ⁰ 5'53 | 25 ⁰ 3 | 28 ⁰ 44 | 10 ⁰ 5 | 1 ⁰ 7 | 0 ⁰ 5 | 19 ⁰ 1 | 8 ⁰ 8 | 25 ⁰ 26 | 18 ⁰ 1 | 17 ⁰ 16 | 16 ⁰ 0 | 0 ⁰ Y 4 | 24 ⁰ 34 | W 13 |
| T 14 | 7 34 32 | 24 ⁰ 7'01 | 8 ⁰ 12 | 0 ⁰ 26 | 11 ⁰ 3 | 0 ⁰ 57 | 29 ⁰ 59 | 19 ⁰ 6 | 8 ⁰ 5 | 25 ⁰ 26 | 18 ⁰ 2 | 17 ⁰ 8 | 15 ⁰ 57 | 0 ⁰ 10 | 24 ⁰ 31 | T 14 |
| F 15 | 7 38 29 | 25 ⁰ 8'08 | 21 ⁰ 9 | 2 ⁰ 8 | 12 ⁰ 0 | 0 ⁰ 47 | 29 ⁰ 54 | 19 ⁰ 11 | 8 ⁰ 3 | 25 ⁰ 27 | 18 ⁰ 4 | 16 ⁰ 57 | 15 ⁰ 54 | 0 ⁰ 17 | 24 ⁰ 28 | F 15 |
| S 16 | 7 42 25 | 26 ⁰ 9'14 | 3 ⁰ 54 | 3 ⁰ 50 | 12 ⁰ 56 | 0 ⁰ 36 | 29 ⁰ 49 | 19 ⁰ 17 | 8 ⁰ 0 | 25 ⁰ 27 | 18 ⁰ 6 | 16 ⁰ 44 | 15 ⁰ 51 | 0 ⁰ 24 | 24 ⁰ 24 | S 16 |
| S 17 | 7 46 22 | 27 ⁰ 10'20 | 16 ⁰ 26 | 5 ⁰ 33 | 13 ⁰ 52 | 0 ⁰ 24 | 29 ⁰ 43 | 19 ⁰ 22 | 7 ⁰ 58 | 25 ⁰ 27 | 18 ⁰ 7 | 16 ⁰ 31 | 15 ⁰ 47 | 0 ⁰ 30 | 24 ⁰ 21 | S 17 |
| M 18 | 7 50 18 | 28 ⁰ 11'25 | 28 ⁰ 44 | 7 ⁰ 16 | 14 ⁰ 47 | 0 ⁰ 11 | 29 ⁰ 37 | 19 ⁰ 28 | 7 ⁰ 55 | 25 ⁰ 28 | 18 ⁰ 9 | 16 ⁰ 18 | 15 ⁰ 44 | 0 ⁰ 37 | 24 ⁰ 18 | M 18 |
| T 19 | 7 54 15 | 29 ⁰ 12'29 | 10 ⁰ 41 | 8 ⁰ 59 | 15 ⁰ 42 | 29 ⁰ 58 | 29 ⁰ 32 | 19 ⁰ 33 | 7 ⁰ 53 | 25 ⁰ 28 | 18 ⁰ 11 | 16 ⁰ 7 | 15 ⁰ 41 | 0 ⁰ 44 | 24 ⁰ 15 | T 19 |
| W 20 | 7 58 11 | 0 ⁰ 13'33 | 22 ⁰ 47 | 10 ⁰ 42 | 16 ⁰ 36 | 29 ⁰ 43 | 29 ⁰ 26 | 19 ⁰ 39 | 7 ⁰ 50 | 25 ⁰ 28 | 18 ⁰ 12 | 15 ⁰ 59 | 15 ⁰ 38 | 0 ⁰ 50 | 24 ⁰ 12 | W 20 |
| T 21 | 8 2 8 | 1 ⁰ 14'35 | 4 ⁰ Y38 | 12 ⁰ 24 | 17 ⁰ 29 | 29 ⁰ 28 | 29 ⁰ 19 | 19 ⁰ 45 | 7 ⁰ 47 | 25 ⁰ 28 | 18 ⁰ 14 | 15 ⁰ 53 | 15 ⁰ 35 | 0 ⁰ 57 | 24 ⁰ 9 | T 21 |
| F 22 | 8 6 5 | 2 ⁰ 15'36 | 16 ⁰ 26 | 14 ⁰ 7 | 18 ⁰ 22 | 29 ⁰ 13 | 29 ⁰ 13 | 19 ⁰ 50 | 7 ⁰ 45 | 25 ⁰ 28 | 18 ⁰ 16 | 15 ⁰ 50 | 15 ⁰ 32 | 1 ⁰ 4 | 24 ⁰ 7 | F 22 |
| S 23 | 8 10 1 | 3 ⁰ 16'36 | 28 ⁰ 17 | 15 ⁰ 49 | 19 ⁰ 14 | 28 ⁰ 56 | 29 ⁰ 7 | 19 ⁰ 56 | 7 ⁰ 42 | 25 ⁰ 29 | 18 ⁰ 17 | 15 ⁰ 48 | 15 ⁰ 28 | 1 ⁰ 10 | 24 ⁰ 4 | S 23 |
| S 24 | 8 13 58 | 4 ⁰ 17'35 | 10 ⁰ 816 | 17 ⁰ 31 | 20 ⁰ 5 | 28 ⁰ 39 | 29 ⁰ 0 | 20 ⁰ 2 | 7 ⁰ 40 | 25 ⁰ 29 | 18 ⁰ 19 | 15 ⁰ 48 | 15 ⁰ 25 | 1 ⁰ 17 | 24 ⁰ 1 | S 24 |
| M 25 | 8 17 54 | 5 ⁰ 18'33 | 22 ⁰ 29 | 19 ⁰ 11 | 20 ⁰ 55 | 28 ⁰ 21 | 28 ⁰ 53 | 20 ⁰ 8 | 7 ⁰ 37 | 25 ⁰ 29 | 18 ⁰ 21 | 15 ⁰ 48 | 15 ⁰ 22 | 1 ⁰ 24 | 23 ⁰ 59 | M 25 |
| T 26 | 8 21 51 | 6 ⁰ 19'30 | 5 ⁰ II 0 | 20 ⁰ 51 | 21 ⁰ 45 | 28 ⁰ 3 | 28 ⁰ 47 | 20 ⁰ 14 | 7 ⁰ 34 | 25 ⁰ R29 | 18 ⁰ 23 | 15 ⁰ 47 | 15 ⁰ 19 | 1 ⁰ 30 | 23 ⁰ 56 | T 26 |
| W 27 | 8 25 47 | 7 ⁰ 20'26 | 17 ⁰ 56 | 22 ⁰ 29 | 22 ⁰ 33 | 27 ⁰ 44 | 28 ⁰ 40 | 20 ⁰ 20 | 7 ⁰ 32 | 25 ⁰ 29 | 18 ⁰ 24 | 15 ⁰ 44 | 15 ⁰ 16 | 1 ⁰ 37 | 23 ⁰ 53 | W 27 |
| T 28 | 8 29 44 | 8 ⁰ 21'20 | 1 ⁰ 517 | 24 ⁰ 5 | 23 ⁰ 21 | 27 ⁰ 24 | 28 ⁰ 33 | 20 ⁰ 26 | 7 ⁰ 29 | 25 ⁰ 29 | 18 ⁰ 26 | 15 ⁰ 37 | 15 ⁰ 12 | 1 ⁰ 44 | 23 ⁰ 51 | T 28 |
| F 29 | 8 33 40 | 9 ⁰ 22'13 | 15 ⁰ 7 | 25 ⁰ 38 | 24 ⁰ 8 | 27 ⁰ 4 | 28 ⁰ 26 | 20 ⁰ 33 | 7 ⁰ 26 | 25 ⁰ 29 | 18 ⁰ 28 | 15 ⁰ 29 | 15 ⁰ 9 | 1 ⁰ 50 | 23 ⁰ 49 | F 29 |
| S 30 | 8 37 37 | 10 ⁰ 23'05 | 29 ⁰ 22 | 27 ⁰ 9 | 24 ⁰ 54 | 26 ⁰ 44 | 28 ⁰ 19 | 20 ⁰ 39 | 7 ⁰ 24 | 25 ⁰ 29 | 18 ⁰ 30 | 15 ⁰ 18 | 15 ⁰ 6 | 1 ⁰ 57 | 23 ⁰ 46 | S 30 |
| S 31 | 8 41 34 | 11 ⁰ 23'56 | 13 ⁰ 57 | 28 ⁰ 37 | 25 ⁰ 43 | 26 ⁰ 23 | 28 ⁰ 11 | 20 ⁰ 45 | 7 ⁰ 21 | 25 ⁰ 28 | 18 ⁰ 31 | 15 ⁰ 18 | 15 ⁰ 3 | 2 ⁰ Y 4 | 23 ⁰ II44 | 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 | 23s 1 | 19n26 | 3s51 | 24s51 | 1s41 | 13s19 | 1s12 | 14n 4 | 3n31 | 12n10 | 1n 3 | 6s41 | 2s 7 | 18n46 | 0n40 | 8s12 | 1n42 | 23s59 | 8s53 | 17s15 | 16s50 | 3n 0 | 16n53 | 6s30 | | | |
| S 2 | 22 56 | 17 20 | 4 32 | 24 47 | 1 45 | 12 53 | 1 8 | 14 7 | 3 34 | 12 11 | 1 4 | 6 39 | 2 7 | 18 46 | 0 40 | 8 13 | 1 42 | 23 58 | 8 53 | 17 13 | 16 49 | 3 2 | 16 53 | 6 30 | | | |
| S 3 | 22 50 | 14 10 | 4 58 | 24 42 | 1 49 | 12 27 | 1 3 | 14 9 | 3 36 | 12 12 | 1 4 | 6 37 | 2 7 | 18 47 | 0 40 | 8 13 | 1 43 | 23 58 | 8 53 | 17 10 | 16 48 | 3 4 | 16 53 | 6 30 | | | |
| M 4 | 22 44 | 10 8 | 5 5 | 24 36 | 1 52 | 12 0 | 0 58 | 14 12 | 3 38 | 12 14 | 1 4 | 6 35 | 2 7 | 18 48 | 0 40 | 8 13 | 1 43 | 23 57 | 8 53 | 17 7 | 16 47 | 3 6 | 16 52 | 6 30 | | | |
| T 5 | 22 38 | 5 30 | 4 53 | 24 28 | 1 55 | 11 33 | 0 53 | 14 14 | 3 40 | 12 15 | 1 4 | 6 33 | 2 7 | 18 48 | 0 40 | 8 13 | 1 43 | 23 57 | 8 53 | 17 5 | 16 46 | 3 8 | 16 52 | 6 30 | | | |
| W 6 | 22 31 | 0 35 | 4 22 | 24 19 | 1 57 | 11 6 | 0 47 | 14 18 | 3 43 | 12 17 | 1 5 | 6 31 | 2 7 | 18 49 | 0 40 | 8 14 | 1 43 | 23 56 | 8 53 | 17 4 | 16 45 | 3 10 | 16 52 | 6 30 | | | |
| T 7 | 22 23 | 4s21 | 3 35 | 24 8 | 2 0 | 10 39 | 0 42 | 14 21 | 3 45 | 12 18 | 1 5 | 6 29 | 2 6 | 18 50 | 0 40 | 8 14 | 1 43 | 23 56 | 8 53 | 17 3 | 16 44 | 3 13 | 16 52 | 6 30 | | | |
| F 8 | 22 15 | 9 1 | 2 36 | 23 55 | 2 2 | 10 11 | 0 36 | 14 25 | 3 47 | 12 20 | 1 5 | 6 27 | 2 6 | 18 50 | 0 40 | 8 14 | 1 43 | 23 55 | 8 52 | 17 3 | 16 43 | 3 15 | 16 52 | 6 30 | | | |
| S 9 | 22 7 | 13 8 | 1 28 | 23 41 | 2 3 | 9 44 | 0 30 | 14 29 | 3 49 | 12 22 | 1 5 | 6 25 | 2 6 | 18 51 | 0 40 | 8 14 | 1 43 | 23 54 | 8 52 | 17 3 | 16 42 | 3 17 | 16 52 | 6 30 | | | |
| S 10 | 21 58 | 16 28 | 0 15 | 23 26 | 2 5 | 9 16 | 0 24 | 14 33 | 3 52 | 12 24 | 1 6 | 6 23 | 2 6 | 18 52 | 0 40 | 8 14 | 1 43 | 23 54 | 8 52 | 17 3 | 16 41 | 3 19 | 16 52 | 6 29 | | | |
| M11 | 21 49 | 18 51 | 0n57 | 23 9 | 2 6 | 8 49 | 0 18 | 14 38 | 3 54 | 12 26 | 1 6 | 6 21 | 2 6 | 18 52 | 0 40 | 8 14 | 1 43 | 23 53 | 8 52 | 17 3 | 16 41 | 3 21 | 16 52 | 6 29 | | | |
| T 12 | 21 39 | 20 8 | 2 6 | 22 50 | 2 6 | 8 21 | 0 12 | 14 43 | 3 56 | 12 28 | 1 6 | 6 19 | 2 6 | 18 53 | 0 40 | 8 15 | 1 43 | 23 53 | 8 52 | 17 2 | 16 40 | 3 23 | 16 53 | 6 29 | | | |
| W13 | 21 29 | 20 16 | 3 6 | 22 29 | 2 6 | 7 53 | 0 6 | 14 48 | 3 58 | 12 29 | 1 6 | 6 17 | 2 6 | 18 54 | 0 40 | 8 15 | 1 43 | 23 52 | 8 52 | 17 0 | 16 39 | 3 25 | 16 53 | 6 29 | | | |
| T 14 | 21 19 | 19 17 | 3 56 | 22 7 | 2 6 | 7 25 | 0n 1 | 14 53 | 4 0 | 12 32 | 1 7 | 6 14 | 2 5 | 18 54 | 0 40 | 8 15 | 1 43 | 23 52 | 8 52 | 16 58 | 16 38 | 3 27 | 16 53 | 6 29 | | | |
| F 15 | 21 8 | 17 19 | 4 32 | 21 44 | 2 5 | 6 57 | 0 8 | 14 59 | 4 2 | 12 34 | 1 7 | 6 12 | 2 5 | 18 55 | 0 40 | 8 15 | 1 43 | 23 51 | 8 52 | 16 55 | 16 37 | 3 29 | 16 53 | 6 29 | | | |
| S 16 | 20 56 | 14 32 | 4 54 | 21 18 | 2 3 | 6 29 | 0 15 | 15 5 | 4 4 | 12 36 | 1 7 | 6 10 | 2 5 | 18 56 | 0 40 | 8 15 | 1 43 | 23 50 | 8 52 | 16 51 | 16 36 | 3 31 | 16 53 | 6 28 | | | |
| S 17 | 20 45 | 11 8 | 5 1 | 20 52 | 2 1 | 6 1 | 0 22 | 15 11 | 4 6 | 12 38 | 1 7 | 6 8 | 2 5 | 18 56 | 0 40 | 8 15 | 1 43 | 23 50 | 8 52 | 16 48 | 16 35 | 3 34 | 16 53 | 6 28 | | | |
| M18 | 20 33 | 7 19 | 4 55 | 20 23 | 1 59 | 5 33 | 0 29 | 15 17 | 4 8 | 12 40 | 1 7 | 6 5 | 2 5 | 18 57 | 0 40 | 8 15 | 1 43 | 23 49 | 8 52 | 16 44 | 16 34 | 3 36 | 16 53 | 6 28 | | | |
| T 19 | 20 20 | 3 16 | 4 34 | 19 54 | 1 56 | 5 5 | 0 36 | 15 24 | 4 10 | 12 42 | 1 8 | 6 3 | 2 5 | 18 58 | 0 40 | 8 15 | 1 44 | 23 49 | 8 52 | 16 41 | 16 33 | 3 38 | 16 53 | 6 28 | | | |
| W20 | 20 7 | 0n51 | 4 2 | 19 22 | 1 52 | 5 37 | 0 44 | 15 30 | 4 12 | 12 45 | 1 8 | 6 1 | 2 5 | 18 58 | 0 40 | 8 15 | 1 44 | 23 48 | 8 52 | 16 38 | 16 32 | 3 40 | 16 53 | 6 27 | | | |
| T 21 | 19 54 | 4 54 | 3 20 | 18 49 | 1 48 | 4 9 | 0 51 | 15 37 | 4 14 | 12 47 | 1 8 | 5 58 | 2 5 | 18 59 | 0 40 | 8 15 | 1 44 | 23 48 | 8 52 | 16 37 | 16 31 | 3 42 | 16 53 | 6 27 | | | |
| F 22 | 19 41 | 8 46 | 2 29 | 18 15 | 1 43 | 3 42 | 0 59 | 15 45 | 4 15 | 12 49 | 1 8 | 5 56 | 2 4 | 19 0 | 0 40 | 8 15 | 1 44 | 23 47 | 8 52 | 16 36 | 16 30 | 3 44 | 16 53 | 6 27 | | | |
| S 23 | 19 27 | 12 18 | 1 32 | 17 40 | 1 37 | 3 14 | 1 7 | 15 52 | 4 17 | 12 52 | 1 9 | 5 54 | 2 4 | 19 0 | 0 40 | 8 15 | 1 44 | 23 47 | 8 52 | 16 35 | 16 29 | 3 46 | 16 54 | 6 27 | | | |
| S 24 | 19 12 | 15 23 | 0 29 | 17 3 | 1 31 | 2 47 | 1 15 | 15 59 | 4 19 | 12 54 | 1 9 | 5 51 | 2 4 | 19 1 | 0 40 | 8 15 | 1 44 | 23 46 | 8 52 | 16 35 | 16 29 | 3 48 | 16 54 | 6 26 | | | |
| M25 | 18 58 | 17 50 | 0s35 | 16 25 | 1 24 | 2 19 | 1 24 | 16 7 | 4 20 | 12 57 | 1 9 | 5 49 | 2 4 | 19 2 | 0 40 | 8 15 | 1 44 | 23 45 | 8 52 | 16 35 | 16 28 | 3 50 | 16 54 | 6 26 | | | |
| T 26 | 18 43 | 19 31 | 1 40 | 15 46 | 1 16 | 1 52 | 1 32 | 16 15 | 4 22 | 12 59 | 1 9 | 5 46 | 2 4 | 19 2 | 0 40 | 8 15 | 1 44 | 23 45 | 8 52 | 16 35 | 16 27 | 3 52 | 16 54 | 6 26 | | | |
| W27 | 18 27 | 20 14 | 2 41 | 15 6 | 1 8 | 1 25 | 1 41 | 16 23 | 4 23 | 13 2 | 1 9 | 5 44 | 2 4 | 19 3 | 0 40 | 8 15 | 1 44 | 23 44 | 8 52 | 16 34 | 16 26 | 3 54 | 16 54 | 6 26 | | | |
| T 28 | 18 12 | 19 52 | 3 36 | 14 26 | 0 58 | 0 58 | 1 50 | 16 31 | 4 24 | 13 5 | 1 9 | 5 41 | 2 4 | 19 4 | 0 40 | 8 15 | 1 44 | 23 44 | 8 52 | 16 32 | 16 25 | 3 56 | 16 54 | 6 25 | | | |
| F 29 | 17 56 | 18 18 | 4 20 | 13 45 | 0 48 | 0 31 | 1 59 | 16 39 | 4 25 | 13 7 | 1 10 | 5 39 | 2 4 | 19 4 | 0 40 | 8 15 | 1 44 | 23 43 | 8 52 | 16 30 | 16 24 | 3 59 | 16 55 | 6 25 | | | |
| S 30 | 17 39 | 15 36 | 4 49 | 13 3 | 0 37 | 0 5 | 2 8 | 16 47 | 4 27 | 13 10 | 1 10 | 5 36 | 2 4 | 19 5 | 0 40 | 8 15 | 1 44 | 23 43 | 8 52 | 16 26 | 16 23 | 4 1 | 16 55 | 6 25 | | | |
| S 31 | 17s23 | 11n52 | 5s 0 | 12s22 | 0s25 | 0n21 | 2n17 | 16n56 | 4n28 | 13n13 | 1n10 | 5s34 | 2s 3 | 19n 6 | 0n40 | 8s15 | 1n44 | 23s42 | 8s52 | 16s23 | 16s22 | 4n 3 | 16n55 | 6s24 | | | |

ASTRODIENST EPHEMERIS for the year 1790

geocentric

FEBRUARY 1790

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♂ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|-----------------------|---------------------|---------------------|--------------------|---------------------|---------------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|--------------------|----------------------|------|
| M 1 | 8 45 30 | 12 ²² 44'5 | 28 ⁰ 46 | 29 ²² 59 | 26 ¹ 22 | 26 ⁰ R 1 | 28 ⁰ R 4 | 20 ¹ 51 | 7 ⁰ R19 | 25 ⁰ R28 | 18 ²² 33 | 14 ⁰ R53 | 15 ⁰ 0 | 2 ⁰ Y10 | 23 ⁰ R42 | M 1 |
| T 2 | 8 49 27 | 13 ⁰ 25'33 | 13 ⁰ 38 | 1 ⁰ 19 | 27 ⁰ 5 | 25 ⁰ Ω39 | 27 ⁰ Ω57 | 20 ⁰ 58 | 7 ⁰ Ω16 | 25 ⁰ Ω28 | 18 ⁰ 35 | 14 ⁰ Ω43 | 14 ⁰ 57 | 2 ⁰ 17 | 23 ⁰ II40 | T 2 |
| W 3 | 8 53 23 | 14 ⁰ 26'21 | 28 ⁰ 27 | 2 ⁰ 32 | 27 ⁰ 46 | 25 ⁰ 16 | 27 ⁰ 49 | 21 ⁰ 4 | 7 ⁰ 13 | 25 ⁰ 28 | 18 ⁰ 37 | 14 ⁰ 35 | 14 ⁰ 53 | 2 ⁰ 24 | 23 ⁰ 38 | W 3 |
| T 4 | 8 57 20 | 15 ⁰ 27'07 | 13 ⁰ 4 | 3 ⁰ 39 | 28 ⁰ 26 | 24 ⁰ 54 | 27 ⁰ 42 | 21 ⁰ 11 | 7 ⁰ 11 | 25 ⁰ 27 | 18 ⁰ 38 | 14 ⁰ 30 | 14 ⁰ 50 | 2 ⁰ 31 | 23 ⁰ 36 | T 4 |
| F 5 | 9 1 16 | 16 ⁰ 27'52 | 27 ⁰ 25 | 4 ⁰ 39 | 29 ⁰ 5 | 24 ⁰ 31 | 27 ⁰ 34 | 21 ⁰ 17 | 7 ⁰ 8 | 25 ⁰ 27 | 18 ⁰ 40 | 14 ⁰ 28 | 14 ⁰ 47 | 2 ⁰ 37 | 23 ⁰ 34 | F 5 |
| S 6 | 9 5 13 | 17 ⁰ 28'37 | 11 ⁰ 28 | 5 ⁰ 32 | 29 ⁰ 43 | 24 ⁰ 7 | 27 ⁰ 26 | 21 ⁰ 24 | 7 ⁰ 6 | 25 ⁰ 27 | 18 ⁰ 42 | 14 ⁰ 27 | 14 ⁰ 44 | 2 ⁰ 44 | 23 ⁰ 33 | S 6 |
| S 7 | 9 9 9 | 18 ⁰ 29'20 | 25 ⁰ 13 | 6 ⁰ 16 | 0 ⁰ Y20 | 23 ⁰ 44 | 27 ⁰ 19 | 21 ⁰ 30 | 7 ⁰ 3 | 25 ⁰ 26 | 18 ⁰ 44 | 14 ⁰ 27 | 14 ⁰ 41 | 2 ⁰ 51 | 23 ⁰ 31 | S 7 |
| M 8 | 9 13 6 | 19 ⁰ 30'03 | 8 ⁰ 24 | 6 ⁰ 51 | 0 ⁰ 55 | 23 ⁰ 20 | 27 ⁰ 11 | 21 ⁰ 37 | 7 ⁰ 1 | 25 ⁰ 26 | 18 ⁰ 45 | 14 ⁰ 26 | 14 ⁰ 38 | 2 ⁰ 57 | 23 ⁰ 29 | M 8 |
| T 9 | 9 17 3 | 20 ⁰ 30'44 | 21 ⁰ 54 | 7 ⁰ 17 | 1 ⁰ 29 | 22 ⁰ 56 | 27 ⁰ 3 | 21 ⁰ 44 | 6 ⁰ 58 | 25 ⁰ 26 | 18 ⁰ 47 | 14 ⁰ 23 | 14 ⁰ 34 | 3 ⁰ 4 | 23 ⁰ 28 | T 9 |
| W10 | 9 20 59 | 21 ⁰ 31'24 | 4 ⁰ 54 | 7 ⁰ 32 | 2 ⁰ 1 | 22 ⁰ 32 | 26 ⁰ 55 | 21 ⁰ 51 | 6 ⁰ 55 | 25 ⁰ 25 | 18 ⁰ 49 | 14 ⁰ 17 | 14 ⁰ 31 | 3 ⁰ 11 | 23 ⁰ 26 | W10 |
| T 11 | 9 24 56 | 22 ⁰ 32'03 | 17 ⁰ 41 | 7 ⁰ R37 | 2 ⁰ 31 | 22 ⁰ 8 | 26 ⁰ 47 | 21 ⁰ 57 | 6 ⁰ 53 | 25 ⁰ 25 | 18 ⁰ 51 | 14 ⁰ 9 | 14 ⁰ 28 | 3 ⁰ 17 | 23 ⁰ 25 | T 11 |
| F 12 | 9 28 52 | 23 ⁰ 32'41 | 0 ⁰ 19 | 7 ⁰ 31 | 3 ⁰ 0 | 21 ⁰ 44 | 26 ⁰ 39 | 22 ⁰ 4 | 6 ⁰ 50 | 25 ⁰ 24 | 18 ⁰ 53 | 13 ⁰ 57 | 14 ⁰ 25 | 3 ⁰ 24 | 23 ⁰ 24 | F 12 |
| S 13 | 9 32 49 | 24 ⁰ 33'17 | 12 ⁰ 46 | 7 ⁰ 15 | 3 ⁰ 28 | 21 ⁰ 20 | 26 ⁰ 32 | 22 ⁰ 11 | 6 ⁰ 48 | 25 ⁰ 23 | 18 ⁰ 54 | 13 ⁰ 43 | 14 ⁰ 22 | 3 ⁰ 31 | 23 ⁰ 22 | S 13 |
| S 14 | 9 36 45 | 25 ⁰ 33'52 | 25 ⁰ 3 | 6 ⁰ 49 | 3 ⁰ 54 | 20 ⁰ 57 | 26 ⁰ 24 | 22 ⁰ 18 | 6 ⁰ 46 | 25 ⁰ 23 | 18 ⁰ 56 | 13 ⁰ 29 | 14 ⁰ 18 | 3 ⁰ 37 | 23 ⁰ 21 | S 14 |
| M15 | 9 40 42 | 26 ⁰ 34'25 | 7 ⁰ 11 | 6 ⁰ 14 | 4 ⁰ 18 | 20 ⁰ 33 | 26 ⁰ 16 | 22 ⁰ 25 | 6 ⁰ 43 | 25 ⁰ 22 | 18 ⁰ 58 | 13 ⁰ 15 | 14 ⁰ 15 | 3 ⁰ 44 | 23 ⁰ 20 | M15 |
| T 16 | 9 44 38 | 27 ⁰ 34'57 | 19 ⁰ 11 | 5 ⁰ 29 | 4 ⁰ 40 | 20 ⁰ 9 | 26 ⁰ 8 | 22 ⁰ 32 | 6 ⁰ 41 | 25 ⁰ 21 | 19 ⁰ 0 | 13 ⁰ 3 | 14 ⁰ 12 | 3 ⁰ 51 | 23 ⁰ 19 | T 16 |
| W17 | 9 48 35 | 28 ⁰ 35'26 | 1 ⁰ Y 4 | 4 ⁰ 38 | 5 ⁰ 0 | 19 ⁰ 46 | 26 ⁰ 0 | 22 ⁰ 39 | 6 ⁰ 38 | 25 ⁰ 21 | 19 ⁰ 1 | 12 ⁰ 53 | 14 ⁰ 9 | 3 ⁰ 57 | 23 ⁰ 18 | W17 |
| T 18 | 9 52 32 | 29 ⁰ 35'54 | 12 ⁰ 53 | 3 ⁰ 41 | 5 ⁰ 18 | 19 ⁰ 23 | 25 ⁰ 52 | 22 ⁰ 46 | 6 ⁰ 36 | 25 ⁰ 20 | 19 ⁰ 3 | 12 ⁰ 46 | 14 ⁰ 6 | 4 ⁰ 4 | 23 ⁰ 17 | T 18 |
| F 19 | 9 56 28 | 0 ⁰ 36'21 | 24 ⁰ 40 | 2 ⁰ 39 | 5 ⁰ 34 | 19 ⁰ 1 | 25 ⁰ 44 | 22 ⁰ 53 | 6 ⁰ 34 | 25 ⁰ 19 | 19 ⁰ 5 | 12 ⁰ 42 | 14 ⁰ 3 | 4 ⁰ 11 | 23 ⁰ 17 | F 19 |
| S 20 | 10 0 25 | 1 ⁰ 36'45 | 6 ⁰ 29 | 1 ⁰ 34 | 5 ⁰ 48 | 18 ⁰ 38 | 25 ⁰ 36 | 23 ⁰ 0 | 6 ⁰ 31 | 25 ⁰ 18 | 19 ⁰ 7 | 12 ⁰ 41 | 13 ⁰ 59 | 4 ⁰ 17 | 23 ⁰ 16 | S 20 |
| S 21 | 10 4 21 | 2 ⁰ 37'08 | 18 ⁰ 26 | 0 ⁰ 28 | 6 ⁰ 0 | 18 ⁰ 17 | 25 ⁰ 28 | 23 ⁰ 7 | 6 ⁰ 29 | 25 ⁰ 18 | 19 ⁰ 8 | 12 ⁰ D41 | 13 ⁰ 56 | 4 ⁰ 24 | 23 ⁰ 16 | S 21 |
| M22 | 10 8 18 | 3 ⁰ 37'28 | 0 ⁰ II36 | 29 ⁰ 23 | 6 ⁰ 10 | 17 ⁰ 55 | 25 ⁰ 21 | 23 ⁰ 14 | 6 ⁰ 27 | 25 ⁰ 17 | 19 ⁰ 10 | 12 ⁰ R41 | 13 ⁰ 53 | 4 ⁰ 31 | 23 ⁰ 15 | M22 |
| T 23 | 10 12 14 | 4 ⁰ 37'47 | 13 ⁰ 4 | 28 ⁰ 20 | 6 ⁰ 17 | 17 ⁰ 34 | 25 ⁰ 13 | 23 ⁰ 22 | 6 ⁰ 24 | 25 ⁰ 16 | 19 ⁰ 12 | 12 ⁰ 41 | 13 ⁰ 50 | 4 ⁰ 37 | 23 ⁰ 15 | T 23 |
| W24 | 10 16 11 | 5 ⁰ 38'04 | 25 ⁰ 55 | 27 ⁰ 20 | 6 ⁰ 22 | 17 ⁰ 14 | 25 ⁰ 5 | 23 ⁰ 29 | 6 ⁰ 22 | 25 ⁰ 15 | 19 ⁰ 13 | 12 ⁰ 39 | 13 ⁰ 47 | 4 ⁰ 44 | 23 ⁰ 15 | W24 |
| T 25 | 10 20 7 | 6 ⁰ 38'18 | 9 ⁰ Ω13 | 26 ⁰ 25 | 6 ⁰ 25 | 16 ⁰ 54 | 24 ⁰ 58 | 23 ⁰ 36 | 6 ⁰ 20 | 25 ⁰ 14 | 19 ⁰ 15 | 12 ⁰ 35 | 13 ⁰ 44 | 4 ⁰ 51 | 23 ⁰ 14 | T 25 |
| F 26 | 10 24 4 | 7 ⁰ 38'31 | 23 ⁰ 0 | 25 ⁰ 35 | 6 ⁰ R25 | 16 ⁰ 35 | 24 ⁰ 50 | 23 ⁰ 43 | 6 ⁰ 18 | 25 ⁰ 13 | 19 ⁰ 17 | 12 ⁰ 28 | 13 ⁰ 40 | 4 ⁰ 57 | 23 ⁰ 14 | F 26 |
| S 27 | 10 28 0 | 8 ⁰ 38'42 | 7 ⁰ Ω18 | 24 ⁰ 51 | 6 ⁰ 23 | 16 ⁰ 16 | 24 ⁰ 42 | 23 ⁰ 50 | 6 ⁰ 16 | 25 ⁰ 12 | 19 ⁰ 19 | 12 ⁰ 19 | 13 ⁰ 37 | 5 ⁰ 4 | 23 ⁰ D14 | S 27 |
| S 28 | 10 31 57 | 9 ⁰ 38'50 | 22 ⁰ Ω 1 | 24 ⁰ 14 | 6 ⁰ Y18 | 15 ⁰ Ω58 | 24 ⁰ Ω35 | 23 ⁰ 58 | 6 ⁰ Ω14 | 25 ⁰ Ω11 | 19 ⁰ Ω20 | 12 ⁰ Ω10 | 13 ⁰ Ω34 | 5 ⁰ Y11 | 23 ⁰ II14 | S 28 |

| Day | ☉ | ☽ | ♂ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | 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 | |
| M 1 | 17s 6 | 7n21 | 4s52 | 11s41 | 0s13 | 0n47 | 2n26 | 17n 4 | 4n29 | 13n15 | 1n10 | 5s31 | 2s 3 | 19n 6 | 0n40 | M 1 |
| T 2 | 16 49 | 2 23 | 4 23 | 11 1 | 0n 1 | 1 13 | 2 36 | 17 12 | 4 29 | 13 18 | 1 10 | 5 28 | 2 3 | 19 7 | 0 40 | T 2 |
| W 3 | 16 31 | 2s42 | 3 37 | 10 21 | 0 15 | 1 38 | 2 45 | 17 21 | 4 30 | 13 21 | 1 10 | 5 26 | 2 3 | 19 8 | 0 40 | W 3 |
| T 4 | 16 13 | 7 35 | 2 38 | 9 43 | 0 29 | 2 3 | 2 55 | 17 29 | 4 31 | 13 23 | 1 11 | 5 23 | 2 3 | 19 8 | 0 40 | T 4 |
| F 5 | 15 55 | 11 57 | 1 29 | 9 7 | 0 45 | 2 28 | 3 5 | 17 37 | 4 31 | 13 26 | 1 11 | 5 21 | 2 3 | 19 9 | 0 40 | F 5 |
| S 6 | 15 37 | 15 32 | 0 16 | 8 33 | 1 0 | 2 52 | 3 15 | 17 46 | 4 32 | 13 29 | 1 11 | 5 18 | 2 3 | 19 10 | 0 40 | S 6 |
| S 7 | 15 18 | 18 10 | 0n57 | 8 2 | 1 17 | 3 16 | 3 25 | 17 54 | 4 32 | 13 32 | 1 11 | 5 15 | 2 3 | 19 10 | 0 40 | S 7 |
| M 8 | 14 59 | 19 44 | 2 4 | 7 34 | 1 33 | 3 40 | 3 36 | 18 2 | 4 32 | 13 35 | 1 11 | 5 12 | 2 3 | 19 11 | 0 40 | M 8 |
| T 9 | 14 40 | 20 9 | 3 4 | 7 9 | 1 49 | 4 3 | 3 46 | 18 10 | 4 32 | 13 37 | 1 11 | 5 10 | 2 3 | 19 12 | 0 40 | T 9 |
| W10 | 14 21 | 19 30 | 3 53 | 6 49 | 2 6 | 4 25 | 3 57 | 18 18 | 4 32 | 13 40 | 1 11 | 5 7 | 2 3 | 19 12 | 0 40 | W10 |
| T 11 | 14 1 | 17 51 | 4 29 | 6 32 | 2 21 | 4 47 | 4 7 | 18 26 | 4 32 | 13 43 | 1 11 | 5 4 | 2 3 | 19 13 | 0 40 | T 11 |
| F 12 | 13 41 | 15 21 | 4 52 | 6 20 | 2 37 | 5 9 | 4 18 | 18 34 | 4 32 | 13 46 | 1 12 | 5 2 | 2 3 | 19 14 | 0 40 | F 12 |
| S 13 | 13 21 | 12 12 | 5 0 | 6 13 | 2 51 | 5 29 | 4 29 | 18 41 | 4 32 | 13 49 | 1 12 | 4 59 | 2 3 | 19 14 | 0 40 | S 13 |
| S 14 | 13 1 | 8 34 | 4 54 | 6 10 | 3 4 | 5 50 | 4 40 | 18 49 | 4 31 | 13 51 | 1 12 | 4 56 | 2 2 | 19 15 | 0 40 | S 14 |
| M15 | 12 40 | 4 37 | 4 35 | 6 13 | 3 15 | 6 9 | 4 51 | 18 56 | 4 31 | 13 54 | 1 12 | 4 53 | 2 2 | 19 15 | 0 40 | M15 |
| T 16 | 12 20 | 0 33 | 4 4 | 6 19 | 3 25 | 6 28 | 5 2 | 19 3 | 4 30 | 13 57 | 1 12 | 4 50 | 2 2 | 19 16 | 0 40 | T 16 |
| W17 | 11 59 | 3n31 | 3 22 | 6 31 | 3 33 | 6 46 | 5 13 | 19 10 | 4 29 | 14 0 | 1 12 | 4 48 | 2 2 | 19 17 | 0 40 | W17 |
| T 18 | 11 38 | 7 25 | 2 31 | 6 46 | 3 39 | 7 4 | 5 24 | 19 16 | 4 29 | 14 3 | 1 12 | 4 45 | 2 2 | 19 17 | 0 40 | T 18 |
| F 19 | 11 16 | 11 2 | 1 34 | 7 4 | 3 43 | 7 20 | 5 35 | 19 22 | 4 28 | 14 5 | 1 12 | 4 42 | 2 2 | 19 18 | 0 40 | F 19 |
| S 20 | 10 55 | 14 13 | 0 33 | 7 26 | 3 44 | 7 36 | 5 46 | 19 28 | 4 27 | 14 8 | 1 12 | 4 39 | 2 2 | 19 18 | 0 40 | S 20 |
| S 21 | 10 33 | 16 51 | 0s31 | 7 50 | 3 43 | 7 51 | 5 57 | 19 34 | 4 25 | 14 11 | 1 12 | 4 36 | 2 2 | 19 19 | 0 40 | S 21 |
| M22 | 10 11 | 18 46 | 1 34 | 8 15 | 3 40 | 8 5 | 6 8 | 19 40 | 4 24 | 14 13 | 1 12 | 4 33 | 2 2 | 19 19 | 0 40 | M22 |
| T 23 | 9 49 | 19 50 | 2 34 | 8 42 | 3 35 | 8 18 | 6 19 | 19 45 | 4 23 | 14 16 | 1 12 | 4 30 | 2 2 | 19 20 | 0 40 | T 23 |
| W24 | 9 27 | 19 55 | 3 29 | 9 9 | 3 28 | 8 30 | 6 30 | 19 50 | 4 21 | 14 19 | 1 12 | 4 28 | 2 2 | 19 21 | 0 40 | W24 |
| T 25 | 9 5 | 18 55 | 4 14 | 9 36 | 3 20 | 8 40 | 6 40 | 19 55 | 4 20 | 14 21 | 1 13 | 4 25 | 2 2 | 19 21 | 0 40 | T 25 |
| F 26 | 8 43 | 16 47 | 4 47 | 10 2 | 3 9 | 8 50 | 6 51 | 19 59 | 4 18 | 14 24 | 1 13 | 4 22 | 2 2 | 19 22 | 0 40 | F 26 |
| S 27 | 8 20 | 13 35 | 5 3 | 10 27 | 2 58 | 8 58 | 7 1 | 20 3 | 4 17 | 14 26 | 1 13 | 4 19 | 2 2 | 19 22 | 0 40 | S 27 |
| S 28 | 7s58 | 9n28 | 4s59 | 10s51 | 2n46 | 9n 6 | 7n11 | 20n 7 | 4n15 | 14n29 | 1n13 | 4s16 | 2s 2 | 19n23 | 0n40 | S 28 |

Julian Day Number = 2374875.5, Delta T = 21.63 sec

Ecliptic obliquity = 23°27'53, Nutation = 0°00'14, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 21°48'34, Lahiri = 20°55'34Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1790

geocentric

MARCH 1790

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|----------|----------|----------|--------|--------|--------|-------|--------|--------|--------|--------|-------|---------|------|
| M 1 | 10 35 54 | 10°38'57 | 7°13' 3 | 23°R43 | 6°R11 | 15°R41 | 24°R28 | 24°H 5 | 6°R12 | 25°R10 | 19°R22 | 12°R 0 | 13°M31 | 5°Y17 | 23°II15 | M 1 |
| T 2 | 10 39 50 | 11°39'01 | 22°14 | 23°R20 | 6°Y 1 | 15°R24 | 24°R20 | 24°12 | 6°R10 | 25°R 9 | 19°24 | 11°M51 | 13°28 | 5°24 | 23°15 | T 2 |
| W 3 | 10 43 47 | 12°39'04 | 7°12 23 | 23° 3 | 5°48 | 15° 8 | 24°13 | 24°20 | 6° 8 | 25° 8 | 19°25 | 11°45 | 13°24 | 5°31 | 23°15 | W 3 |
| T 4 | 10 47 43 | 13°39'05 | 22°23 | 22°54 | 5°34 | 14°53 | 24° 6 | 24°27 | 6° 6 | 25° 7 | 19°27 | 11°41 | 13°21 | 5°37 | 23°16 | T 4 |
| F 5 | 10 51 40 | 14°39'05 | 7°14 4 | 22°D50 | 5°16 | 14°39 | 23°59 | 24°34 | 6° 4 | 25° 6 | 19°29 | 11°D39 | 13°18 | 5°44 | 23°16 | F 5 |
| S 6 | 10 55 36 | 15°39'03 | 21°22 | 22°53 | 4°56 | 14°25 | 23°52 | 24°42 | 6° 2 | 25° 5 | 19°30 | 11°40 | 13°15 | 5°51 | 23°17 | S 6 |
| S 7 | 10 59 33 | 16°38'59 | 5°16 16 | 23° 2 | 4°34 | 14°12 | 23°45 | 24°49 | 6° 0 | 25° 3 | 19°32 | 11°41 | 13°12 | 5°58 | 23°17 | S 7 |
| M 8 | 11 3 29 | 17°38'54 | 18°47 | 23°17 | 4°10 | 13°59 | 23°38 | 24°57 | 5°59 | 25° 2 | 19°33 | 11°R41 | 13° 9 | 6° 4 | 23°18 | M 8 |
| T 9 | 11 7 26 | 18°38'47 | 1°35 56 | 23°38 | 3°44 | 13°48 | 23°32 | 25° 4 | 5°57 | 25° 1 | 19°35 | 11°40 | 13° 5 | 6°11 | 23°19 | T 9 |
| W10 | 11 11 23 | 19°38'38 | 14°47 | 24° 3 | 3°15 | 13°37 | 23°25 | 25°11 | 5°55 | 25° 0 | 19°37 | 11°37 | 13° 2 | 6°18 | 23°20 | W10 |
| T 11 | 11 15 19 | 20°38'28 | 27°23 | 24°33 | 2°45 | 13°27 | 23°19 | 25°19 | 5°53 | 24°58 | 19°38 | 11°32 | 12°59 | 6°24 | 23°21 | T 11 |
| F 12 | 11 19 16 | 21°38'15 | 9°14 46 | 25° 7 | 2°13 | 13°18 | 23°13 | 25°26 | 5°52 | 24°57 | 19°40 | 11°24 | 12°56 | 6°31 | 23°22 | F 12 |
| S 13 | 11 23 12 | 22°38'01 | 21°59 | 25°46 | 1°40 | 13° 9 | 23° 7 | 25°34 | 5°50 | 24°56 | 19°41 | 11°15 | 12°53 | 6°38 | 23°23 | S 13 |
| S 14 | 11 27 9 | 23°37'46 | 4°14 4 | 26°29 | 1° 5 | 13° 1 | 23° 1 | 25°41 | 5°49 | 24°55 | 19°43 | 11° 6 | 12°49 | 6°44 | 23°24 | S 14 |
| M15 | 11 31 5 | 24°37'28 | 16° 2 | 27°15 | 0°29 | 12°55 | 22°55 | 25°49 | 5°47 | 24°53 | 19°44 | 10°57 | 12°46 | 6°51 | 23°26 | M15 |
| T 16 | 11 35 2 | 25°37'08 | 27°55 | 28° 5 | 29°15 53 | 12°49 | 22°49 | 25°56 | 5°46 | 24°52 | 19°46 | 10°49 | 12°43 | 6°58 | 23°27 | T 16 |
| W17 | 11 38 58 | 26°36'46 | 9°14 42 | 28°58 | 29°16 | 12°43 | 22°44 | 26° 4 | 5°44 | 24°50 | 19°47 | 10°42 | 12°40 | 7° 4 | 23°29 | W17 |
| T 18 | 11 42 55 | 27°36'22 | 21°32 | 29°53 | 28°38 | 12°39 | 22°38 | 26°11 | 5°43 | 24°49 | 19°49 | 10°38 | 12°37 | 7°11 | 23°30 | T 18 |
| F 19 | 11 46 52 | 28°35'56 | 3°12 20 | 0°15 52 | 28° 0 | 12°35 | 22°33 | 26°18 | 5°42 | 24°48 | 19°50 | 10°36 | 12°34 | 7°18 | 23°32 | F 19 |
| S 20 | 11 50 48 | 29°35'28 | 15°13 | 1°54 | 27°23 | 12°32 | 22°28 | 26°26 | 5°41 | 24°46 | 19°52 | 10°D36 | 12°30 | 7°24 | 23°34 | S 20 |
| S 21 | 11 54 45 | 0°34'57 | 27°12 | 2°58 | 26°45 | 12°30 | 22°23 | 26°33 | 5°39 | 24°45 | 19°53 | 10°37 | 12°27 | 7°31 | 23°35 | S 21 |
| M22 | 11 58 41 | 1°34'25 | 9°12 23 | 4° 4 | 26° 9 | 12°28 | 22°18 | 26°41 | 5°38 | 24°43 | 19°54 | 10°39 | 12°24 | 7°38 | 23°37 | M22 |
| T 23 | 12 2 38 | 2°33'50 | 21°50 | 5°13 | 25°33 | 12°D28 | 22°13 | 26°48 | 5°37 | 24°42 | 19°56 | 10°40 | 12°21 | 7°44 | 23°39 | T 23 |
| W24 | 12 6 34 | 3°33'13 | 4°12 37 | 6°24 | 24°58 | 12°28 | 22° 9 | 26°56 | 5°36 | 24°40 | 19°57 | 10°R41 | 12°18 | 7°51 | 23°41 | W24 |
| T 25 | 12 10 31 | 4°32'33 | 17°49 | 7°37 | 24°25 | 12°29 | 22° 5 | 27° 3 | 5°35 | 24°39 | 19°59 | 10°40 | 12°15 | 7°58 | 23°43 | T 25 |
| F 26 | 12 14 27 | 5°31'51 | 1°12 28 | 8°52 | 23°53 | 12°30 | 22° 0 | 27°10 | 5°34 | 24°37 | 20° 0 | 10°37 | 12°11 | 8° 4 | 23°46 | F 26 |
| S 27 | 12 18 24 | 6°31'07 | 15°36 | 10° 9 | 23°23 | 12°32 | 21°57 | 27°18 | 5°33 | 24°36 | 20° 1 | 10°34 | 12° 8 | 8°11 | 23°48 | S 27 |
| S 28 | 12 22 21 | 7°30'20 | 0°11 11 | 11°28 | 22°54 | 12°35 | 21°53 | 27°25 | 5°32 | 24°34 | 20° 2 | 10°29 | 12° 5 | 8°18 | 23°50 | S 28 |
| M29 | 12 26 17 | 8°29'31 | 15° 8 | 12°49 | 22°28 | 12°39 | 21°49 | 27°33 | 5°32 | 24°33 | 20° 4 | 10°24 | 12° 2 | 8°24 | 23°53 | M29 |
| T 30 | 12 30 14 | 9°28'40 | 0°12 20 | 14°11 | 22° 4 | 12°43 | 21°46 | 27°40 | 5°31 | 24°31 | 20° 5 | 10°20 | 11°59 | 8°31 | 23°55 | T 30 |
| W31 | 12 34 10 | 10°27'47 | 15°12 36 | 15°13 35 | 21°14 42 | 12°48 | 21°42 | 27°47 | 5°30 | 24°29 | 20° 6 | 10°17 | 11°55 | 8°38 | 23°58 | W31 |

| Day | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|------|-------|------|-------|------|------|------|-------|------|-------|------|------|------|-------|------|------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | lat |
| M 1 | 7s35 | 4n40 | 4s36 | 11s13 | 2n33 | 9n11 | 7n21 | 20n11 | 4n13 | 14n31 | 1n13 | 4s13 | 2s 2 | 19n23 | 0n40 | 8s 6 |
| T 2 | 7 12 | 0s28 | 3 52 | 11 33 | 2 20 | 9 16 | 7 30 | 20 14 | 4 11 | 14 34 | 1 13 | 4 10 | 2 2 | 19 24 | 0 40 | 8 6 |
| W 3 | 6 49 | 5 35 | 2 53 | 11 52 | 2 6 | 9 19 | 7 39 | 20 17 | 4 9 | 14 36 | 1 13 | 4 7 | 2 2 | 19 24 | 0 40 | 8 6 |
| T 4 | 6 26 | 10 17 | 1 41 | 12 8 | 1 52 | 9 21 | 7 47 | 20 20 | 4 8 | 14 39 | 1 13 | 4 4 | 2 2 | 19 25 | 0 40 | 8 5 |
| F 5 | 6 3 | 14 17 | 0 25 | 12 23 | 1 38 | 9 21 | 7 55 | 20 22 | 4 6 | 14 41 | 1 13 | 4 1 | 2 2 | 19 25 | 0 40 | 8 5 |
| S 6 | 5 40 | 17 17 | 0n52 | 12 35 | 1 24 | 9 20 | 8 2 | 20 24 | 4 3 | 14 43 | 1 13 | 3 58 | 2 2 | 19 25 | 0 40 | 8 4 |
| S 7 | 5 17 | 19 11 | 2 3 | 12 45 | 1 10 | 9 18 | 8 9 | 20 26 | 4 1 | 14 46 | 1 13 | 3 55 | 2 2 | 19 26 | 0 40 | 8 4 |
| M 8 | 4 53 | 19 54 | 3 6 | 12 53 | 0 56 | 9 14 | 8 15 | 20 28 | 3 59 | 14 48 | 1 13 | 3 53 | 2 2 | 19 26 | 0 40 | 8 3 |
| T 9 | 4 30 | 19 30 | 3 57 | 12 59 | 0 43 | 9 8 | 8 21 | 20 29 | 3 57 | 14 50 | 1 13 | 3 50 | 2 2 | 19 27 | 0 40 | 8 3 |
| W10 | 4 6 | 18 6 | 4 34 | 13 3 | 0 30 | 9 1 | 8 25 | 20 30 | 3 55 | 14 52 | 1 13 | 3 47 | 2 2 | 19 27 | 0 40 | 8 2 |
| T 11 | 3 43 | 15 50 | 4 58 | 13 5 | 0 17 | 8 53 | 8 29 | 20 31 | 3 53 | 14 54 | 1 13 | 3 44 | 2 2 | 19 28 | 0 40 | 8 2 |
| F 12 | 3 19 | 12 54 | 5 7 | 13 5 | 0 5 | 8 43 | 8 32 | 20 31 | 3 50 | 14 56 | 1 12 | 3 41 | 2 2 | 19 28 | 0 40 | 8 1 |
| S 13 | 2 56 | 9 26 | 5 2 | 13 3 | 0s 7 | 8 31 | 8 35 | 20 32 | 3 48 | 14 58 | 1 12 | 3 38 | 2 2 | 19 28 | 0 40 | 8 1 |
| S 14 | 2 32 | 5 38 | 4 43 | 13 0 | 0 19 | 8 19 | 8 36 | 20 32 | 3 46 | 15 0 | 1 12 | 3 35 | 2 2 | 19 29 | 0 40 | 8 0 |
| M15 | 2 8 | 1 39 | 4 12 | 12 54 | 0 30 | 8 5 | 8 36 | 20 32 | 3 43 | 15 2 | 1 12 | 3 32 | 2 2 | 19 29 | 0 40 | 8 0 |
| T 16 | 1 45 | 2n23 | 3 30 | 12 47 | 0 40 | 7 50 | 8 36 | 20 31 | 3 41 | 15 4 | 1 12 | 3 29 | 2 2 | 19 29 | 0 39 | 7 59 |
| W17 | 1 21 | 6 18 | 2 39 | 12 38 | 0 50 | 7 34 | 8 34 | 20 30 | 3 39 | 15 6 | 1 12 | 3 26 | 2 2 | 19 30 | 0 39 | 7 59 |
| T 18 | 0 57 | 9 58 | 1 42 | 12 27 | 1 0 | 7 16 | 8 31 | 20 29 | 3 36 | 15 7 | 1 12 | 3 23 | 2 2 | 19 30 | 0 39 | 7 58 |
| F 19 | 0 33 | 13 15 | 0 39 | 12 15 | 1 9 | 6 58 | 8 28 | 20 28 | 3 34 | 15 9 | 1 12 | 3 20 | 2 2 | 19 30 | 0 39 | 7 58 |
| S 20 | 0 10 | 16 1 | 0s25 | 12 1 | 1 17 | 6 39 | 8 24 | 20 27 | 3 32 | 15 11 | 1 12 | 3 17 | 2 2 | 19 31 | 0 39 | 7 57 |
| S 21 | 0n14 | 18 6 | 1 29 | 11 45 | 1 25 | 6 20 | 8 18 | 20 25 | 3 29 | 15 12 | 1 12 | 3 14 | 2 2 | 19 31 | 0 39 | 7 56 |
| M22 | 0 38 | 19 24 | 2 30 | 11 28 | 1 33 | 5 59 | 8 12 | 20 23 | 3 27 | 15 14 | 1 12 | 3 11 | 2 2 | 19 31 | 0 39 | 7 56 |
| T 23 | 1 1 | 19 47 | 3 26 | 11 10 | 1 40 | 5 39 | 8 5 | 20 21 | 3 25 | 15 15 | 1 12 | 3 9 | 2 2 | 19 31 | 0 39 | 7 55 |
| W24 | 1 25 | 19 10 | 4 13 | 10 50 | 1 47 | 5 18 | 7 57 | 20 19 | 3 22 | 15 16 | 1 12 | 3 6 | 2 2 | 19 32 | 0 39 | 7 55 |
| T 25 | 1 48 | 17 31 | 4 48 | 10 28 | 1 53 | 4 57 | 7 49 | 20 16 | 3 20 | 15 18 | 1 12 | 3 3 | 2 2 | 19 32 | 0 39 | 7 54 |
| F 26 | 2 12 | 14 50 | 5 8 | 10 5 | 1 59 | 4 36 | 7 39 | 20 14 | 3 18 | 15 19 | 1 12 | 3 0 | 2 2 | 19 32 | 0 39 | 7 54 |
| S 27 | 2 35 | 11 13 | 5 11 | 9 41 | 2 4 | 4 15 | 7 29 | 20 11 | 3 15 | 15 20 | 1 11 | 2 57 | 2 3 | 19 32 | 0 39 | 7 53 |
| S 28 | 2 59 | 6 50 | 4 54 | 9 15 | 2 9 | 3 54 | 7 19 | 20 8 | 3 13 | 15 21 | 1 11 | 2 54 | 2 3 | 19 32 | 0 39 | 7 52 |
| M29 | 3 22 | 1 55 | 4 17 | 8 48 | 2 13 | 3 33 | 7 8 | 20 4 | 3 11 | 15 22 | 1 11 | 2 51 | 2 3 | 19 32 | 0 39 | 7 52 |
| T 30 | 3 46 | 3s13 | 3 22 | 8 20 | 2 17 | 3 13 | 6 56 | 20 1 | 3 8 | 15 23 | 1 11 | 2 48 | 2 3 | 19 33 | 0 39 | 7 51 |
| W31 | 4n 9 | 8s10 | 2s11 | 7s50 | 2s20 | 2n53 | 6n44 | 19n57 | 3n 6 | 15n24 | 1n11 | 2s46 | 2s 3 | 19n33 | 0n39 | 7s51 |

Julian Day Number = 2374903.5, Delta T = 21.61 sec
 Ecliptic obliquity = 23°27'54, Nutation = 0°00'13, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 21°48'38, Lahiri = 20°55'38Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1790

geocentric

APRIL 1790

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♂ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|-------|-------|--------|-------|--------|-------|-------|--------|-------|--------|-------|--------|--------|------|
| T 1 | 12 38 7 | 11°26'52 | 0°46 | 17°1 | 21°R22 | 12°54 | 21°R39 | 27°55 | 5°R30 | 24°R28 | 20°7 | 10°R15 | 11°52 | 8°Y44 | 24°1 | T 1 |
| F 2 | 12 42 3 | 12°25'55 | 15°42 | 18°29 | 21°5 | 13° 0 | 21°36 | 28° 2 | 5°29 | 24°26 | 20° 9 | 10°D15 | 11°49 | 8°51 | 24° 3 | F 2 |
| S 3 | 12 46 0 | 13°24'56 | 0°15 | 19°58 | 20°50 | 13° 7 | 21°34 | 28° 9 | 5°28 | 24°25 | 20°10 | 10°16 | 11°46 | 8°58 | 24° 6 | S 3 |
| S 4 | 12 49 56 | 14°23'55 | 14°23 | 21°28 | 20°37 | 13°15 | 21°31 | 28°16 | 5°28 | 24°23 | 20°11 | 10°18 | 11°43 | 9° 4 | 24° 9 | S 4 |
| M 5 | 12 53 53 | 15°22'52 | 28° 4 | 23° 1 | 20°27 | 13°23 | 21°29 | 28°24 | 5°28 | 24°21 | 20°12 | 10°19 | 11°40 | 9°11 | 24°12 | M 5 |
| T 6 | 12 57 49 | 16°21'48 | 11°20 | 24°35 | 20°20 | 13°31 | 21°27 | 28°31 | 5°27 | 24°20 | 20°13 | 10°R20 | 11°36 | 9°18 | 24°15 | T 6 |
| W 7 | 13 1 46 | 17°20'42 | 24°12 | 26°10 | 20°15 | 13°41 | 21°25 | 28°38 | 5°27 | 24°18 | 20°14 | 10°20 | 11°33 | 9°24 | 24°18 | W 7 |
| T 8 | 13 5 43 | 18°19'35 | 6°45 | 27°47 | 20°12 | 13°51 | 21°23 | 28°45 | 5°27 | 24°17 | 20°15 | 10°19 | 11°30 | 9°31 | 24°21 | T 8 |
| F 9 | 13 9 39 | 19°18'25 | 19° 3 | 29°26 | 20°D12 | 14° 1 | 21°21 | 28°53 | 5°26 | 24°15 | 20°17 | 10°17 | 11°27 | 9°38 | 24°25 | F 9 |
| S 10 | 13 13 36 | 20°17'14 | 1°8 | 1°Y 6 | 20°14 | 14°12 | 21°20 | 29° 0 | 5°26 | 24°13 | 20°18 | 10°14 | 11°24 | 9°44 | 24°28 | S 10 |
| S 11 | 13 17 32 | 21°16'01 | 13° 5 | 2°48 | 20°19 | 14°24 | 21°19 | 29° 7 | 5°26 | 24°12 | 20°19 | 10°11 | 11°20 | 9°51 | 24°31 | S 11 |
| M12 | 13 21 29 | 22°14'46 | 24°56 | 4°31 | 20°26 | 14°36 | 21°17 | 29°14 | 5°26 | 24°10 | 20°20 | 10° 8 | 11°17 | 9°58 | 24°35 | M12 |
| T 13 | 13 25 25 | 23°13'29 | 6°Y45 | 6°16 | 20°35 | 14°49 | 21°17 | 29°21 | 5°D26 | 24° 8 | 20°21 | 10° 5 | 11°14 | 10° 4 | 24°38 | T 13 |
| W14 | 13 29 22 | 24°12'10 | 18°33 | 8° 2 | 20°46 | 15° 2 | 21°16 | 29°28 | 5°26 | 24° 7 | 20°22 | 10° 3 | 11°11 | 10°11 | 24°42 | W14 |
| T 15 | 13 33 18 | 25°10'50 | 0°23 | 9°50 | 20°59 | 15°15 | 21°15 | 29°35 | 5°26 | 24° 5 | 20°22 | 10° 2 | 11° 8 | 10°18 | 24°46 | T 15 |
| F 16 | 13 37 15 | 26° 9'27 | 12°17 | 11°40 | 21°14 | 15°30 | 21°15 | 29°42 | 5°26 | 24° 3 | 20°23 | 10°D 2 | 11° 5 | 10°24 | 24°49 | F 16 |
| S 17 | 13 41 12 | 27° 8'02 | 24°17 | 13°31 | 21°31 | 15°44 | 21°D15 | 29°49 | 5°27 | 24° 2 | 20°24 | 10° 2 | 11° 1 | 10°31 | 24°53 | S 17 |
| S 18 | 13 45 8 | 28° 6'36 | 6°I25 | 15°24 | 21°51 | 15°59 | 21°15 | 29°56 | 5°27 | 24° 0 | 20°25 | 10° 3 | 10°58 | 10°38 | 24°57 | S 18 |
| M19 | 13 49 5 | 29° 5'07 | 18°44 | 17°18 | 22°12 | 16°15 | 21°15 | 0°Y 3 | 5°27 | 23°59 | 20°26 | 10° 4 | 10°55 | 10°44 | 25° 1 | M19 |
| T 20 | 13 53 1 | 0° 3'37 | 1°18 | 19°14 | 22°34 | 16°31 | 21°16 | 0° 9 | 5°28 | 23°57 | 20°27 | 10° 5 | 10°52 | 10°51 | 25° 5 | T 20 |
| W21 | 13 56 58 | 1° 2'04 | 14° 8 | 21°12 | 22°59 | 16°47 | 21°16 | 0°16 | 5°28 | 23°55 | 20°28 | 10° 6 | 10°49 | 10°58 | 25° 9 | W21 |
| T 22 | 14 0 54 | 2° 0'29 | 27°18 | 23°11 | 23°25 | 17° 4 | 21°17 | 0°23 | 5°28 | 23°54 | 20°28 | 10°R 6 | 10°46 | 11° 4 | 25°13 | T 22 |
| F 23 | 14 4 51 | 2°58'52 | 10°51 | 25°12 | 23°52 | 17°22 | 21°18 | 0°30 | 5°29 | 23°52 | 20°29 | 10° 6 | 10°42 | 11°11 | 25°17 | F 23 |
| S 24 | 14 8 47 | 3°57'12 | 24°48 | 27°14 | 24°22 | 17°40 | 21°19 | 0°36 | 5°30 | 23°50 | 20°30 | 10° 6 | 10°39 | 11°18 | 25°21 | S 24 |
| S 25 | 14 12 44 | 4°55'31 | 9°7 | 29°18 | 24°52 | 17°58 | 21°21 | 0°43 | 5°30 | 23°49 | 20°30 | 10° 6 | 10°36 | 11°24 | 25°25 | S 25 |
| M26 | 14 16 41 | 5°53'47 | 23°48 | 1°23 | 25°24 | 18°16 | 21°22 | 0°49 | 5°31 | 23°47 | 20°31 | 10° 5 | 10°33 | 11°31 | 25°30 | M26 |
| T 27 | 14 20 37 | 6°52'02 | 8°44 | 3°29 | 25°58 | 18°35 | 21°24 | 0°56 | 5°32 | 23°46 | 20°32 | 10° 5 | 10°30 | 11°38 | 25°34 | T 27 |
| W28 | 14 24 34 | 7°50'14 | 23°49 | 5°36 | 26°33 | 18°55 | 21°26 | 1° 2 | 5°33 | 23°44 | 20°32 | 10° 4 | 10°26 | 11°44 | 25°38 | W28 |
| T 29 | 14 28 30 | 8°48'25 | 8°53 | 7°45 | 27° 9 | 19°14 | 21°28 | 1° 9 | 5°33 | 23°42 | 20°33 | 10°D 4 | 10°23 | 11°51 | 25°43 | T 29 |
| F 30 | 14 32 27 | 9°46'34 | 23°49 | 9°54 | 27°46 | 19°35 | 21°30 | 1°Y15 | 5°34 | 23°41 | 20°33 | 10°R 4 | 10°20 | 11°Y58 | 25°I47 | F 30 |

| Day | ☉ | ☽ | ♂ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|-------|-------|------|-------|------|------|------|-------|------|-------|------|------|------|-------|------|------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | |
| T 1 | 4n32 | 12s34 | 0s52 | 7s19 | 2s23 | 2n34 | 6n32 | 19n54 | 3n 4 | 15n25 | 1n11 | 2s43 | 2s 3 | 19n33 | 0n39 | T 1 |
| F 2 | 4 55 | 16 5 | 0n30 | 6 47 | 2 25 | 2 16 | 6 19 | 19 50 | 3 1 | 15 26 | 1 11 | 2 40 | 2 3 | 19 33 | 0 39 | F 2 |
| S 3 | 5 18 | 18 28 | 1 48 | 6 14 | 2 27 | 1 58 | 6 6 | 19 45 | 2 59 | 15 27 | 1 11 | 2 37 | 2 3 | 19 33 | 0 39 | S 3 |
| S 4 | 5 41 | 19 37 | 2 57 | 5 39 | 2 28 | 1 42 | 5 53 | 19 41 | 2 57 | 15 28 | 1 11 | 2 34 | 2 3 | 19 33 | 0 39 | S 4 |
| M 5 | 6 4 | 19 34 | 3 54 | 5 3 | 2 29 | 1 26 | 5 40 | 19 37 | 2 55 | 15 28 | 1 11 | 2 31 | 2 3 | 19 33 | 0 39 | M 5 |
| T 6 | 6 26 | 18 24 | 4 36 | 4 26 | 2 29 | 1 10 | 5 27 | 19 32 | 2 52 | 15 29 | 1 10 | 2 29 | 2 3 | 19 33 | 0 39 | T 6 |
| W 7 | 6 49 | 16 19 | 5 3 | 3 48 | 2 29 | 0 56 | 5 13 | 19 27 | 2 50 | 15 29 | 1 10 | 2 26 | 2 3 | 19 33 | 0 39 | W 7 |
| T 8 | 7 12 | 13 32 | 5 15 | 3 9 | 2 28 | 0 43 | 5 0 | 19 22 | 2 48 | 15 30 | 1 10 | 2 23 | 2 3 | 19 33 | 0 39 | T 8 |
| F 9 | 7 34 | 10 11 | 5 11 | 2 29 | 2 27 | 0 31 | 4 47 | 19 17 | 2 46 | 15 30 | 1 10 | 2 20 | 2 4 | 19 33 | 0 39 | F 9 |
| S 10 | 7 56 | 6 29 | 4 55 | 1 47 | 2 25 | 0 19 | 4 33 | 19 12 | 2 44 | 15 31 | 1 10 | 2 17 | 2 4 | 19 33 | 0 39 | S 10 |
| S 11 | 8 18 | 2 34 | 4 25 | 1 5 | 2 23 | 0 9 | 4 20 | 19 6 | 2 42 | 15 31 | 1 10 | 2 15 | 2 4 | 19 33 | 0 39 | S 11 |
| M12 | 8 40 | 1n25 | 3 44 | 0 21 | 2 20 | 0s 0 | 4 7 | 19 1 | 2 39 | 15 31 | 1 10 | 2 12 | 2 4 | 19 33 | 0 39 | M12 |
| T 13 | 9 2 | 5 21 | 2 54 | 0n23 | 2 17 | 0 9 | 3 54 | 18 55 | 2 37 | 15 31 | 1 10 | 2 9 | 2 4 | 19 33 | 0 39 | T 13 |
| W14 | 9 24 | 9 4 | 1 56 | 1 9 | 2 13 | 0 16 | 3 41 | 18 49 | 2 35 | 15 31 | 1 9 | 2 7 | 2 4 | 19 33 | 0 39 | W14 |
| T 15 | 9 45 | 12 27 | 0 53 | 1 55 | 2 9 | 0 23 | 3 29 | 18 43 | 2 33 | 15 31 | 1 9 | 2 4 | 2 4 | 19 33 | 0 39 | T 15 |
| F 16 | 10 7 | 15 20 | 0s12 | 2 43 | 2 4 | 0 28 | 3 16 | 18 37 | 2 31 | 15 31 | 1 9 | 2 1 | 2 4 | 19 33 | 0 39 | F 16 |
| S 17 | 10 28 | 17 36 | 1 18 | 3 31 | 1 59 | 0 33 | 3 4 | 18 31 | 2 29 | 15 31 | 1 9 | 1 59 | 2 4 | 19 33 | 0 39 | S 17 |
| S 18 | 10 49 | 19 5 | 2 21 | 4 20 | 1 53 | 0 36 | 2 52 | 18 24 | 2 27 | 15 31 | 1 9 | 1 56 | 2 5 | 19 33 | 0 39 | S 18 |
| M19 | 11 10 | 19 41 | 3 19 | 5 9 | 1 47 | 0 39 | 2 40 | 18 18 | 2 25 | 15 31 | 1 9 | 1 53 | 2 5 | 19 33 | 0 39 | M19 |
| T 20 | 11 30 | 19 20 | 4 8 | 6 0 | 1 40 | 0 40 | 2 29 | 18 11 | 2 23 | 15 31 | 1 9 | 1 51 | 2 5 | 19 33 | 0 39 | T 20 |
| W21 | 11 51 | 17 59 | 4 46 | 6 51 | 1 33 | 0 41 | 2 17 | 18 4 | 2 21 | 15 30 | 1 9 | 1 48 | 2 5 | 19 33 | 0 39 | W21 |
| T 22 | 12 11 | 15 39 | 5 10 | 7 42 | 1 25 | 0 41 | 2 6 | 17 57 | 2 19 | 15 30 | 1 8 | 1 46 | 2 5 | 19 33 | 0 38 | T 22 |
| F 23 | 12 31 | 12 26 | 5 18 | 8 34 | 1 17 | 0 40 | 1 55 | 17 50 | 2 18 | 15 30 | 1 8 | 1 43 | 2 5 | 19 32 | 0 38 | F 23 |
| S 24 | 12 51 | 8 26 | 5 7 | 9 26 | 1 8 | 0 38 | 1 45 | 17 43 | 2 16 | 15 29 | 1 8 | 1 41 | 2 5 | 19 32 | 0 38 | S 24 |
| S 25 | 13 11 | 3 52 | 4 38 | 10 19 | 0 59 | 0 36 | 1 34 | 17 35 | 2 14 | 15 29 | 1 8 | 1 38 | 2 6 | 19 32 | 0 38 | S 25 |
| M26 | 13 30 | 1s 3 | 3 50 | 11 11 | 0 50 | 0 33 | 1 24 | 17 28 | 2 12 | 15 28 | 1 8 | 1 36 | 2 6 | 19 32 | 0 38 | M26 |
| T 27 | 13 49 | 6 0 | 2 46 | 12 3 | 0 40 | 0 28 | 1 14 | 17 20 | 2 10 | 15 27 | 1 8 | 1 33 | 2 6 | 19 32 | 0 38 | T 27 |
| W28 | 14 8 | 10 38 | 1 29 | 12 56 | 0 30 | 0 23 | 1 4 | 17 12 | 2 8 | 15 26 | 1 8 | 1 31 | 2 6 | 19 31 | 0 38 | W28 |
| T 29 | 14 27 | 14 35 | 0 7 | 13 47 | 0 20 | 0 18 | 0 55 | 17 4 | 2 7 | 15 26 | 1 7 | 1 28 | 2 6 | 19 31 | 0 38 | T 29 |
| F 30 | 14n46 | 17s31 | 1n16 | 14n38 | 0s10 | 0s11 | 0n46 | 16n56 | 2n 5 | 15n25 | 1n 7 | 1s26 | 2s 6 | 19n31 | 0n38 | F 30 |

Julian Day Number = 2374934.5, Delta T = 21.60 sec

Ecliptic obliquity = 23°27'53, Nutation = 0°00'11, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 21°48'42, Lahiri = 20°55'43Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1790
geocentric

MAY 1790

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♊ | ♋ | ♌ | ♍ | ♎ | ♏ | ♐ | ♑ | ♒ | ♓ | ♈ | ♉ | Day |
|------|----------|------------------------|---------------------|---------------------|--------------------|--------------------|---------------------|-------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|----------------------|------|
| S 1 | 14 36 23 | 10 ⁸ 44'42 | 8 [♊] 27 | 12 [♋] 3 | 28 [♌] 24 | 19 [♍] 55 | 21 [♎] 33 | 1 [♏] 22 | 5 [♐] 35 | 23 [♑] R39 | 20 [♒] 34 | 10 [♓] R 4 | 10 [♈] 17 | 12 [♉] Y 4 | 25 [♊] II52 | S 1 |
| S 2 | 14 40 20 | 11°42'47 | 22°43 | 14°13 | 29° 4 | 20°16 | 21°35 | 1°28 | 5°36 | 23 [♑] 38 | 20°35 | 10 [♈] 4 | 10°14 | 12°11 | 25°56 | S 2 |
| M 3 | 14 44 16 | 12°40'52 | 6 [♈] 34 | 16°23 | 29°45 | 20°37 | 21°38 | 1°34 | 5°37 | 23°36 | 20°35 | 10° 4 | 10°11 | 12°18 | 26° 1 | M 3 |
| T 4 | 14 48 13 | 13°38'55 | 19°57 | 18°33 | 0 [♈] Y26 | 20°58 | 21°41 | 1°40 | 5°38 | 23°35 | 20°35 | 10° 4 | 10° 7 | 12°24 | 26° 6 | T 4 |
| W 5 | 14 52 10 | 14°36'56 | 2 [♈] 56 | 20°42 | 1° 9 | 21°20 | 21°44 | 1°47 | 5°40 | 23°33 | 20°36 | 10° 4 | 10° 4 | 12°31 | 26°11 | W 5 |
| T 6 | 14 56 6 | 15°34'57 | 15°32 | 22°51 | 1°53 | 21°42 | 21°47 | 1°53 | 5°41 | 23°32 | 20°36 | 10°D 3 | 10° 1 | 12°38 | 26°15 | T 6 |
| F 7 | 15 0 3 | 16°32'55 | 27°50 | 24°58 | 2°37 | 22° 5 | 21°51 | 1°59 | 5°42 | 23°30 | 20°37 | 10° 4 | 9°58 | 12°44 | 26°20 | F 7 |
| S 8 | 15 3 59 | 17°30'53 | 9 [♈] 54 | 27° 4 | 3°23 | 22°27 | 21°54 | 2° 5 | 5°43 | 23°29 | 20°37 | 10° 4 | 9°55 | 12°51 | 26°25 | S 8 |
| S 9 | 15 7 56 | 18°28'49 | 21°48 | 29° 9 | 4° 9 | 22°51 | 21°58 | 2°11 | 5°45 | 23°27 | 20°37 | 10° 5 | 9°52 | 12°57 | 26°30 | S 9 |
| M10 | 15 11 52 | 19°26'44 | 3 [♈] Y37 | 1 [♈] II12 | 4°56 | 23°14 | 22° 2 | 2°16 | 5°46 | 23°26 | 20°38 | 10° 6 | 9°48 | 13° 4 | 26°35 | M10 |
| T 11 | 15 15 49 | 20°24'37 | 15°25 | 3°12 | 5°44 | 23°38 | 22° 6 | 2°22 | 5°48 | 23°24 | 20°38 | 10° 7 | 9°45 | 13°11 | 26°40 | T 11 |
| W12 | 15 19 45 | 21°22'30 | 27°15 | 5°10 | 6°33 | 24° 1 | 22°11 | 2°28 | 5°49 | 23°23 | 20°38 | 10° 7 | 9°42 | 13°17 | 26°45 | W12 |
| T 13 | 15 23 42 | 22°20'20 | 9 [♈] 9 | 7° 6 | 7°23 | 24°26 | 22°15 | 2°34 | 5°51 | 23°22 | 20°38 | 10°R 8 | 9°39 | 13°24 | 26°50 | T 13 |
| F 14 | 15 27 38 | 23°18'10 | 21°12 | 8°59 | 8°13 | 24°50 | 22°20 | 2°39 | 5°52 | 23°20 | 20°39 | 10° 7 | 9°36 | 13°31 | 26°55 | F 14 |
| S 15 | 15 31 35 | 24°15'58 | 3 [♈] II23 | 10°50 | 9° 3 | 25°15 | 22°24 | 2°45 | 5°54 | 23°19 | 20°39 | 10° 6 | 9°32 | 13°37 | 27° 0 | S 15 |
| S 16 | 15 35 32 | 25°13'45 | 15°46 | 12°37 | 9°55 | 25°40 | 22°29 | 2°51 | 5°56 | 23°18 | 20°39 | 10° 5 | 9°29 | 13°44 | 27° 6 | S 16 |
| M17 | 15 39 28 | 26°11'30 | 28°21 | 14°21 | 10°47 | 26° 5 | 22°34 | 2°56 | 5°58 | 23°16 | 20°39 | 10° 3 | 9°26 | 13°51 | 27°11 | M17 |
| T 18 | 15 43 25 | 27° 9'14 | 11 [♈] 510 | 16° 3 | 11°40 | 26°31 | 22°40 | 3° 1 | 5°59 | 23°15 | 20°39 | 10° 0 | 9°23 | 13°57 | 27°16 | T 18 |
| W19 | 15 47 21 | 28° 6'56 | 24°13 | 17°41 | 12°33 | 26°57 | 22°45 | 3° 7 | 6° 1 | 23°14 | 20°39 | 9°58 | 9°20 | 14° 4 | 27°21 | W19 |
| T 20 | 15 51 18 | 29° 4'37 | 7 [♈] Ω31 | 19°16 | 13°26 | 27°23 | 22°51 | 3°12 | 6° 3 | 23°12 | 20°39 | 9°56 | 9°17 | 14°11 | 27°27 | T 20 |
| F 21 | 15 55 14 | 0 [♈] II 2'16 | 21° 6 | 20°48 | 14°21 | 27°49 | 22°56 | 3°17 | 6° 5 | 23°11 | 20°R39 | 9°55 | 9°13 | 14°17 | 27°32 | F 21 |
| S 22 | 15 59 11 | 0°59'53 | 4 [♈] η57 | 22°17 | 15°16 | 28°15 | 23° 2 | 3°22 | 6° 7 | 23°10 | 20°39 | 9°D55 | 9°10 | 14°24 | 27°37 | S 22 |
| S 23 | 16 3 8 | 1°57'29 | 19° 4 | 23°42 | 16°11 | 28°42 | 23° 8 | 3°27 | 6° 9 | 23° 9 | 20°39 | 9°56 | 9° 7 | 14°31 | 27°43 | S 23 |
| M24 | 16 7 4 | 2°55'04 | 3 [♈] Δ26 | 25° 4 | 17° 7 | 29° 9 | 23°14 | 3°32 | 6°11 | 23° 8 | 20°39 | 9°57 | 9° 4 | 14°37 | 27°48 | M24 |
| T 25 | 16 11 1 | 3°52'37 | 18° 0 | 26°22 | 18° 3 | 29°36 | 23°21 | 3°37 | 6°13 | 23° 6 | 20°39 | 9°58 | 9° 1 | 14°44 | 27°54 | T 25 |
| W26 | 16 14 57 | 4°50'08 | 2 [♈] η42 | 27°37 | 18°59 | 0 [♈] η 4 | 23°27 | 3°42 | 6°15 | 23° 5 | 20°39 | 9°R59 | 8°58 | 14°51 | 27°59 | W26 |
| T 27 | 16 18 54 | 5°47'39 | 17°27 | 28°49 | 19°57 | 0°31 | 23°33 | 3°47 | 6°18 | 23° 4 | 20°39 | 9°59 | 8°54 | 14°57 | 28° 5 | T 27 |
| F 28 | 16 22 50 | 6°45'08 | 2 [♈] ♂ 7 | 29°57 | 20°54 | 0°59 | 23°40 | 3°52 | 6°20 | 23° 3 | 20°39 | 9°58 | 8°51 | 15° 4 | 28°10 | F 28 |
| S 29 | 16 26 47 | 7°42'36 | 16°36 | 1 [♈] 5 1 | 21°52 | 1°27 | 23°47 | 3°56 | 6°22 | 23° 2 | 20°39 | 9°55 | 8°48 | 15°11 | 28°16 | S 29 |
| S 30 | 16 30 43 | 8°40'04 | 0 [♈] 348 | 2° 2 | 22°50 | 1°55 | 23°54 | 4° 1 | 6°25 | 23° 1 | 20°38 | 9°51 | 8°45 | 15°17 | 28°22 | S 30 |
| M31 | 16 34 40 | 9 [♈] II37'30 | 14 [♈] 339 | 2 [♈] 59 | 23°Y49 | 2 [♈] η24 | 24 [♈] Ω 1 | 4°Y 5 | 6 [♈] Ω27 | 23 [♈] Δ 0 | 20 [♈] 38 | 9 [♈] η47 | 8 [♈] η42 | 15°Y24 | 28 [♈] II27 | M31 |

| Day | ☉ | ☽ | | ♊ | ♋ | ♌ | ♍ | ♎ | ♏ | ♐ | ♑ | ♒ | ♓ | ♈ | ♉ | ♊ | ♋ | ♌ | ♍ | ♎ | ♏ | ♐ | ♑ | ♒ | ♓ |
|------|-------|-------|------|-------|------|------|------|-------|------|-------|------|------|------|-------|------|------|------|-------|------|-------|-------|------|-------|------|-----|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat |
| S 1 | 15n 4 | 19s15 | 2n31 | 15n29 | 0n 1 | 0s 4 | 0n37 | 16n48 | 2n 3 | 15n24 | 1n 7 | 1s23 | 2s 6 | 19n31 | 0n38 | 7s32 | 1n47 | 23s18 | 9s 9 | 14s51 | 14s55 | 7n 1 | 17n34 | 5s50 | |
| S 2 | 15 22 | 19 41 | 3 36 | 16 18 | 0 11 | 0n 3 | 0 28 | 16 40 | 2 1 | 15 23 | 1 7 | 1 21 | 2 7 | 19 30 | 0 38 | 7 32 | 1 47 | 23 18 | 9 9 | 14 51 | 14 54 | 7 3 | 17 35 | 5 49 | |
| M 3 | 15 40 | 18 53 | 4 25 | 17 6 | 0 22 | 0 12 | 0 20 | 16 32 | 2 0 | 15 22 | 1 7 | 1 19 | 2 7 | 19 30 | 0 38 | 7 31 | 1 47 | 23 18 | 9 9 | 14 51 | 14 53 | 7 5 | 17 35 | 5 49 | |
| T 4 | 15 57 | 17 3 | 4 59 | 17 53 | 0 32 | 0 21 | 0 11 | 16 23 | 1 58 | 15 21 | 1 7 | 1 16 | 2 7 | 19 30 | 0 38 | 7 31 | 1 47 | 23 18 | 9 10 | 14 51 | 14 52 | 7 7 | 17 36 | 5 49 | |
| W 5 | 16 14 | 14 24 | 5 15 | 18 38 | 0 43 | 0 30 | 0 3 | 16 14 | 1 56 | 15 20 | 1 7 | 1 14 | 2 7 | 19 29 | 0 38 | 7 30 | 1 47 | 23 18 | 9 10 | 14 51 | 14 51 | 7 9 | 17 36 | 5 49 | |
| T 6 | 16 31 | 11 9 | 5 16 | 19 21 | 0 53 | 0 41 | 0s 5 | 16 6 | 1 55 | 15 18 | 1 7 | 1 12 | 2 7 | 19 29 | 0 38 | 7 29 | 1 47 | 23 19 | 9 10 | 14 51 | 14 50 | 7 11 | 17 36 | 5 49 | |
| F 7 | 16 48 | 7 30 | 5 3 | 20 3 | 1 3 | 0 51 | 0 12 | 15 57 | 1 53 | 15 17 | 1 6 | 1 10 | 2 7 | 19 29 | 0 38 | 7 29 | 1 47 | 23 19 | 9 11 | 14 51 | 14 49 | 7 12 | 17 37 | 5 48 | |
| S 8 | 17 5 | 3 36 | 4 36 | 20 42 | 1 12 | 1 3 | 0 20 | 15 48 | 1 51 | 15 16 | 1 6 | 1 7 | 2 8 | 19 28 | 0 38 | 7 28 | 1 47 | 23 19 | 9 11 | 14 51 | 14 48 | 7 14 | 17 37 | 5 48 | |
| S 9 | 17 21 | 0n23 | 3 57 | 21 19 | 1 21 | 1 15 | 0 27 | 15 39 | 1 50 | 15 15 | 1 6 | 1 5 | 2 8 | 19 28 | 0 38 | 7 28 | 1 47 | 23 19 | 9 11 | 14 51 | 14 47 | 7 16 | 17 37 | 5 48 | |
| M10 | 17 37 | 4 20 | 3 9 | 21 53 | 1 30 | 1 27 | 0 34 | 15 29 | 1 48 | 15 13 | 1 6 | 1 3 | 2 8 | 19 28 | 0 38 | 7 27 | 1 47 | 23 19 | 9 11 | 14 52 | 14 46 | 7 18 | 17 38 | 5 48 | |
| T 11 | 17 52 | 8 7 | 2 13 | 22 25 | 1 38 | 1 40 | 0 40 | 15 20 | 1 47 | 15 12 | 1 6 | 1 1 | 2 8 | 19 27 | 0 38 | 7 27 | 1 47 | 23 19 | 9 12 | 14 52 | 14 45 | 7 20 | 17 38 | 5 47 | |
| W12 | 18 7 | 11 36 | 1 11 | 22 55 | 1 45 | 1 53 | 0 47 | 15 11 | 1 45 | 15 10 | 1 6 | 0 59 | 2 8 | 19 27 | 0 38 | 7 26 | 1 47 | 23 20 | 9 12 | 14 52 | 14 44 | 7 22 | 17 38 | 5 47 | |
| T 13 | 18 22 | 14 39 | 0 5 | 23 21 | 1 52 | 2 7 | 0 53 | 15 1 | 1 43 | 15 9 | 1 6 | 0 57 | 2 9 | 19 26 | 0 38 | 7 26 | 1 47 | 23 20 | 9 12 | 14 52 | 14 43 | 7 24 | 17 39 | 5 47 | |
| F 14 | 18 37 | 17 6 | 1s 1 | 23 46 | 1 58 | 2 21 | 0 59 | 14 51 | 1 42 | 15 7 | 1 5 | 0 55 | 2 9 | 19 26 | 0 38 | 7 25 | 1 47 | 23 20 | 9 13 | 14 52 | 14 42 | 7 26 | 17 39 | 5 47 | |
| S 15 | 18 51 | 18 48 | 2 5 | 24 7 | 2 3 | 2 36 | 1 5 | 14 42 | 1 40 | 15 5 | 1 5 | 0 53 | 2 9 | 19 26 | 0 38 | 7 25 | 1 47 | 23 20 | 9 13 | 14 52 | 14 41 | 7 27 | 17 39 | 5 47 | |
| S 16 | 19 5 | 19 38 | 3 5 | 24 26 | 2 7 | 2 51 | 1 11 | 14 32 | 1 39 | 15 4 | 1 5 | 0 51 | 2 9 | 19 25 | 0 38 | 7 24 | 1 47 | 23 20 | 9 13 | 14 51 | 14 40 | 7 29 | 17 40 | 5 47 | |
| M17 | 19 19 | 19 31 | 3 56 | 24 43 | 2 11 | 3 6 | 1 16 | 14 22 | 1 37 | 15 2 | 1 5 | 0 49 | 2 9 | 19 25 | 0 38 | 7 24 | 1 47 | 23 21 | 9 14 | 14 51 | 14 39 | 7 31 | 17 40 | 5 46 | |
| T 18 | 19 33 | 18 24 | 4 37 | 24 57 | 2 14 | 3 22 | 1 21 | 14 12 | 1 36 | 15 0 | 1 5 | 0 47 | 2 10 | 19 24 | 0 38 | 7 24 | 1 47 | 23 21 | 9 14 | 14 50 | 14 38 | 7 33 | 17 40 | 5 46 | |
| W19 | 19 46 | 16 18 | 5 4 | 25 9 | 2 16 | 3 38 | 1 26 | 14 1 | 1 35 | 14 58 | 1 5 | 0 45 | 2 10 | 19 24 | 0 38 | 7 23 | 1 47 | 23 21 | 9 14 | 14 49 | 14 37 | 7 35 | 17 40 | 5 46 | |
| T 20 | 19 58 | 13 19 | 5 15 | 25 19 | 2 17 | 3 55 | 1 31 | 13 51 | 1 33 | 14 56 | 1 5 | 0 43 | 2 10 | 19 23 | 0 38 | 7 23 | 1 47 | 23 21 | 9 15 | 14 49 | 14 36 | 7 37 | 17 41 | 5 46 | |
| F 21 | 20 11 | 9 35 | 5 10 | 25 26 | 2 18 | 4 11 | 1 36 | 13 41 | 1 32 | 14 54 | 1 5 | 0 41 | 2 10 | 19 23 | 0 38 | 7 22 | 1 46 | 23 22 | 9 15 | 14 48 | 14 35 | 7 39 | 17 41 | 5 46 | |
| S 22 | 20 23 | 5 16 | 4 46 | 25 32 | 2 17 | 4 28 | 1 40 | 13 30 | 1 30 | 14 52 | 1 4 | 0 39 | 2 10 | 19 22 | 0 38 | 7 22 | 1 46 | 23 22 | 9 15 | 14 48 | 14 34 | 7 40 | 17 41 | 5 46 | |
| S 23 | 20 34 | 0 34 | 4 5 | 25 35 | 2 16 | 4 46 | 1 45 | 13 19 | 1 29 | 14 50 | 1 4 | 0 37 | 2 11 | 19 22 | 0 38 | 7 21 | 1 46 | 23 22 | 9 15 | 14 48 | 14 33 | 7 42 | 17 41 | 5 45 | |
| M24 | 20 46 | 4s15 | 3 8 | 25 36 | 2 14 | 5 3 | 1 49 | 13 9 | 1 27 | 14 48 | 1 4 | 0 36 | 2 11 | 19 21 | 0 38 | 7 21 | 1 46 | 23 23 | 9 16 | 14 49 | 14 32 | 7 44 | 17 41 | 5 45 | |
| T 25 | 20 57 | 8 53 | 1 58 | 25 36 | 2 11 | 5 21 | 1 53 | 12 58 | 1 26 | 14 46 | 1 4 | 0 34 | 2 11 | 19 21 | 0 38 | 7 21 | 1 46 | 23 23 | 9 16 | 14 49 | 14 31 | 7 46 | 17 42 | 5 45 | |
| W26 | 21 7 | 13 3 | 0 40 | 25 34 | 2 7 | 5 39 | 1 56 | 12 47 | 1 25 | 14 43 | 1 4 | 0 32 | 2 11 | 19 20 | 0 38 | 7 20 | 1 46 | 23 23 | 9 16 | 14 49 | 14 30 | 7 48 | 17 42 | 5 45 | |
| T 27 | 21 18 | 16 24 | 0n41 | 25 30 | 2 3 | 5 57 | 2 0 | 12 36 | 1 23 | 14 41 | 1 4 | 0 30 | 2 11 | 19 19 | 0 38 | 7 20 | 1 46 | 23 24 | 9 17 | 14 49 | 14 29 | 7 50 | 17 42 | 5 45 | |
| F 28 | 21 28 | 18 40 | 1 59 | 25 25 | 1 57 | 6 16 | 2 3 | 12 25 | 1 22 | 14 39 | 1 4 | 0 29 | 2 12 | 19 19 | 0 38 | 7 19 | 1 46 | 23 24 | 9 17 | 14 49 | 14 28 | 7 52 | 17 42 | 5 45 | |
| S 29 | 21 37 | 19 41 | 3 8 | 25 19 | 1 51 | 6 34 | 2 7 | 12 13 | 1 21 | 14 36 | 1 4 | 0 27 | 2 12 | 19 18 | 0 37 | 7 19 | 1 46 | 23 24 | 9 17 | 14 48 | 14 27 | 7 53 | 17 42 | 5 45 | |
| S 30 | 21 46 | 19 24 | 4 4 | 25 11 | 1 44 | 6 53 | 2 10 | 12 2 | 1 19 | 14 34 | 1 3 | 0 25 | 2 12 | 19 18 | 0 37 | 7 19 | 1 46 | 23 25 | 9 17 | 14 47 | 14 26 | 7 55 | 17 43 | 5 45 | |
| M31 | 21n55 | 17s58 | 4n44 | 25n 2 | 1n36 | 7n12 | 2s13 | 11n51 | 1n18 | 14n32 | 1n 3 | 0s24 | 2s12 | 19n17 | 0n37 | 7s18 | 1n46 | 23s25 | 9s18 | 14s46 | 14s25 | 7n57 | 17n43 | 5s45 | |

ASTRODIENST EPHEMERIS for the year 1790
geocentric

JUNE 1790

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|------------------------|---------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|-------------------|--------------------|---------------------|------|
| T 1 | 16 38 37 | 10 ^{II} 34'56 | 28 [☾] 5 | 3 [☾] 53 | 24 [♀] 48 | 2 [♂] 53 | 24 [♂] 8 | 4 [♀] 10 | 6 [♂] 29 | 22 [♂] 59 | 20 [♂] 38 | 9 [♂] 43 | 8 [♂] 38 | 15 [♀] 31 | 28 ^{II} 33 | T 1 |
| W 2 | 16 42 33 | 11 [°] 32'21 | 11 [☾] 7 | 4 [°] 42 | 25 [°] 48 | 3 [°] 21 | 24 [°] 16 | 4 [°] 14 | 6 [°] 32 | 22 [°] 58 | 20 [°] 38 | 9 [°] 39 | 8 [°] 35 | 15 [°] 37 | 28 [°] 39 | W 2 |
| T 3 | 16 46 30 | 12 [°] 29'45 | 23 [°] 46 | 5 [°] 27 | 26 [°] 47 | 3 [°] 50 | 24 [°] 23 | 4 [°] 18 | 6 [°] 34 | 22 [°] 57 | 20 [°] 37 | 9 [°] 36 | 8 [°] 32 | 15 [°] 44 | 28 [°] 44 | T 3 |
| F 4 | 16 50 26 | 13 [°] 27'08 | 6 [☾] 6 | 6 [°] 9 | 27 [°] 48 | 4 [°] 20 | 24 [°] 31 | 4 [°] 22 | 6 [°] 37 | 22 [°] 56 | 20 [°] 37 | 9 [°] 34 | 8 [°] 29 | 15 [°] 51 | 28 [°] 50 | F 4 |
| S 5 | 16 54 23 | 14 [°] 24'31 | 18 [°] 11 | 6 [°] 46 | 28 [°] 48 | 4 [°] 49 | 24 [°] 38 | 4 [°] 26 | 6 [°] 39 | 22 [°] 55 | 20 [°] 37 | 9 [°] D34 | 8 [°] 26 | 15 [°] 57 | 28 [°] 56 | S 5 |
| S 6 | 16 58 19 | 15 [°] 21'53 | 0 [♀] 6 | 7 [°] 19 | 29 [°] 49 | 5 [°] 18 | 24 [°] 46 | 4 [°] 30 | 6 [°] 42 | 22 [°] 54 | 20 [°] 36 | 9 [°] 35 | 8 [°] 23 | 16 [°] 4 | 29 [°] 1 | S 6 |
| M 7 | 17 2 16 | 16 [°] 19'15 | 11 [°] 55 | 7 [°] 48 | 0 [♂] 50 | 5 [°] 48 | 24 [°] 54 | 4 [°] 34 | 6 [°] 45 | 22 [°] 53 | 20 [°] 36 | 9 [°] 36 | 8 [°] 19 | 16 [°] 11 | 29 [°] 7 | M 7 |
| T 8 | 17 6 12 | 17 [°] 16'36 | 23 [°] 44 | 8 [°] 12 | 1 [°] 51 | 6 [°] 18 | 25 [°] 2 | 4 [°] 38 | 6 [°] 47 | 22 [°] 53 | 20 [°] 35 | 9 [°] 38 | 8 [°] 16 | 16 [°] 17 | 29 [°] 13 | T 8 |
| W 9 | 17 10 9 | 18 [°] 13'57 | 5 [♂] 36 | 8 [°] 32 | 2 [°] 53 | 6 [°] 48 | 25 [°] 10 | 4 [°] 42 | 6 [°] 50 | 22 [°] 52 | 20 [°] 35 | 9 [°] R39 | 8 [°] 13 | 16 [°] 24 | 29 [°] 19 | W 9 |
| T 10 | 17 14 6 | 19 [°] 11'17 | 17 [°] 37 | 8 [°] 47 | 3 [°] 55 | 7 [°] 18 | 25 [°] 19 | 4 [°] 45 | 6 [°] 53 | 22 [°] 51 | 20 [°] 35 | 9 [°] 39 | 8 [°] 10 | 16 [°] 31 | 29 [°] 25 | T 10 |
| F 11 | 17 18 2 | 20 [°] 8'37 | 29 [°] 49 | 8 [°] 58 | 4 [°] 57 | 7 [°] 49 | 25 [°] 27 | 4 [°] 49 | 6 [°] 56 | 22 [°] 50 | 20 [°] 34 | 9 [°] 37 | 8 [°] 7 | 16 [°] 37 | 29 [°] 30 | F 11 |
| S 12 | 17 21 59 | 21 [°] 5'56 | 12 ^{II} 15 | 9 [°] 4 | 5 [°] 59 | 8 [°] 19 | 25 [°] 36 | 4 [°] 53 | 6 [°] 58 | 22 [°] 50 | 20 [°] 34 | 9 [°] 33 | 8 [°] 3 | 16 [°] 44 | 29 [°] 36 | S 12 |
| S 13 | 17 25 55 | 22 [°] 3'15 | 24 [°] 55 | 9 [°] R 5 | 7 [°] 2 | 8 [°] 50 | 25 [°] 44 | 4 [°] 56 | 7 [°] 1 | 22 [°] 49 | 20 [°] 33 | 9 [°] 28 | 8 [°] 0 | 16 [°] 51 | 29 [°] 42 | S 13 |
| M14 | 17 29 52 | 23 [°] 0'33 | 7 [☾] 51 | 9 [°] 3 | 8 [°] 5 | 9 [°] 21 | 25 [°] 53 | 4 [°] 59 | 7 [°] 4 | 22 [°] 48 | 20 [°] 32 | 9 [°] 21 | 7 [°] 57 | 16 [°] 57 | 29 [°] 48 | M14 |
| T 15 | 17 33 48 | 23 [°] 57'51 | 21 [°] 1 | 8 [°] 55 | 9 [°] 8 | 9 [°] 52 | 26 [°] 2 | 5 [°] 2 | 7 [°] 7 | 22 [°] 48 | 20 [°] 32 | 9 [°] 13 | 7 [°] 54 | 17 [°] 4 | 29 [°] 54 | T 15 |
| W16 | 17 37 45 | 24 [°] 55'08 | 4 [♂] 25 | 8 [°] 44 | 10 [°] 11 | 10 [°] 23 | 26 [°] 11 | 5 [°] 6 | 7 [°] 10 | 22 [°] 47 | 20 [°] 31 | 9 [°] 6 | 7 [°] 51 | 17 [°] 10 | 29 [°] 59 | W16 |
| T 17 | 17 41 41 | 25 [°] 52'24 | 18 [°] 1 | 8 [°] 28 | 11 [°] 15 | 10 [°] 55 | 26 [°] 20 | 5 [°] 9 | 7 [°] 13 | 22 [°] 47 | 20 [°] 31 | 9 [°] 0 | 7 [°] 48 | 17 [°] 17 | 0 [☾] 6 | T 17 |
| F 18 | 17 45 38 | 26 [°] 49'39 | 1 [♂] 47 | 8 [°] 8 | 12 [°] 19 | 11 [°] 26 | 26 [°] 29 | 5 [°] 12 | 7 [°] 16 | 22 [°] 46 | 20 [°] 30 | 8 [°] 55 | 7 [°] 44 | 17 [°] 24 | 0 [°] 12 | F 18 |
| S 19 | 17 49 35 | 27 [°] 46'54 | 15 [°] 43 | 7 [°] 45 | 13 [°] 23 | 11 [°] 58 | 26 [°] 38 | 5 [°] 14 | 7 [°] 19 | 22 [°] 46 | 20 [°] 29 | 8 [°] 53 | 7 [°] 41 | 17 [°] 30 | 0 [°] 17 | S 19 |
| S 20 | 17 53 31 | 28 [°] 44'08 | 29 [°] 47 | 7 [°] 19 | 14 [°] 27 | 12 [°] 30 | 26 [°] 48 | 5 [°] 17 | 7 [°] 22 | 22 [°] 45 | 20 [°] 29 | 8 [°] D52 | 7 [°] 38 | 17 [°] 37 | 0 [°] 23 | S 20 |
| M21 | 17 57 28 | 29 [°] 41'21 | 13 [♂] 57 | 6 [°] 50 | 15 [°] 31 | 13 [°] 2 | 26 [°] 57 | 5 [°] 20 | 7 [°] 25 | 22 [°] 45 | 20 [°] 28 | 8 [°] 53 | 7 [°] 35 | 17 [°] 44 | 0 [°] 29 | M21 |
| T 22 | 18 1 24 | 0 [☾] 38'34 | 28 [°] 13 | 6 [°] 18 | 16 [°] 36 | 13 [°] 34 | 27 [°] 7 | 5 [°] 22 | 7 [°] 28 | 22 [°] 44 | 20 [°] 27 | 8 [°] 54 | 7 [°] 32 | 17 [°] 50 | 0 [°] 35 | T 22 |
| W23 | 18 5 21 | 1 [°] 35'46 | 12 ^{II} 31 | 5 [°] 44 | 17 [°] 41 | 14 [°] 6 | 27 [°] 16 | 5 [°] 25 | 7 [°] 31 | 22 [°] 44 | 20 [°] 26 | 8 [°] R54 | 7 [°] 29 | 17 [°] 57 | 0 [°] 41 | W23 |
| T 24 | 18 9 17 | 2 [°] 32'58 | 26 [°] 51 | 5 [°] 10 | 18 [°] 46 | 14 [°] 39 | 27 [°] 26 | 5 [°] 27 | 7 [°] 35 | 22 [°] 44 | 20 [°] 26 | 8 [°] 53 | 7 [°] 25 | 18 [°] 4 | 0 [°] 47 | T 24 |
| F 25 | 18 13 14 | 3 [°] 30'09 | 11 [♂] 7 | 4 [°] 34 | 19 [°] 51 | 15 [°] 11 | 27 [°] 36 | 5 [°] 30 | 7 [°] 38 | 22 [°] 43 | 20 [°] 25 | 8 [°] 49 | 7 [°] 22 | 18 [°] 10 | 0 [°] 53 | F 25 |
| S 26 | 18 17 10 | 4 [°] 27'20 | 25 [°] 15 | 3 [°] 58 | 20 [°] 56 | 15 [°] 44 | 27 [°] 46 | 5 [°] 32 | 7 [°] 41 | 22 [°] 43 | 20 [°] 24 | 8 [°] 43 | 7 [°] 19 | 18 [°] 17 | 0 [°] 59 | S 26 |
| S 27 | 18 21 7 | 5 [°] 24'31 | 9 [☾] 10 | 3 [°] 23 | 22 [°] 2 | 16 [°] 17 | 27 [°] 56 | 5 [°] 34 | 7 [°] 44 | 22 [°] 43 | 20 [°] 23 | 8 [°] 36 | 7 [°] 16 | 18 [°] 24 | 1 [°] 5 | S 27 |
| M28 | 18 25 4 | 6 [°] 21'42 | 22 [°] 49 | 2 [°] 49 | 23 [°] 7 | 16 [°] 49 | 28 [°] 6 | 5 [°] 36 | 7 [°] 48 | 22 [°] 43 | 20 [°] 22 | 8 [°] 26 | 7 [°] 13 | 18 [°] 30 | 1 [°] 11 | M28 |
| T 29 | 18 29 0 | 7 [°] 18'52 | 6 [☾] 9 | 2 [°] 16 | 24 [°] 13 | 17 [°] 22 | 28 [°] 16 | 5 [°] 38 | 7 [°] 51 | 22 [°] 43 | 20 [°] 21 | 8 [°] 17 | 7 [°] 10 | 18 [°] 37 | 1 [°] 17 | T 29 |
| W30 | 18 32 57 | 8 [☾] 16'03 | 19 [☾] 7 | 1 [☾] 46 | 25 [♂] 19 | 17 [♂] 56 | 28 [♂] 27 | 5 [♀] 40 | 7 [♂] 54 | 22 [♂] 42 | 20 [♂] 20 | 8 [♂] 8 | 7 [♂] 6 | 18 [♀] 44 | 1 [☾] 22 | W30 |

| Day | ☉ | ☾ | | ♀ | | ♀ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|------|------|-------|------|-------|-------|------|-------|------|-----|------|-----|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat |
| T 1 | 22n 3 | 15s33 | 5n 7 | 24n52 | 1n27 | 7n31 | 2s15 | 11n39 | 1n17 | 14n29 | 1n 3 | 0s22 | 2s13 | 19n16 | 0n37 | 7s18 | 1n46 | 23s25 | 9s18 | 14s44 | 14s24 | 7n59 | 17n43 | 5s45 | | | |
| W 2 | 22 11 | 12 26 | 5 13 | 24 41 | 1 18 | 7 50 | 2 18 | 11 27 | 1 15 | 14 27 | 1 3 | 0 21 | 2 13 | 19 16 | 0 37 | 7 18 | 1 46 | 23 26 | 9 18 | 14 43 | 14 23 | 8 1 | 17 43 | 5 45 | | | |
| T 3 | 22 19 | 8 50 | 5 4 | 24 29 | 1 8 | 8 9 | 2 20 | 11 16 | 1 14 | 14 24 | 1 3 | 0 19 | 2 13 | 19 15 | 0 37 | 7 17 | 1 46 | 23 26 | 9 19 | 14 42 | 14 22 | 8 3 | 17 43 | 5 44 | | | |
| F 4 | 22 26 | 4 56 | 4 40 | 24 16 | 0 57 | 8 29 | 2 23 | 11 4 | 1 13 | 14 21 | 1 3 | 0 18 | 2 13 | 19 15 | 0 37 | 7 17 | 1 46 | 23 26 | 9 19 | 14 42 | 14 21 | 8 4 | 17 43 | 5 44 | | | |
| S 5 | 22 33 | 0 55 | 4 5 | 24 2 | 0 45 | 8 48 | 2 25 | 10 52 | 1 12 | 14 19 | 1 3 | 0 17 | 2 14 | 19 14 | 0 37 | 7 17 | 1 46 | 23 27 | 9 19 | 14 42 | 14 20 | 8 6 | 17 43 | 5 44 | | | |
| S 6 | 22 40 | 3n 5 | 3 19 | 23 48 | 0 32 | 9 8 | 2 27 | 10 40 | 1 10 | 14 16 | 1 3 | 0 15 | 2 14 | 19 13 | 0 37 | 7 17 | 1 46 | 23 27 | 9 20 | 14 42 | 14 19 | 8 8 | 17 43 | 5 44 | | | |
| M 7 | 22 46 | 6 57 | 2 26 | 23 33 | 0 19 | 9 27 | 2 28 | 10 28 | 1 9 | 14 13 | 1 3 | 0 14 | 2 14 | 19 12 | 0 37 | 7 16 | 1 46 | 23 28 | 9 20 | 14 42 | 14 18 | 8 10 | 17 43 | 5 44 | | | |
| T 8 | 22 51 | 10 33 | 1 26 | 23 18 | 0 5 | 9 47 | 2 30 | 10 16 | 1 8 | 14 10 | 1 3 | 0 13 | 2 14 | 19 12 | 0 37 | 7 16 | 1 46 | 23 28 | 9 20 | 14 43 | 14 17 | 8 12 | 17 43 | 5 44 | | | |
| W 9 | 22 57 | 13 45 | 0 22 | 23 2 | 0s 9 | 10 7 | 2 32 | 10 3 | 1 7 | 14 7 | 1 2 | 0 11 | 2 14 | 19 11 | 0 37 | 7 16 | 1 46 | 23 28 | 9 20 | 14 43 | 14 16 | 8 13 | 17 44 | 5 44 | | | |
| T 10 | 23 1 | 16 25 | 0s43 | 22 46 | 0 24 | 10 26 | 2 33 | 9 51 | 1 6 | 14 5 | 1 2 | 0 10 | 2 15 | 19 10 | 0 37 | 7 16 | 1 46 | 23 29 | 9 21 | 14 43 | 14 15 | 8 15 | 17 44 | 5 44 | | | |
| F 11 | 23 6 | 18 23 | 1 48 | 22 30 | 0 40 | 10 46 | 2 34 | 9 39 | 1 4 | 14 2 | 1 2 | 0 9 | 2 15 | 19 10 | 0 37 | 7 15 | 1 46 | 23 29 | 9 21 | 14 42 | 14 14 | 8 17 | 17 44 | 5 44 | | | |
| S 12 | 23 10 | 19 31 | 2 48 | 22 14 | 0 56 | 11 5 | 2 35 | 9 26 | 1 3 | 13 59 | 1 2 | 0 8 | 2 15 | 19 9 | 0 37 | 7 15 | 1 46 | 23 30 | 9 21 | 14 41 | 14 13 | 8 19 | 17 44 | 5 44 | | | |
| S 13 | 23 14 | 19 41 | 3 41 | 21 57 | 1 12 | 11 25 | 2 36 | 9 13 | 1 2 | 13 56 | 1 2 | 0 7 | 2 16 | 19 8 | 0 37 | 7 15 | 1 46 | 23 30 | 9 21 | 14 39 | 14 12 | 8 21 | 17 44 | 5 44 | | | |
| M14 | 23 17 | 18 51 | 4 23 | 21 41 | 1 29 | 11 44 | 2 37 | 9 1 | 1 1 | 13 53 | 1 2 | 0 6 | 2 16 | 19 7 | 0 37 | 7 15 | 1 45 | 23 31 | 9 22 | 14 37 | 14 10 | 8 22 | 17 44 | 5 44 | | | |
| T 15 | 23 20 | 16 59 | 4 53 | 21 25 | 1 45 | 12 4 | 2 38 | 8 48 | 1 0 | 13 49 | 1 2 | 0 5 | 2 16 | 19 7 | 0 37 | 7 15 | 1 45 | 23 31 | 9 22 | 14 35 | 14 9 | 8 24 | 17 44 | 5 44 | | | |
| W16 | 23 22 | 14 12 | 5 7 | 21 9 | 2 2 | 12 23 | 2 38 | 8 35 | 0 58 | 13 46 | 1 2 | 0 4 | 2 16 | 19 6 | 0 37 | 7 14 | 1 45 | 23 32 | 9 22 | 14 33 | 14 8 | 8 26 | 17 44 | 5 44 | | | |
| T 17 | 23 24 | 10 37 | 5 5 | 20 53 | 2 19 | 12 42 | 2 39 | 8 22 | 0 57 | 13 43 | 1 2 | 0 3 | 2 17 | 19 5 | 0 37 | 7 14 | 1 45 | 23 32 | 9 23 | 14 31 | 14 7 | 8 28 | 17 44 | 5 44 | | | |
| F 18 | 23 26 | 6 25 | 4 44 | 20 38 | 2 35 | 13 1 | 2 39 | 8 9 | 0 56 | 13 40 | 1 2 | 0 2 | 2 17 | 19 4 | 0 37 | 7 14 | 1 45 | 23 32 | 9 23 | 14 29 | 14 6 | 8 30 | 17 44 | 5 44 | | | |
| S 19 | 23 27 | 1 50 | 4 7 | 20 24 | 2 31 | 13 20 | 2 39 | 7 56 | 0 55 | 13 37 | 1 1 | 0 1 | 2 17 | 19 4 | 0 37 | 7 14 | 1 45 | 23 33 | 9 23 | 14 28 | 14 5 | 8 31 | 17 43 | 5 44 | | | |
| S 20 | 23 27 | 2s54 | 3 15 | 20 10 | 3 6 | 13 39 | 2 39 | 7 43 | 0 54 | 13 33 | 1 1 | 0n 0 | 2 17 | 19 3 | 0 37 | 7 14 | 1 45 | 23 33 | 9 23 | 14 28 | 14 4 | 8 33 | 17 43 | 5 44 | | | |
| M21 | 23 28 | 7 31 | 2 10 | 19 56 | 3 21 | 13 58 | 2 39 | 7 29 | 0 53 | 13 30 | 1 1 | 0 1 | 2 18 | 19 2 | 0 37 | 7 14 | 1 45 | 23 34 | 9 24 | 14 28 | 14 3 | 8 35 | 17 43 | 5 45 | | | |
| T 22 | 23 28 | 11 44 | 0 57 | 19 44 | 3 35 | 14 17 | 2 39 | 7 16 | 0 52 | 13 27 | 1 1 | 0 2 | 2 18 | 19 1 | 0 37 | 7 14 | 1 45 | 23 34 | 9 24 | 14 29 | 14 2 | 8 37 | 17 43 | 5 45 | | | |
| W23 | 23 27 | 15 18 | 0n20 | 19 32 | 3 48 | 14 35 | 2 39 | 7 2 | 0 51 | 13 23 | 1 1 | 0 2 | 2 18 | 19 0 | 0 37 | 7 14 | 1 45 | 23 35 | 9 24 | 14 29 | 14 1 | 8 39 | 17 43 | 5 45 | | | |
| T 24 | 23 26 | 17 56 | 1 35 | 19 22 | 4 0 | 14 53 | 2 38 | 6 49 | 0 50 | 13 20 | 1 1 | 0 3 | 2 18 | 18 59 | 0 37 | 7 13 | 1 45 | 23 35 | 9 24 | 14 28 | 14 0 | 8 40 | 17 43 | 5 45 | | | |
| F 25 | 23 25 | 19 25 | 2 44 | 19 12 | 4 11 | 15 11 | 2 38 | 6 35 | 0 49 | 13 16 | 1 1 | 0 4 | 2 19 | 18 59 | 0 37 | 7 13 | 1 45 | 23 36 | 9 25 | 14 27 | 13 59 | 8 42 | 17 43 | 5 45 | | | |
| S 26 | 23 23 | 19 41 | 3 42 | 19 4 | 4 20 | 15 29 | 2 37 | 6 22 | 0 47 | 13 13 | 1 1 | 0 4 | 2 19 | 18 58 | 0 37 | 7 13 | 1 45 | 23 36 | 9 25 | 14 25 | 13 58 | 8 44 | 17 43 | 5 45 | | | |
| S 27 | 23 21 | 18 43 | 4 26 | 18 57 | 4 28 | 15 46 | 2 36 | 6 8 | 0 46 | 13 9 | 1 1 | 0 5 | 2 19 | 18 57 | 0 37 | 7 13 | 1 45 | 23 37 | 9 25 | 14 23 | 13 57 | 8 46 | 17 43 | 5 45 | | | |
| M28 | 23 19 | 16 42 | 4 54 | 18 51 | 4 35 | 16 4 | 2 36 | 5 54 | 0 45 | 13 6 | 1 1 | 0 6 | 2 20 | 18 56 | 0 37 | 7 13 | 1 45 | 23 37 | 9 25 | 14 20 | 13 56 | 8 47 | 17 42 | 5 45 | | | |
| T 29 | 23 16 | 13 50 | 5 5 | 18 47 | 4 40 | 16 21 | 2 35 | 5 40 | 0 44 | 13 2 | 1 1 | 0 6 | 2 20 | 18 55 | 0 37 | 7 13 | 1 45 | 23 38 | 9 26 | 14 17 | 13 55 | 8 49 | 17 42 | 5 45 | | | |
| W30 | 23n12 | 10s22 | 4n59 | 18n44 | 4s43 | 16n38 | 2s34 | 5n26 | 0n43 | 12n58 | 1n 1 | 0n 6 | 2s20 | 18n54 | 0n37 | 7s13 | 1n45 | 23s38 | 9s26 | 14s14 | 13s54 | 8n51 | 17n42 | 5s45 | | | |

ASTRODIENST EPHEMERIS for the year 1790
geocentric

JULY 1790

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♊ | ♋ | ♌ | ♍ | ♎ | ♏ | ♐ | ♑ | ♒ | ♓ | ♈ | ♉ | Day |
|------|----------|------------------------|---------------------|----------------------|---------------------|---------------------|---------------------|--------------------|--------------------|---------------------|---------------------|---------------------|--------------------|---------------------|--------------------|------|
| T 1 | 18 36 53 | 9 ⁵⁵ 13'14 | 1 ⁴⁵ 45 | 1 ¹⁸ 18 | 26 ⁸ 25 | 18 ¹⁷ 29 | 28 ⁸ 37 | 5 ¹⁷ 41 | 7 ¹⁵ 58 | 22 ² R42 | 20 ² R19 | 8 ¹⁸ 0 | 7 ¹¹ 3 | 18 ¹⁷ 50 | 1 ⁵² 28 | T 1 |
| F 2 | 18 40 50 | 10 ¹⁰ 10'25 | 14 ⁵ 5 | 0 ⁵⁴ 54 | 27 ³² 2 | 19 ² 2 | 28 ⁴⁷ 2 | 5 ⁴³ 1 | 8 ¹ 1 | 22 ² 42 | 20 ² 19 | 7 ¹⁵ 55 | 7 ⁰ 0 | 18 ⁵⁷ 1 | 1 ³⁴ 3 | F 2 |
| S 3 | 18 44 46 | 11 ⁰ 7'36 | 26 ¹⁰ 0 | 0 ³⁴ 28 | 28 ³⁸ 19 | 19 ³⁶ 28 | 28 ⁵⁸ 5 | 5 ⁴⁵ 8 | 8 ⁴ 4 | 22 ² 42 | 20 ¹⁸ 7 | 5 ⁵² 6 | 6 ⁵⁷ 19 | 1 ⁴⁰ 1 | 1 ⁴⁰ 1 | S 3 |
| S 4 | 18 48 43 | 12 ⁰ 4'48 | 8 ¹⁷ 5 | 0 ¹⁷ 29 | 29 ⁴⁵ 20 | 10 ²⁹ 9 | 29 ⁹ 5 | 5 ⁴⁶ 8 | 8 ⁸ 22 | 22 ² D42 | 20 ¹⁷ 7 | 7 ¹⁵ D50 | 6 ⁵⁴ 19 | 1 ⁴⁶ 1 | 1 ⁴⁶ 1 | S 4 |
| M 5 | 18 52 39 | 13 ⁰ 2'00 | 19 ⁵⁴ 0 | 5 ⁵⁴ 0 | 0 ¹¹ 52 | 20 ⁴³ 29 | 19 ⁵⁴ 5 | 5 ⁴⁷ 8 | 8 ¹¹ 22 | 22 ² 42 | 20 ¹⁶ 7 | 7 ⁵⁰ 6 | 6 ⁵⁰ 19 | 1 ⁵² 1 | 1 ⁵² 1 | M 5 |
| T 6 | 18 56 36 | 13 ⁵⁹ 12 | 1 ⁸ 44 | 29 ¹¹ 58 | 1 ⁵⁸ 21 | 17 ²⁹ 30 | 29 ³⁰ 5 | 5 ⁴⁸ 8 | 8 ¹⁵ 22 | 22 ² 42 | 20 ¹⁵ 7 | 7 ¹⁵ R51 | 6 ⁴⁷ 19 | 1 ⁵⁸ 2 | 1 ⁵⁸ 2 | T 6 |
| W 7 | 19 0 33 | 14 ⁵⁶ 25 | 13 ³⁹ 29 | 29 ¹⁵ D55 | 3 ⁶ 21 | 51 ²⁹ 41 | 29 ⁴¹ 5 | 5 ⁵⁰ 8 | 8 ¹⁸ 22 | 22 ² 42 | 20 ¹⁴ 7 | 7 ⁵¹ 6 | 6 ⁴⁴ 19 | 2 ³ 3 | 2 ³ 3 | W 7 |
| T 8 | 19 4 29 | 15 ⁵³ 38 | 25 ⁴⁴ 29 | 29 ⁵⁸ 4 | 4 ¹³ 22 | 25 ²⁹ 52 | 29 ⁵² 5 | 5 ⁵¹ 8 | 8 ²² 22 | 22 ² 42 | 20 ¹³ 7 | 7 ⁴⁹ 6 | 6 ⁴¹ 19 | 2 ⁹ 2 | 2 ⁹ 2 | T 8 |
| F 9 | 19 8 26 | 16 ⁵⁰ 52 | 8 ¹¹ 4 | 0 ⁵⁸ 6 | 5 ²⁰ 23 | 0 ¹⁷ 3 | 0 ¹⁷ 3 | 5 ⁵² 8 | 8 ²⁵ 22 | 22 ² 43 | 20 ¹² 7 | 7 ⁴⁶ 6 | 6 ³⁸ 19 | 2 ¹⁵ 2 | 2 ¹⁵ 2 | F 9 |
| S 10 | 19 12 22 | 17 ⁴⁸ 06 | 20 ⁴¹ 0 | 0 ¹⁹ 6 | 6 ²⁸ 23 | 34 ⁰ 14 | 0 ¹⁴ 5 | 5 ⁵² 8 | 8 ²⁹ 22 | 22 ² 43 | 20 ¹⁰ 7 | 7 ⁴⁰ 6 | 6 ³⁵ 19 | 2 ²¹ 2 | 2 ²¹ 2 | S 10 |
| S 11 | 19 16 19 | 18 ⁴⁵ 21 | 3 ⁵⁸ 38 | 0 ³⁸ 7 | 7 ³⁵ 24 | 9 ⁰ 25 | 0 ²⁵ 5 | 5 ⁵³ 8 | 8 ³² 22 | 22 ² 43 | 20 ⁹ 7 | 7 ³¹ 6 | 6 ³¹ 19 | 2 ²⁷ 2 | 2 ²⁷ 2 | S 11 |
| M 12 | 19 20 15 | 19 ⁴² 36 | 16 ⁵⁴ 1 | 1 ² 8 | 8 ⁴³ 24 | 43 ⁰ 36 | 0 ³⁶ 5 | 5 ⁵⁴ 8 | 8 ³⁶ 22 | 22 ² 43 | 20 ⁸ 7 | 7 ²¹ 6 | 6 ²⁸ 19 | 2 ³² 2 | 2 ³² 2 | M 12 |
| T 13 | 19 24 12 | 20 ³⁹ 51 | 0 ¹² 28 | 1 ³¹ 9 | 9 ⁵¹ 25 | 18 ⁰ 47 | 0 ⁴⁷ 5 | 5 ⁵⁴ 8 | 8 ³⁹ 22 | 22 ² 43 | 20 ⁷ 7 | 7 ⁹ 6 | 6 ²⁵ 19 | 2 ³⁸ 2 | 2 ³⁸ 2 | T 13 |
| W 14 | 19 28 8 | 21 ³⁷ 07 | 14 ¹⁷ 2 | 2 ⁶ 10 | 5 ⁵⁹ 25 | 53 ⁰ 59 | 0 ⁵⁹ 5 | 5 ⁵⁵ 8 | 8 ⁴³ 22 | 22 ² 44 | 20 ⁶ 6 | 6 ⁵⁸ 6 | 6 ²² 19 | 2 ⁴⁴ 2 | 2 ⁴⁴ 2 | W 14 |
| T 15 | 19 32 5 | 22 ³⁴ 23 | 28 ¹⁸ 2 | 2 ⁴⁶ 12 | 7 ²⁶ 25 | 28 ¹² 7 | 26 ²⁸ 1 | 5 ⁵⁵ 8 | 8 ⁴⁶ 22 | 22 ² 44 | 20 ⁵ 6 | 6 ⁴⁸ 6 | 6 ¹⁹ 19 | 2 ⁵⁰ 2 | 2 ⁵⁰ 2 | T 15 |
| F 16 | 19 36 2 | 23 ³¹ 39 | 12 ¹⁷ 25 | 3 ³² 13 | 15 ²⁷ 3 | 1 ²² 5 | 5 ⁵⁵ 8 | 5 ⁵⁵ 8 | 8 ⁵⁰ 22 | 22 ² 44 | 20 ⁴ 6 | 6 ⁴¹ 6 | 6 ¹⁵ 19 | 2 ⁵⁵ 2 | 2 ⁵⁵ 2 | F 16 |
| S 17 | 19 39 58 | 24 ²⁸ 55 | 26 ³⁶ 4 | 4 ²² 14 | 23 ²⁷ 38 | 1 ³³ 5 | 5 ⁵⁵ R55 | 8 ⁵⁴ 22 | 22 ² 45 | 20 ³ 6 | 6 ³⁶ 6 | 6 ¹² 19 | 20 ³⁷ 3 | 3 ¹ 1 | 3 ¹ 1 | S 17 |
| S 18 | 19 43 55 | 25 ²⁶ 12 | 10 ¹² 47 | 5 ¹⁸ 15 | 31 ²⁸ 13 | 1 ⁴⁵ 5 | 5 ⁵⁵ 8 | 8 ⁵⁷ 22 | 22 ² 45 | 20 ¹ 6 | 6 ³⁴ 6 | 6 ⁹ 19 | 20 ⁴³ 3 | 7 ¹⁸ 2 | 7 ¹⁸ 2 | S 18 |
| M 19 | 19 47 51 | 26 ²³ 29 | 24 ⁵⁶ 6 | 6 ²⁰ 16 | 40 ²⁸ 49 | 1 ⁵⁶ 5 | 5 ⁵⁵ 9 | 9 ¹ 22 | 22 ² 46 | 20 ⁰ 6 | 6 ³³ D33 | 6 ⁶ 20 | 20 ⁵⁰ 3 | 3 ¹² 2 | 3 ¹² 2 | M 19 |
| T 20 | 19 51 48 | 27 ²⁰ 46 | 9 ¹¹ 2 | 7 ²⁶ 17 | 49 ²⁹ 24 | 2 ⁸ 5 | 5 ⁵⁵ 9 | 9 ⁵ 22 | 22 ² 46 | 19 ⁵⁹ 6 | 6 ³³ R33 | 6 ³ 20 | 20 ⁵⁷ 3 | 3 ¹⁸ 2 | 3 ¹⁸ 2 | T 20 |
| W 21 | 19 55 44 | 28 ¹⁸ 03 | 23 ⁴ 8 | 8 ³⁷ 18 | 57 ²⁹ 59 | 2 ²⁰ 5 | 5 ⁵⁵ 9 | 9 ⁸ 22 | 22 ² 47 | 19 ⁵⁸ 6 | 6 ³³ 6 | 6 ⁰ 21 | 2 ³ 3 | 3 ²⁴ 2 | 3 ²⁴ 2 | W 21 |
| T 22 | 19 59 41 | 29 ¹⁵ 21 | 7 ¹⁷ 2 | 9 ⁵³ 20 | 6 ⁰ 36 | 2 ³² 5 | 5 ⁵⁴ 9 | 9 ¹² 22 | 22 ² 47 | 19 ⁵⁷ 6 | 6 ³⁰ 5 | 5 ⁵⁶ 21 | 1 ¹⁰ 3 | 3 ²⁹ 2 | 3 ²⁹ 2 | T 22 |
| F 23 | 20 3 37 | 0 ¹² 240 | 20 ⁵³ 11 | 1 ¹⁴ 21 | 1 ¹⁵ 1 | 1 ¹¹ 2 | 2 ⁴⁴ 5 | 5 ⁵⁴ 9 | 9 ¹⁶ 22 | 22 ² 48 | 19 ⁵⁵ 6 | 6 ²⁵ 5 | 5 ⁵³ 21 | 1 ¹⁷ 3 | 3 ³⁵ 2 | F 23 |
| S 24 | 20 7 34 | 1 ⁹ 59 | 4 ³ 36 | 12 ³⁹ 22 | 2 ²⁴ 1 | 4 ⁷ 2 | 2 ⁵⁵ 5 | 5 ⁵³ 9 | 9 ¹⁹ 22 | 22 ² 49 | 19 ⁵⁴ 6 | 6 ¹⁷ 5 | 5 ⁵⁰ 21 | 2 ²³ 3 | 3 ⁴⁰ 2 | S 24 |
| S 25 | 20 11 31 | 2 ⁷ 18 | 18 ⁸ 14 | 9 ²³ 33 | 2 ²³ 3 | 7 ² 5 | 5 ⁵² 9 | 9 ²³ 22 | 22 ² 49 | 19 ⁵³ 6 | 6 ⁷ 5 | 5 ⁴⁷ 21 | 1 ³⁰ 3 | 3 ⁴⁶ 2 | 3 ⁴⁶ 2 | S 25 |
| M 26 | 20 15 27 | 3 ⁴ 38 | 1 ²⁷ 15 | 4 ³ 23 | 2 ⁵⁹ 2 | 5 ³ 1 | 5 ⁵² 9 | 9 ²⁷ 22 | 22 ² 50 | 19 ⁵² 5 | 5 ⁵⁵ 5 | 5 ⁴⁴ 21 | 1 ³⁷ 3 | 3 ⁵¹ 2 | 3 ⁵¹ 2 | M 26 |
| T 27 | 20 19 24 | 4 ¹ 59 | 14 ³¹ 17 | 2 ²² 25 | 5 ² 3 | 3 ⁶ 3 | 5 ⁵¹ 9 | 9 ³⁰ 22 | 22 ² 51 | 19 ⁵⁰ 5 | 5 ⁴² 5 | 5 ⁴¹ 21 | 1 ⁴³ 3 | 3 ⁵⁶ 2 | 3 ⁵⁶ 2 | T 27 |
| W 28 | 20 23 20 | 4 ⁵⁹ 21 | 27 ¹⁹ 19 | 9 ⁴ 27 | 1 ²⁷ 4 | 1 ² 4 | 3 ⁴⁴ 5 | 5 ⁵⁰ 9 | 9 ³⁴ 22 | 22 ² 51 | 19 ⁴⁹ 5 | 5 ³⁰ 5 | 5 ³⁷ 21 | 1 ⁵⁰ 4 | 2 ¹ 2 | W 28 |
| T 29 | 20 27 17 | 5 ⁵⁶ 43 | 9 ¹⁷ 20 | 5 ⁴³ 28 | 1 ¹¹ 4 | 4 ⁸ 3 | 3 ⁵⁶ 5 | 5 ⁴⁹ 9 | 9 ³⁸ 22 | 22 ² 52 | 19 ⁴⁸ 5 | 5 ²⁰ 5 | 5 ³⁴ 21 | 1 ⁵⁷ 4 | 2 ⁷ 2 | T 29 |
| F 30 | 20 31 13 | 6 ⁵⁴ 07 | 22 ⁴ 22 | 2 ³⁹ 29 | 2 ²⁰ 5 | 2 ⁵ 4 | 4 ⁸ 5 | 5 ⁴⁷ 9 | 9 ⁴¹ 22 | 22 ² 53 | 19 ⁴⁷ 5 | 5 ¹² 5 | 5 ³¹ 22 | 2 ³ 4 | 4 ¹³ 2 | F 30 |
| S 31 | 20 35 10 | 7 ¹⁵ 1'32 | 4 ¹⁷ 7 | 24 ⁵ 31 | 0 ⁵⁸ 30 | 6 ¹ 4 | 4 ¹⁷ 20 | 5 ¹⁷ 46 | 9 ⁴⁵ 22 | 22 ² 54 | 19 ⁴⁵ 5 | 5 ¹¹ 7 | 5 ¹¹ 28 | 22 ¹⁷ 10 | 4 ¹⁸ 2 | S 31 |

| Day | ☉ | ☾ | | ♊ | | ♋ | | ♌ | | ♍ | | ♎ | | ♏ | | ♐ | | ♑ | | ♒ | ♓ | ♈ | ♉ | |
|------|-------|-------|------|-------|------|-------|------|------|------|-------|------|------|------|-------|------|------|------|-------|------|-------|-------|------|-------|------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | decl | decl | decl | lat |
| T 1 | 23n 9 | 6s30 | 4n39 | 18n43 | 4s45 | 16n54 | 2s32 | 5n12 | 0n42 | 12n55 | 1n 1 | 0n 7 | 2s20 | 18n53 | 0n37 | 7s13 | 1n45 | 23s39 | 9s26 | 14s11 | 13s53 | 8n53 | 17n42 | 5s45 |
| F 2 | 23 4 | 2 28 | 4 7 | 18 43 | 4 45 | 17 10 | 2 31 | 4 58 | 0 41 | 12 51 | 1 0 | 0 7 | 2 21 | 18 53 | 0 37 | 7 13 | 1 45 | 23 39 | 9 26 | 14 10 | 13 52 | 8 54 | 17 42 | 5 46 |
| S 3 | 23 0 | 1n35 | 3 24 | 18 44 | 4 44 | 17 26 | 2 30 | 4 44 | 0 40 | 12 47 | 1 0 | 0 8 | 2 21 | 18 52 | 0 37 | 7 13 | 1 45 | 23 40 | 9 26 | 14 9 | 13 51 | 8 56 | 17 42 | 5 46 |
| S 4 | 22 55 | 5 32 | 2 32 | 18 47 | 4 41 | 17 42 | 2 29 | 4 30 | 0 39 | 12 44 | 1 0 | 0 8 | 2 21 | 18 51 | 0 37 | 7 13 | 1 44 | 23 40 | 9 27 | 14 8 | 13 50 | 8 58 | 17 41 | 5 46 |
| M 5 | 22 50 | 9 15 | 1 34 | 18 51 | 4 37 | 17 57 | 2 27 | 4 16 | 0 38 | 12 40 | 1 0 | 0 8 | 2 21 | 18 50 | 0 37 | 7 13 | 1 44 | 23 41 | 9 27 | 14 8 | 13 49 | 9 0 | 17 41 | 5 46 |
| T 6 | 22 44 | 12 36 | 0 33 | 18 56 | 4 32 | 18 12 | 2 25 | 4 2 | 0 37 | 12 36 | 1 0 | 0 8 | 2 22 | 18 49 | 0 37 | 7 14 | 1 44 | 23 42 | 9 27 | 14 9 | 13 48 | 9 1 | 17 41 | 5 46 |
| W 7 | 22 38 | 15 28 | 0s31 | 19 3 | 4 25 | 18 27 | 2 24 | 3 47 | 0 36 | 12 32 | 1 0 | 0 9 | 2 22 | 18 48 | 0 37 | 7 14 | 1 44 | 23 42 | 9 27 | 14 8 | 13 47 | 9 3 | 17 41 | 5 46 |
| T 8 | 22 31 | 17 41 | 1 34 | 19 10 | 4 18 | 18 41 | 2 22 | 3 33 | 0 35 | 12 28 | 1 0 | 0 9 | 2 22 | 18 47 | 0 37 | 7 14 | 1 44 | 23 43 | 9 28 | 14 8 | 13 46 | 9 5 | 17 40 | 5 47 |
| F 9 | 22 24 | 19 9 | 2 34 | 19 19 | 4 9 | 18 55 | 2 20 | 3 18 | 0 34 | 12 24 | 1 0 | 0 9 | 2 23 | 18 46 | 0 37 | 7 14 | 1 44 | 23 43 | 9 28 | 14 7 | 13 45 | 9 7 | 17 40 | 5 47 |
| S 10 | 22 17 | 19 42 | 3 27 | 19 29 | 3 59 | 19 8 | 2 18 | 3 4 | 0 33 | 12 20 | 1 0 | 0 9 | 2 23 | 18 45 | 0 37 | 7 14 | 1 44 | 23 44 | 9 28 | 14 5 | 13 44 | 9 8 | 17 40 | 5 47 |
| S 11 | 22 9 | 19 14 | 4 11 | 19 39 | 3 49 | 19 21 | 2 16 | 2 49 | 0 32 | 12 16 | 1 0 | 0 9 | 2 23 | 18 44 | 0 37 | 7 14 | 1 44 | 23 44 | 9 28 | 14 2 | 13 42 | 9 10 | 17 39 | 5 47 |
| M 12 | 22 1 | 17 43 | 4 43 | 19 50 | 3 37 | 19 34 | 2 14 | 2 35 | 0 31 | 12 12 | 1 0 | 0 9 | 2 23 | 18 43 | 0 37 | 7 14 | 1 44 | 23 45 | 9 28 | 13 59 | 13 41 | 9 12 | 17 39 | 5 47 |
| T 13 | 21 52 | 15 11 | 5 0 | 20 2 | 3 25 | 19 46 | 2 12 | 2 20 | 0 30 | 12 8 | 1 0 | 0 9 | 2 24 | 18 43 | 0 37 | 7 14 | 1 44 | 23 45 | 9 29 | 13 55 | 13 40 | 9 14 | 17 39 | 5 47 |
| W 14 | 21 44 | 11 47 | 4 59 | 20 14 | 3 13 | 19 58 | 2 10 | 2 5 | 0 29 | 12 4 | 1 0 | 0 9 | 2 24 | 18 42 | 0 37 | 7 14 | 1 44 | 23 46 | 9 29 | 13 51 | 13 39 | 9 15 | 17 39 | 5 48 |
| T 15 | 21 34 | 7 41 | 4 41 | 20 27 | 3 0 | 20 9 | 2 8 | 1 51 | 0 28 | 12 0 | 1 0 | 0 9 | 2 24 | 18 41 | 0 37 | 7 15 | 1 44 | 23 46 | 9 29 | 13 48 | 13 38 | 9 17 | 17 38 | 5 48 |
| F 16 | 21 25 | 3 7 | 4 6 | 20 39 | 2 46 | 20 20 | 2 5 | 1 36 | 0 27 | 11 56 | 1 0 | 0 8 | 2 25 | 18 40 | 0 37 | 7 15 | 1 44 | 23 47 | 9 29 | 13 46 | 13 37 | 9 19 | 17 38 | 5 48 |
| S 17 | 21 15 | 1s38 | 3 15 | 20 51 | 2 32 | 20 31 | 2 3 | 1 21 | 0 27 | 11 52 | 1 0 | 0 8 | 2 25 | 18 39 | 0 37 | 7 15 | 1 44 | 23 48 | 9 29 | 13 44 | 13 36 | 9 21 | 17 37 | 5 48 |
| S 18 | 21 4 | 6 18 | 2 12 | 21 4 | 2 18 | 20 41 | 2 0 | 1 6 | 0 26 | 11 48 | 1 0 | 0 8 | 2 25 | 18 38 | 0 37 | 7 15 | 1 44 | 23 48 | 9 29 | 13 43 | 13 35 | 9 22 | 17 37 | 5 49 |
| M 19 | 20 54 | 10 37 | 1 1 | 21 15 | 2 4 | 20 50 | 1 58 | 0 51 | 0 25 | 11 43 | 1 0 | 0 8 | 2 25 | 18 37 | 0 37 | 7 15 | 1 44 | 23 49 | 9 30 | 13 43 | 13 34 | 9 24 | 17 37 | 5 49 |
| T 20 | 20 43 | 14 19 | 0n13 | 21 26 | 1 49 | 20 59 | 1 55 | 0 36 | 0 24 | 11 39 | 1 0 | 0 7 | 2 26 | 18 36 | 0 37 | 7 16 | 1 44 | 23 49 | 9 30 | 13 43 | 13 33 | 9 26 | 17 36 | 5 49 |
| W 21 | 20 31 | 17 10 | 1 26 | 21 36 | 1 35 | 21 8 | 1 53 | 0 21 | 0 23 | 11 35 | 0 59 | 0 7 | 2 26 | 18 35 | 0 37 | 7 16 | 1 44 | 23 50 | 9 30 | 13 43 | 13 32 | 9 27 | 17 36 | 5 49 |
| T 22 | 20 20 | 18 59 | 2 34 | 21 45 | 1 20 | 21 16 | 1 50 | 0 6 | 0 22 | 11 31 | 0 59 | 0 7 | 2 26 | 18 34 | 0 37 | 7 16 | 1 43 | 23 50 | 9 30 | 13 42 | 13 31 | 9 29 | 17 36 | 5 50 |
| F 23 | 20 8 | 19 38 | 3 32 | 21 53 | 1 6 | 21 23 | 1 47 | 0s 9 | 0 21 | 11 26 | 0 59 | 0 6 | 2 26 | 18 33 | 0 37 | 7 16 | 1 43 | 23 51 | 9 30 | 13 40 | 13 30 | 9 31 | 17 35 | 5 50 |
| S 24 | 19 55 | 19 7 | 4 16 | 22 0 | 0 52 | 21 30 | 1 45 | 0 24 | 0 20 | 11 22 | 0 59 | 0 6 | 2 27 | 18 32 | 0 37 | 7 17 | 1 43 | 23 51 | 9 30 | 13 38 | 13 29 | 9 33 | 17 35 | 5 50 |
| S 25 | 19 42 | 17 30 | 4 46 | 22 5 | 0 38 | 21 37 | 1 42 | 0 39 | 0 19 | 11 18 | 0 59 | 0 5 | 2 27 | 18 31 | 0 37 | 7 17 | 1 43 | 23 52 | 9 30 | 13 34 | 13 28 | 9 34 | 17 34 | 5 50 |
| M 26 | 19 29 | 14 59 | 5 0 | 22 8 | 0 25 | 21 43 | 1 39 | 0 55 | 0 18 | 11 13 | 0 59 | 0 5 | 2 27 | 18 30 | 0 37 | 7 17 | 1 43 | 23 52 | 9 31 | 13 30 | 13 27 | 9 36 | 17 34 | 5 51 |
| T 27 | 19 16 | 11 45 | 4 57 | 22 9 | 0 11 | 21 48 | 1 36 | 1 10 | 0 18 | 11 9 | 0 59 | 0 4 | 2 28 | 18 29 | 0 37 | 7 18 | 1 43 | 23 53 | 9 31 | 13 26 | 13 26 | 9 38 | 17 33 | 5 51 |
| W 28 | 19 2 | 8 2 | 4 39 | 22 8 | 0n 1 | 21 53 | 1 33 | 1 25 | 0 17 | 11 4 | 0 59 | 0 3 | 2 28 | 18 28 | 0 37 | 7 18 | 1 43 | 23 53 | 9 31 | 13 22 | 13 25 | 9 39 | 17 33 | 5 51 |
| T 29 | 18 48 | 4 3 | 4 9 | 22 4 | 0 13 | 21 57 | 1 30 | 1 40 | 0 16 | 11 0 | 0 59 | 0 3 | 2 28 | 18 27 | 0 37 | 7 18 | 1 43 | 23 54 | 9 31 | 13 19 | 13 24 | 9 41 | 17 32 | 5 52 |
| F 30 | 18 34 | 0n 1 | 3 27 | 21 58 | 0 25 | 22 1 | 1 27 | 1 55 | 0 15 | 10 55 | 0 59 | 0 2 | 2 28 | 18 26 | 0 37 | 7 19 | 1 43 | 23 55 | 9 31 | 13 16 | 13 22 | 9 43 | 17 32 | 5 52 |
| S 31 | 18n19 | 4n 1 | 2n36 | 21n50 | 0n36 | 22n 4 | 1s24 | 2s11 | 0n14 | 10n51 | 0n59 | 0n 1 | 2s29 | 18n25 | 0n37 | 7s19 | 1n43 | 23s55 | 9s31 | 13s14 | 13s21 | 9n44 | 17n32 | 5s52 |

ASTRODIENST EPHEMERIS for the year 1790

geocentric

AUGUST 1790

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|----------|----------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|------|--------|------|------|
| S 1 | 20 39 6 | 8♌48'58 | 16♍0 | 26♋26 | 1♊40 | 6♊38 | 4♎32 | 5°R45 | 9♏49 | 22♎55 | 19°R44 | 5°R 4 | 5♌25 | 22♍16 | 4♋23 | S 1 |
| M 2 | 20 43 3 | 9°46'25 | 27°48 | 28°23 | 2°50 | 7°15 | 4°45 | 5°Y43 | 9°53 | 22°56 | 19°R43 | 5♌ 3 | 5°21 | 22°23 | 4°28 | M 2 |
| T 3 | 20 47 0 | 10°43'53 | 9♋37 | 0♏22 | 4° 0 | 7°52 | 4°57 | 5°42 | 9°56 | 22°56 | 19°41 | 5° 3 | 5°18 | 22°30 | 4°33 | T 3 |
| W 4 | 20 50 56 | 11°41'23 | 21°33 | 2°22 | 5°10 | 8°29 | 5° 9 | 5°40 | 10° 0 | 22°57 | 19°40 | 5° 2 | 5°15 | 22°36 | 4°39 | W 4 |
| T 5 | 20 54 53 | 12°38'54 | 3♊39 | 4°24 | 6°20 | 9° 6 | 5°22 | 5°38 | 10° 4 | 22°58 | 19°39 | 5° 1 | 5°12 | 22°43 | 4°44 | T 5 |
| F 6 | 20 58 49 | 13°36'26 | 16° 2 | 6°27 | 7°30 | 9°43 | 5°34 | 5°36 | 10° 7 | 22°59 | 19°37 | 4°58 | 5° 9 | 22°50 | 4°49 | F 6 |
| S 7 | 21 2 46 | 14°34'00 | 28°46 | 8°30 | 8°41 | 10°20 | 5°47 | 5°34 | 10°11 | 23° 0 | 19°36 | 4°52 | 5° 6 | 22°56 | 4°54 | S 7 |
| S 8 | 21 6 42 | 15°31'35 | 11♋53 | 10°34 | 9°51 | 10°58 | 5°59 | 5°32 | 10°15 | 23° 2 | 19°35 | 4°43 | 5° 2 | 23° 3 | 4°59 | S 8 |
| M 9 | 21 10 39 | 16°29'12 | 25°24 | 12°37 | 11° 2 | 11°35 | 6°12 | 5°30 | 10°19 | 23° 3 | 19°33 | 4°33 | 4°59 | 23°10 | 5° 4 | M 9 |
| T 10 | 21 14 35 | 17°26'49 | 9♏17 | 14°40 | 12°12 | 12°13 | 6°25 | 5°28 | 10°22 | 23° 4 | 19°32 | 4°21 | 4°56 | 23°16 | 5° 9 | T 10 |
| W11 | 21 18 32 | 18°24'28 | 23°30 | 16°43 | 13°23 | 12°50 | 6°37 | 5°25 | 10°26 | 23° 5 | 19°31 | 4°10 | 4°53 | 23°23 | 5°14 | W11 |
| T 12 | 21 22 29 | 19°22'08 | 7♎56 | 18°45 | 14°34 | 13°28 | 6°50 | 5°23 | 10°30 | 23° 6 | 19°29 | 4° 0 | 4°50 | 23°30 | 5°18 | T 12 |
| F 13 | 21 26 25 | 20°19'50 | 22°28 | 20°46 | 15°45 | 14° 6 | 7° 3 | 5°20 | 10°33 | 23° 7 | 19°28 | 3°53 | 4°47 | 23°36 | 5°23 | F 13 |
| S 14 | 21 30 22 | 21°17'32 | 7♊ 1 | 22°47 | 16°56 | 14°44 | 7°15 | 5°18 | 10°37 | 23° 9 | 19°27 | 3°48 | 4°43 | 23°43 | 5°28 | S 14 |
| S 15 | 21 34 18 | 22°15'15 | 21°29 | 24°46 | 18° 7 | 15°22 | 7°28 | 5°15 | 10°41 | 23°10 | 19°25 | 3°46 | 4°40 | 23°50 | 5°33 | S 15 |
| M16 | 21 38 15 | 23°13'00 | 5♌48 | 26°44 | 19°18 | 16° 0 | 7°41 | 5°12 | 10°44 | 23°11 | 19°24 | 3°D45 | 4°37 | 23°56 | 5°37 | M16 |
| T 17 | 21 42 11 | 24°10'46 | 19°56 | 28°40 | 20°29 | 16°38 | 7°54 | 5° 9 | 10°48 | 23°13 | 19°23 | 3°R45 | 4°34 | 24° 3 | 5°42 | T 17 |
| W18 | 21 46 8 | 25° 8'33 | 3♌53 | 0♎36 | 21°40 | 17°16 | 8° 6 | 5° 6 | 10°52 | 23°14 | 19°21 | 3°45 | 4°31 | 24° 9 | 5°46 | W18 |
| T 19 | 21 50 4 | 26° 6'20 | 17°37 | 2°30 | 22°52 | 17°55 | 8°19 | 5° 3 | 10°55 | 23°15 | 19°20 | 3°43 | 4°27 | 24°16 | 5°51 | T 19 |
| F 20 | 21 54 1 | 27° 4'10 | 1♊10 | 4°23 | 24° 3 | 18°33 | 8°32 | 5° 0 | 10°59 | 23°17 | 19°19 | 3°39 | 4°24 | 24°23 | 5°55 | F 20 |
| S 21 | 21 57 58 | 28° 2'00 | 14°31 | 6°15 | 25°15 | 19°12 | 8°45 | 4°57 | 11° 2 | 23°18 | 19°18 | 3°32 | 4°21 | 24°29 | 6° 0 | S 21 |
| S 22 | 22 1 54 | 28°59'51 | 27°41 | 8° 5 | 26°26 | 19°50 | 8°58 | 4°54 | 11° 6 | 23°20 | 19°16 | 3°23 | 4°18 | 24°36 | 6° 4 | S 22 |
| M23 | 22 5 51 | 29°57'44 | 10♋38 | 9°54 | 27°38 | 20°29 | 9°11 | 4°50 | 11°10 | 23°21 | 19°15 | 3°13 | 4°15 | 24°43 | 6° 8 | M23 |
| T 24 | 22 9 47 | 0♎55'39 | 23°22 | 11°41 | 28°50 | 21° 8 | 9°24 | 4°47 | 11°13 | 23°23 | 19°14 | 3° 2 | 4°12 | 24°49 | 6°12 | T 24 |
| W25 | 22 13 44 | 1°53'35 | 5♋54 | 13°28 | 0♏ 1 | 21°47 | 9°37 | 4°44 | 11°17 | 23°24 | 19°12 | 2°51 | 4° 8 | 24°56 | 6°17 | W25 |
| T 26 | 22 17 40 | 2°51'32 | 18°12 | 15°13 | 1°13 | 22°25 | 9°50 | 4°40 | 11°20 | 23°26 | 19°11 | 2°42 | 4° 5 | 25° 3 | 6°21 | T 26 |
| F 27 | 22 21 37 | 3°49'31 | 0♍19 | 16°56 | 2°25 | 23° 4 | 10° 3 | 4°36 | 11°24 | 23°27 | 19°10 | 2°35 | 4° 2 | 25° 9 | 6°25 | F 27 |
| S 28 | 22 25 33 | 4°47'32 | 12°16 | 18°39 | 3°37 | 23°44 | 10°16 | 4°33 | 11°27 | 23°29 | 19° 8 | 2°31 | 3°59 | 25°16 | 6°29 | S 28 |
| S 29 | 22 29 30 | 5°45'34 | 24° 7 | 20°20 | 4°49 | 24°23 | 10°29 | 4°29 | 11°31 | 23°30 | 19° 7 | 2°29 | 3°56 | 25°23 | 6°33 | S 29 |
| M30 | 22 33 27 | 6°43'39 | 5♊54 | 22° 0 | 6° 2 | 25° 2 | 10°41 | 4°25 | 11°34 | 23°32 | 19° 6 | 2°D28 | 3°52 | 25°29 | 6°36 | M30 |
| T 31 | 22 37 23 | 7♎41'45 | 17♋42 | 23♎38 | 7♏14 | 25♊41 | 10♎54 | 4°Y21 | 11♏38 | 23♊34 | 19° 5 | 2♌29 | 3♌49 | 25°Y36 | 6♋40 | T 31 |

| Day | ☉ | ☽ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|------|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | lat |
| S 1 | 18n 4 | 7n50 | 1n39 | 21n39 | 0n46 | 22n 6 | 1s21 | 2s26 | 0n13 | 10n46 | 0n59 | 0n 0 | 2s29 | 18n24 | 0n37 | 7s19 |
| M 2 | 17 49 | 11 18 | 0 38 | 21 25 | 0 56 | 22 8 | 1 18 | 2 41 | 0 12 | 10 42 | 0 59 | 0s 1 | 2 29 | 18 23 | 0 37 | 7 20 |
| T 3 | 17 34 | 14 20 | 0s24 | 21 8 | 1 4 | 22 9 | 1 15 | 2 57 | 0 11 | 10 37 | 0 59 | 0 1 | 2 29 | 18 22 | 0 37 | 7 20 |
| W 4 | 17 18 | 16 47 | 1 26 | 20 49 | 1 12 | 22 10 | 1 12 | 3 12 | 0 11 | 10 33 | 0 59 | 0 2 | 2 30 | 18 21 | 0 37 | 7 21 |
| T 5 | 17 2 | 18 31 | 2 26 | 20 28 | 1 19 | 22 10 | 1 9 | 3 28 | 0 10 | 10 28 | 0 59 | 0 3 | 2 30 | 18 20 | 0 37 | 7 21 |
| F 6 | 16 45 | 19 26 | 3 19 | 20 3 | 1 25 | 22 10 | 1 5 | 3 43 | 0 9 | 10 24 | 0 59 | 0 4 | 2 30 | 18 19 | 0 37 | 7 21 |
| S 7 | 16 29 | 19 23 | 4 4 | 19 37 | 1 31 | 22 9 | 1 2 | 3 58 | 0 8 | 10 19 | 0 59 | 0 5 | 2 30 | 18 18 | 0 37 | 7 22 |
| S 8 | 16 12 | 18 19 | 4 38 | 19 8 | 1 35 | 22 7 | 0 59 | 4 14 | 0 7 | 10 14 | 0 59 | 0 6 | 2 31 | 18 17 | 0 37 | 7 22 |
| M 9 | 15 55 | 16 12 | 4 58 | 18 37 | 1 39 | 22 5 | 0 56 | 4 29 | 0 6 | 10 10 | 0 59 | 0 7 | 2 31 | 18 16 | 0 37 | 7 23 |
| T 10 | 15 37 | 13 7 | 5 0 | 18 4 | 1 42 | 22 2 | 0 53 | 4 45 | 0 6 | 10 5 | 0 59 | 0 8 | 2 31 | 18 15 | 0 37 | 7 23 |
| W11 | 15 20 | 9 13 | 4 45 | 17 30 | 1 44 | 21 58 | 0 49 | 5 0 | 0 5 | 10 0 | 0 59 | 0 10 | 2 31 | 18 14 | 0 37 | 7 24 |
| T 12 | 15 2 | 4 43 | 4 11 | 16 53 | 1 45 | 21 54 | 0 46 | 5 15 | 0 4 | 9 56 | 0 59 | 0 11 | 2 32 | 18 13 | 0 37 | 7 24 |
| F 13 | 14 44 | 0s 5 | 3 21 | 16 15 | 1 46 | 21 49 | 0 43 | 5 31 | 0 3 | 9 51 | 0 59 | 0 12 | 2 32 | 18 12 | 0 37 | 7 25 |
| S 14 | 14 25 | 4 53 | 2 17 | 15 36 | 1 46 | 21 44 | 0 40 | 5 46 | 0 2 | 9 46 | 0 59 | 0 13 | 2 32 | 18 11 | 0 37 | 7 25 |
| S 15 | 14 6 | 9 23 | 1 5 | 14 56 | 1 45 | 21 38 | 0 37 | 6 2 | 0 2 | 9 41 | 0 59 | 0 15 | 2 32 | 18 10 | 0 37 | 7 26 |
| M16 | 13 48 | 13 18 | 0n11 | 14 15 | 1 44 | 21 31 | 0 33 | 6 17 | 0 1 | 9 37 | 0 59 | 0 16 | 2 33 | 18 9 | 0 37 | 7 26 |
| T 17 | 13 29 | 16 23 | 1 25 | 13 32 | 1 42 | 21 24 | 0 30 | 6 33 | 0 0 | 9 32 | 0 59 | 0 17 | 2 33 | 18 8 | 0 37 | 7 27 |
| W18 | 13 9 | 18 26 | 2 33 | 12 49 | 1 39 | 21 16 | 0 27 | 6 48 | 0s 1 | 9 27 | 0 59 | 0 19 | 2 33 | 18 7 | 0 37 | 7 27 |
| T 19 | 12 50 | 19 23 | 3 31 | 12 6 | 1 36 | 21 8 | 0 24 | 7 3 | 0 1 | 9 22 | 0 59 | 0 20 | 2 33 | 18 6 | 0 37 | 7 28 |
| F 20 | 12 30 | 19 11 | 4 17 | 11 21 | 1 33 | 20 59 | 0 20 | 7 19 | 0 2 | 9 17 | 0 59 | 0 21 | 2 33 | 18 5 | 0 37 | 7 28 |
| S 21 | 12 10 | 17 55 | 4 47 | 10 37 | 1 29 | 20 50 | 0 17 | 7 34 | 0 3 | 9 13 | 0 59 | 0 23 | 2 34 | 18 4 | 0 37 | 7 29 |
| S 22 | 11 50 | 15 43 | 5 2 | 9 52 | 1 25 | 20 39 | 0 14 | 7 49 | 0 4 | 9 8 | 0 59 | 0 24 | 2 34 | 18 3 | 0 37 | 7 30 |
| M23 | 11 30 | 12 45 | 5 1 | 9 6 | 1 20 | 20 29 | 0 11 | 8 5 | 0 5 | 9 3 | 0 59 | 0 26 | 2 34 | 18 2 | 0 37 | 7 30 |
| T 24 | 11 9 | 9 15 | 4 45 | 8 21 | 1 15 | 20 17 | 0 8 | 8 20 | 0 5 | 8 58 | 0 59 | 0 27 | 2 34 | 18 1 | 0 37 | 7 31 |
| W25 | 10 49 | 5 24 | 4 15 | 7 35 | 1 10 | 20 5 | 0 5 | 8 35 | 0 6 | 8 53 | 0 59 | 0 29 | 2 34 | 18 0 | 0 37 | 7 31 |
| T 26 | 10 28 | 1 23 | 3 34 | 6 49 | 1 4 | 19 53 | 0 2 | 8 50 | 0 7 | 8 48 | 0 59 | 0 31 | 2 35 | 17 59 | 0 37 | 7 32 |
| F 27 | 10 7 | 2n38 | 2 44 | 6 3 | 0 58 | 19 40 | 0n 1 | 9 6 | 0 8 | 8 44 | 0 59 | 0 32 | 2 35 | 17 58 | 0 37 | 7 33 |
| S 28 | 9 46 | 6 29 | 1 46 | 5 18 | 0 52 | 19 26 | 0 4 | 9 21 | 0 8 | 8 39 | 0 59 | 0 34 | 2 35 | 17 58 | 0 37 | 7 33 |
| S 29 | 9 25 | 10 3 | 0 45 | 4 32 | 0 45 | 19 12 | 0 7 | 9 36 | 0 9 | 8 34 | 0 59 | 0 35 | 2 35 | 17 57 | 0 37 | 7 34 |
| M30 | 9 3 | 13 13 | 0s18 | 3 46 | 0 39 | 18 57 | 0 10 | 9 51 | 0 10 | 8 29 | 0 59 | 0 37 | 2 35 | 17 56 | 0 37 | 7 34 |
| T 31 | 8n42 | 15n50 | 1s21 | 3n 1 | 0n32 | 18n42 | 0n13 | 10s 6 | 0s10 | 8n24 | 0n59 | 0s39 | 2s36 | 17n55 | 0n37 | 7s35 |

Julian Day Number = 2375056.5, Delta T = 21.54 sec
 Ecliptic obliquity = 23°27'52, Nutation = 0°00'11, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 21°48'59, Lahiri = 20°55'59Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1790

geocentric

SEPTEMBER 1790

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♀ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day | |
|------|----------|----------------------|--------------------|--------------------|-------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|---------------------|------------------|------|
| W 1 | 22 41 20 | 8 ^m 39'54 | 29 ^h 36 | 25 ^m 16 | 8 ^m 26 | 26 ^h 21 | 11 ^m 7 | 4 ^h R17 | 11 ^h 41 | 23 ^h 35 | 19°R 3 | 2 ^m 30 | 3 ^m 46 | 25 ^h 43 | 6 ^h 44 | W 1 | |
| T 2 | 22 45 16 | 9°38'04 | 11 ^h 41 | 26°52 | 9°39 | 27° 0 | 11°20 | 4 ^h Y13 | 11°44 | 23°37 | 19 ^h 2 | 2°R30 | 3°43 | 25°49 | 6°48 | T 2 | |
| F 3 | 22 49 13 | 10°36'16 | 24° 3 | 28°27 | 10°51 | 27°40 | 11°33 | 4° 9 | 11°48 | 23°39 | 19° 1 | 2°29 | 3°40 | 25°56 | 6°51 | F 3 | |
| S 4 | 22 53 9 | 11°34'31 | 6 ^h 47 | 0 ^h 1 | 12° 4 | 28°20 | 11°47 | 4° 5 | 11°51 | 23°41 | 19° 0 | 2°26 | 3°37 | 26° 2 | 6°55 | S 4 | |
| S 5 | 22 57 6 | 12°32'47 | 19°55 | 1°33 | 13°16 | 28°59 | 12° 0 | 4° 1 | 11°55 | 23°42 | 18°59 | 2°22 | 3°33 | 26° 9 | 6°58 | S 5 | |
| M 6 | 23 1 2 | 13°31'06 | 3 ^h 30 | 3° 5 | 14°29 | 29°39 | 12°13 | 3°57 | 11°58 | 23°44 | 18°57 | 2°15 | 3°30 | 26°16 | 7° 2 | M 6 | |
| T 7 | 23 4 59 | 14°29'26 | 17°33 | 4°35 | 15°42 | 0 ^m 19 | 12°26 | 3°53 | 12° 1 | 23°46 | 18°56 | 2° 8 | 3°27 | 26°22 | 7° 5 | T 7 | |
| W 8 | 23 8 55 | 15°27'49 | 1 ^h 59 | 6° 4 | 16°54 | 0°59 | 12°39 | 3°48 | 12° 4 | 23°48 | 18°55 | 2° 0 | 3°24 | 26°29 | 7° 8 | W 8 | |
| T 9 | 23 12 52 | 16°26'13 | 16°43 | 7°32 | 18° 7 | 1°39 | 12°52 | 3°44 | 12° 8 | 23°50 | 18°54 | 1°53 | 3°21 | 26°36 | 7°12 | T 9 | |
| F 10 | 23 16 49 | 17°24'39 | 1 ^h 37 | 8°59 | 19°20 | 2°20 | 13° 5 | 3°40 | 12°11 | 23°52 | 18°53 | 1°49 | 3°18 | 26°42 | 7°15 | F 10 | |
| S 11 | 23 20 45 | 18°23'07 | 16°33 | 10°24 | 20°33 | 3° 0 | 13°18 | 3°35 | 12°14 | 23°53 | 18°52 | 1°46 | 3°14 | 26°49 | 7°18 | S 11 | |
| S 12 | 23 24 42 | 19°21'36 | 1 ^m 23 | 11°48 | 21°46 | 3°40 | 13°30 | 3°31 | 12°17 | 23°55 | 18°51 | 1°D45 | 3°11 | 26°56 | 7°21 | S 12 | |
| M13 | 23 28 38 | 20°20'08 | 16° 0 | 13°11 | 22°59 | 4°21 | 13°43 | 3°26 | 12°20 | 23°57 | 18°49 | 1°45 | 3° 8 | 27° 2 | 7°24 | M13 | |
| T 14 | 23 32 35 | 21°18'41 | 0 ^h 19 | 14°33 | 24°12 | 5° 1 | 13°56 | 3°22 | 12°23 | 23°59 | 18°48 | 1°47 | 3° 5 | 27° 9 | 7°27 | T 14 | |
| W15 | 23 36 31 | 22°17'15 | 14°23 | 15°54 | 25°26 | 5°42 | 14° 9 | 3°17 | 12°27 | 24° 1 | 18°47 | 1°48 | 3° 2 | 27°16 | 7°29 | W15 | |
| T 16 | 23 40 28 | 23°15'52 | 28° 6 | 17°13 | 26°39 | 6°23 | 14°22 | 3°13 | 12°30 | 24° 3 | 18°46 | 1°R48 | 2°58 | 27°22 | 7°32 | T 16 | |
| F 17 | 23 44 24 | 24°14'30 | 11 ^h 30 | 18°30 | 27°52 | 7° 3 | 14°35 | 3° 8 | 12°33 | 24° 5 | 18°45 | 1°47 | 2°55 | 27°29 | 7°35 | F 17 | |
| S 18 | 23 48 21 | 25°13'09 | 24°38 | 19°46 | 29° 6 | 7°44 | 14°48 | 3° 3 | 12°36 | 24° 7 | 18°44 | 1°43 | 2°52 | 27°35 | 7°37 | S 18 | |
| S 19 | 23 52 18 | 26°11'50 | 7 ^h 30 | 21° 1 | 0 ^m 19 | 8°25 | 15° 1 | 2°59 | 12°38 | 24° 9 | 18°43 | 1°39 | 2°49 | 27°42 | 7°40 | S 19 | |
| M20 | 23 56 14 | 27°10'33 | 20° 9 | 22°14 | 1°33 | 9° 6 | 15°14 | 2°54 | 12°41 | 24°11 | 18°42 | 1°33 | 2°46 | 27°49 | 7°42 | M20 | |
| T 21 | 0 0 11 | 28° 9'18 | 2 ^h 35 | 23°25 | 2°46 | 9°47 | 15°27 | 2°49 | 12°44 | 24°13 | 18°41 | 1°27 | 2°43 | 27°55 | 7°45 | T 21 | |
| W22 | 0 4 7 | 29° 8'05 | 14°50 | 24°34 | 4° 0 | 10°28 | 15°40 | 2°45 | 12°47 | 24°15 | 18°40 | 1°22 | 2°39 | 28° 2 | 7°47 | W22 | |
| T 23 | 0 8 4 | 0 ^h 46 | 6°53 | 26°56 | 5°13 | 11° 9 | 15°52 | 2°40 | 12°50 | 24°17 | 18°39 | 1°17 | 2°36 | 28° 9 | 7°49 | T 23 | |
| F 24 | 0 12 0 | 1° 5'44 | 8 ^h 54 | 26°47 | 6°27 | 11°51 | 16° 5 | 2°35 | 12°53 | 24°19 | 18°38 | 1°13 | 2°33 | 28°15 | 7°51 | F 24 | |
| S 25 | 0 15 57 | 2° 4'36 | 20°46 | 27°50 | 7°41 | 12°32 | 16°18 | 2°31 | 12°55 | 24°22 | 18°37 | 1°11 | 2°30 | 28°22 | 7°53 | S 25 | |
| S 26 | 0 19 53 | 3° 3'31 | 2 ^h 34 | 28°51 | 8°55 | 13°14 | 16°31 | 2°26 | 12°58 | 24°24 | 18°37 | 1°D11 | 2°27 | 28°29 | 7°55 | S 26 | |
| M27 | 0 23 50 | 4° 2'28 | 14°20 | 29°50 | 10° 8 | 13°55 | 16°43 | 2°21 | 13° 1 | 24°26 | 18°36 | 1°12 | 2°24 | 28°35 | 7°57 | M27 | |
| T 28 | 0 27 47 | 5° 1'27 | 26° 9 | 0 ^m 45 | 11°22 | 14°37 | 16°56 | 2°17 | 13° 3 | 24°28 | 18°35 | 1°13 | 2°20 | 28°42 | 7°59 | T 28 | |
| W29 | 0 31 43 | 6° 0'28 | 8 ^h 11 | 1°38 | 12°36 | 15°18 | 17° 9 | 2°12 | 13° 6 | 24°30 | 18°34 | 1°15 | 2°17 | 28°49 | 8° 0 | W29 | |
| T 30 | 0 35 40 | 6 ^h 59'32 | 20 ^h 11 | 9 | 2 ^m 27 | 13 ^m 50 | 16 ^m 0 | 17 ^m 21 | 2 ^h Y 7 | 13 ^h 49 | 24 ^h 32 | 18 ^h 33 | 1 ^m 16 | 2 ^m 14 | 28 ^h Y55 | 8 ^h 2 | T 30 |

| Day | ☉ | ☾ | | ♀ | | ♀ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | | ♂ | |
|------|------|-------|------|-------|------|-------|------|-------|------|------|------|------|------|-------|------|------|------|-------|------|-------|-------|-------|-------|------|-------|------|-----|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat |
| W 1 | 8n20 | 17n48 | 2s21 | 2n16 | 0n25 | 18n26 | 0n16 | 10s21 | 0s11 | 8n19 | 0n59 | 0s40 | 2s36 | 17n54 | 0n37 | 7s36 | 1n42 | 24s10 | 9s33 | 12s21 | 12s47 | 10n37 | 17n12 | 6s 6 | 17n12 | 6s 6 | |
| T 2 | 7 58 | 18 59 | 3 15 | 1 31 | 0 17 | 18 10 | 0 19 | 10 36 | 0 12 | 8 14 | 0 59 | 0 42 | 2 36 | 17 53 | 0 37 | 7 36 | 1 42 | 24 10 | 9 33 | 12 21 | 12 46 | 10 39 | 17 11 | 6 7 | 17 11 | 6 7 | |
| F 3 | 7 36 | 19 18 | 4 2 | 0 46 | 0 10 | 17 53 | 0 22 | 10 51 | 0 13 | 8 9 | 1 0 | 0 44 | 2 36 | 17 52 | 0 37 | 7 37 | 1 41 | 24 11 | 9 33 | 12 21 | 12 45 | 10 40 | 17 11 | 6 7 | 17 11 | 6 7 | |
| S 4 | 7 14 | 18 40 | 4 38 | 0 2 | 0 3 | 17 35 | 0 25 | 11 6 | 0 13 | 8 4 | 1 0 | 0 46 | 2 36 | 17 51 | 0 37 | 7 38 | 1 41 | 24 11 | 9 32 | 12 20 | 12 44 | 10 42 | 17 10 | 6 8 | 17 10 | 6 8 | |
| S 5 | 6 52 | 17 1 | 5 1 | 0s42 | 0s 5 | 17 18 | 0 27 | 11 21 | 0 14 | 7 59 | 1 0 | 0 48 | 2 36 | 17 50 | 0 37 | 7 38 | 1 41 | 24 11 | 9 32 | 12 18 | 12 43 | 10 44 | 17 9 | 6 8 | 17 9 | 6 8 | |
| M 6 | 6 29 | 14 24 | 5 8 | 1 25 | 0 13 | 16 59 | 0 30 | 11 36 | 0 15 | 7 54 | 1 0 | 0 49 | 2 36 | 17 49 | 0 37 | 7 39 | 1 41 | 24 12 | 9 32 | 12 16 | 12 42 | 10 45 | 17 8 | 6 9 | 17 8 | 6 9 | |
| T 7 | 6 7 | 10 52 | 4 57 | 2 8 | 0 21 | 16 40 | 0 33 | 11 50 | 0 15 | 7 49 | 1 0 | 0 51 | 2 37 | 17 48 | 0 37 | 7 40 | 1 41 | 24 12 | 9 32 | 12 13 | 12 41 | 10 47 | 17 8 | 6 9 | 17 8 | 6 9 | |
| W 8 | 5 44 | 6 37 | 4 27 | 2 51 | 0 29 | 16 21 | 0 36 | 12 5 | 0 16 | 7 45 | 1 0 | 0 53 | 2 37 | 17 47 | 0 37 | 7 41 | 1 41 | 24 12 | 9 32 | 12 11 | 12 40 | 10 48 | 17 7 | 6 10 | 17 7 | 6 10 | |
| T 9 | 5 21 | 1 53 | 3 39 | 3 33 | 0 36 | 16 1 | 0 38 | 12 20 | 0 17 | 7 40 | 1 0 | 0 55 | 2 37 | 17 46 | 0 37 | 7 41 | 1 41 | 24 13 | 9 32 | 12 9 | 12 39 | 10 50 | 17 6 | 6 10 | 17 6 | 6 10 | |
| F 10 | 4 59 | 3s 2 | 2 36 | 4 15 | 0 44 | 15 41 | 0 41 | 12 34 | 0 18 | 7 35 | 1 0 | 0 57 | 2 37 | 17 46 | 0 37 | 7 42 | 1 41 | 24 13 | 9 32 | 12 7 | 12 37 | 10 52 | 17 6 | 6 11 | 17 6 | 6 11 | |
| S 11 | 4 36 | 7 46 | 1 22 | 4 56 | 0 52 | 15 20 | 0 43 | 12 49 | 0 18 | 7 30 | 1 0 | 0 58 | 2 37 | 17 45 | 0 37 | 7 43 | 1 41 | 24 13 | 9 32 | 12 6 | 12 36 | 10 53 | 17 5 | 6 11 | 17 5 | 6 11 | |
| S 12 | 4 13 | 12 0 | 0 2 | 5 36 | 1 1 | 14 59 | 0 46 | 13 3 | 0 19 | 7 25 | 1 0 | 1 0 | 2 37 | 17 44 | 0 37 | 7 43 | 1 41 | 24 14 | 9 32 | 12 6 | 12 35 | 10 55 | 17 4 | 6 12 | 17 4 | 6 12 | |
| M13 | 3 50 | 15 25 | 1n17 | 6 16 | 1 9 | 14 37 | 0 48 | 13 17 | 0 20 | 7 20 | 1 0 | 1 2 | 2 37 | 17 43 | 0 38 | 7 44 | 1 41 | 24 14 | 9 32 | 12 6 | 12 34 | 10 56 | 17 3 | 6 13 | 17 3 | 6 13 | |
| T 14 | 3 27 | 17 49 | 2 29 | 6 55 | 1 17 | 14 15 | 0 50 | 13 32 | 0 20 | 7 15 | 1 0 | 1 4 | 2 37 | 17 42 | 0 38 | 7 45 | 1 41 | 24 14 | 9 32 | 12 6 | 12 33 | 10 58 | 17 3 | 6 13 | 17 3 | 6 13 | |
| W15 | 3 4 | 19 3 | 3 31 | 7 34 | 1 25 | 13 53 | 0 53 | 13 46 | 0 21 | 7 10 | 1 0 | 1 6 | 2 37 | 17 41 | 0 38 | 7 46 | 1 41 | 24 15 | 9 32 | 12 7 | 12 32 | 11 0 | 17 2 | 6 14 | 17 2 | 6 14 | |
| T 16 | 2 41 | 19 8 | 4 20 | 8 11 | 1 32 | 13 30 | 0 55 | 14 0 | 0 22 | 7 5 | 1 0 | 1 8 | 2 37 | 17 41 | 0 38 | 7 46 | 1 41 | 24 15 | 9 32 | 12 7 | 12 31 | 11 1 | 17 1 | 6 14 | 17 1 | 6 14 | |
| F 17 | 2 17 | 18 7 | 4 52 | 8 48 | 1 40 | 13 7 | 0 57 | 14 14 | 0 22 | 7 0 | 1 0 | 1 10 | 2 38 | 17 40 | 0 38 | 7 47 | 1 41 | 24 15 | 9 32 | 12 6 | 12 30 | 11 3 | 17 0 | 6 15 | 17 0 | 6 15 | |
| S 18 | 1 54 | 16 9 | 5 9 | 9 24 | 1 48 | 12 43 | 0 59 | 14 28 | 0 23 | 6 55 | 1 0 | 1 12 | 2 38 | 17 39 | 0 38 | 7 48 | 1 41 | 24 15 | 9 32 | 12 5 | 12 29 | 11 4 | 17 0 | 6 16 | 17 0 | 6 16 | |
| S 19 | 1 31 | 13 25 | 5 10 | 10 0 | 1 56 | 12 19 | 1 1 | 14 42 | 0 24 | 6 50 | 1 0 | 1 14 | 2 38 | 17 38 | 0 38 | 7 49 | 1 41 | 24 16 | 9 31 | 12 4 | 12 28 | 11 6 | 16 59 | 6 16 | 16 59 | 6 16 | |
| M20 | 1 7 | 10 6 | 4 56 | 10 34 | 2 3 | 11 55 | 1 3 | 14 56 | 0 24 | 6 45 | 1 0 | 1 15 | 2 38 | 17 37 | 0 38 | 7 49 | 1 41 | 24 16 | 9 31 | 12 2 | 12 27 | 11 7 | 16 58 | 6 17 | 16 58 | 6 17 | |
| T 21 | 0 44 | 6 24 | 4 27 | 11 8 | 2 11 | 11 31 | 1 5 | 15 9 | 0 25 | 6 40 | 1 1 | 1 17 | 2 38 | 17 36 | 0 38 | 7 50 | 1 41 | 24 16 | 9 31 | 12 0 | 12 26 | 11 9 | 16 58 | 6 17 | 16 58 | 6 17 | |
| W22 | 0 21 | 2 29 | 3 47 | 11 40 | 2 18 | 11 6 | 1 7 | 15 23 | 0 26 | 6 35 | 1 1 | 1 19 | 2 38 | 17 36 | 0 38 | 7 51 | 1 41 | 24 16 | 9 31 | 11 58 | 12 24 | 11 10 | 16 57 | 6 18 | 16 57 | 6 18 | |
| T 23 | 0s 3 | 1n29 | 2 57 | 12 12 | 2 25 | 10 40 | 1 9 | 15 36 | 0 26 | 6 31 | 1 1 | 1 21 | 2 38 | 17 35 | 0 38 | 7 52 | 1 41 | 24 16 | 9 31 | 11 56 | 12 23 | 11 12 | 16 56 | 6 19 | 16 56 | 6 19 | |
| F 24 | 0 26 | 5 22 | 1 59 | 12 42 | 2 32 | 10 15 | 1 10 | 15 50 | 0 27 | 6 26 | 1 1 | 1 23 | 2 38 | 17 34 | 0 38 | 7 53 | 1 41 | 24 17 | 9 31 | 11 55 | 12 22 | 11 14 | 16 55 | 6 19 | 16 55 | 6 19 | |
| S 25 | 0 50 | 9 0 | 0 57 | 13 11 | 2 39 | 9 49 | 1 12 | 16 3 | 0 27 | 6 21 | 1 1 | 1 25 | 2 38 | 17 33 | 0 38 | 7 53 | 1 41 | 24 17 | 9 31 | 11 54 | 12 21 | 11 15 | 16 55 | 6 20 | 16 55 | 6 20 | |
| S 26 | 1 13 | 12 15 | 0s 8 | 13 39 | 2 45 | 9 23 | 1 14 | 16 16 | 0 28 | 6 16 | 1 1 | 1 27 | 2 38 | 17 33 | 0 38 | 7 54 | 1 41 | 24 17 | 9 31 | 11 54 | 12 20 | 11 17 | 16 54 | 6 20 | 16 54 | 6 20 | |
| M27 | 1 36 | 15 1 | 1 12 | 14 6 | 2 51 | 8 56 | 1 15 | 16 29 | 0 29 | 6 11 | 1 1 | 1 29 | 2 38 | 17 32 | 0 38 | 7 55 | 1 41 | 24 17 | 9 31 | 11 54 | 12 19 | 11 18 | 16 53 | 6 21 | 16 53 | 6 21 | |
| T 28 | 2 0 | 17 9 | 2 13 | 14 31 | 2 57 | 8 29 | 1 17 | 16 42 | 0 29 | 6 6 | 1 1 | 1 31 | 2 38 | 17 31 | 0 38 | 7 56 | 1 41 | 24 17 | 9 30 | 11 55 | 12 18 | 11 20 | 16 52 | 6 22 | 16 52 | 6 22 | |
| W29 | 2 23 | 18 33 | 3 10 | 14 54 | 3 3 | 8 2 | 2 18 | 16 55 | 0 30 | 6 1 | 1 1 | 1 33 | 2 38 | 17 31 | 0 38 | 7 56 | 1 41 | 24 17 | 9 30 | 11 55 | 12 17 | 11 21 | 16 52 | 6 22 | 16 52 | 6 22 | |
| T 30 | 2s47 | 19n 8 | 3s58 | 15s16 | 3s 8 | 7n35 | 1n20 | 17s 8 | 0s30 | 5n56 | 1n 1 | 1s34 | 2s38 | 17n30 | 0n38 | 7s57 | 1n41 | 24s18 | 9s30 | 11s56 | 12s16 | 11n23 | 16m51 | 6s23 | 16m51 | 6s23 | |

ASTRODIENST EPHEMERIS for the year 1790
geocentric

OCTOBER 1790

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♂ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|---------|----------|-------|--------|-------|-------|-------|-------|-------|-------|--------|-------|------|--------|-------|------|
| F 1 | 0 39 36 | 7♂58'38 | 2♂29 | 3♂13 | 15♂4 | 16♂42 | 17♂34 | 2°R 3 | 13♂11 | 24♂34 | 18°R33 | 1°R17 | 2♂11 | 29°V 2 | 8♂3 | F 1 |
| S 2 | 0 43 33 | 8°57'46 | 15° 9 | 3°54 | 16°19 | 17°24 | 17°47 | 1°V58 | 13°14 | 24°37 | 18♂32 | 1♂17 | 2° 8 | 29° 8 | 8° 5 | S 2 |
| S 3 | 0 47 29 | 9°56'57 | 28°12 | 4°32 | 17°33 | 18° 6 | 17°59 | 1°53 | 13°16 | 24°39 | 18°31 | 1°16 | 2° 4 | 29°15 | 8° 6 | S 3 |
| M 4 | 0 51 26 | 10°56'10 | 11♂24 | 5° 5 | 18°47 | 18°48 | 18°12 | 1°49 | 13°18 | 24°41 | 18°30 | 1°14 | 2° 1 | 29°22 | 8° 8 | M 4 |
| T 5 | 0 55 22 | 11°55'25 | 25°40 | 5°33 | 20° 1 | 19°30 | 18°24 | 1°44 | 13°21 | 24°43 | 18°30 | 1°12 | 1°58 | 29°28 | 8° 9 | T 5 |
| W 6 | 0 59 19 | 12°54'43 | 10♂5 | 5°55 | 21°16 | 20°12 | 18°36 | 1°39 | 13°23 | 24°45 | 18°29 | 1° 9 | 1°55 | 29°35 | 8°10 | W 6 |
| T 7 | 1 3 15 | 13°54'02 | 24°52 | 6°12 | 22°30 | 20°54 | 18°49 | 1°35 | 13°25 | 24°48 | 18°28 | 1° 7 | 1°52 | 29°42 | 8°11 | T 7 |
| F 8 | 1 7 12 | 14°53'24 | 9♂55 | 6°22 | 23°44 | 21°37 | 19° 1 | 1°30 | 13°28 | 24°50 | 18°28 | 1° 6 | 1°49 | 29°48 | 8°12 | F 8 |
| S 9 | 1 11 9 | 15°52'48 | 25° 6 | 6°R25 | 24°59 | 22°19 | 19°13 | 1°26 | 13°30 | 24°52 | 18°27 | 1°D 5 | 1°45 | 29°55 | 8°13 | S 9 |
| S 10 | 1 15 5 | 16°52'14 | 10♂14 | 6°21 | 26°13 | 23° 2 | 19°26 | 1°21 | 13°32 | 24°54 | 18°26 | 1° 5 | 1°42 | 0♂2 | 8°13 | S 10 |
| M 11 | 1 19 2 | 17°51'42 | 25°11 | 6° 9 | 27°28 | 23°44 | 19°38 | 1°17 | 13°34 | 24°56 | 18°26 | 1° 6 | 1°39 | 0° 8 | 8°14 | M 11 |
| T 12 | 1 22 58 | 18°51'11 | 9♂50 | 5°49 | 28°42 | 24°27 | 19°50 | 1°13 | 13°36 | 24°59 | 18°25 | 1° 7 | 1°36 | 0°15 | 8°15 | T 12 |
| W 13 | 1 26 55 | 19°50'43 | 24° 6 | 5°20 | 29°57 | 25°10 | 20° 2 | 1° 8 | 13°38 | 25° 1 | 18°25 | 1° 8 | 1°33 | 0°22 | 8°15 | W 13 |
| T 14 | 1 30 51 | 20°50'16 | 7♂57 | 4°43 | 1♂11 | 25°52 | 20°14 | 1° 4 | 13°40 | 25° 3 | 18°24 | 1° 8 | 1°29 | 0°28 | 8°15 | T 14 |
| F 15 | 1 34 48 | 21°49'51 | 21°23 | 3°57 | 2°26 | 26°35 | 20°26 | 1° 0 | 13°42 | 25° 5 | 18°24 | 1°R 9 | 1°26 | 0°35 | 8°16 | F 15 |
| S 16 | 1 38 44 | 22°49'28 | 4♂27 | 3° 3 | 3°41 | 27°18 | 20°38 | 0°56 | 13°44 | 25° 8 | 18°24 | 1° 8 | 1°23 | 0°42 | 8°16 | S 16 |
| S 17 | 1 42 41 | 23°49'06 | 17°11 | 2° 2 | 4°55 | 28° 1 | 20°50 | 0°51 | 13°46 | 25°10 | 18°23 | 1° 8 | 1°20 | 0°48 | 8°16 | S 17 |
| M 18 | 1 46 38 | 24°48'47 | 29°38 | 0°55 | 6°10 | 28°44 | 21° 2 | 0°47 | 13°47 | 25°12 | 18°23 | 1° 7 | 1°17 | 0°55 | 8°R16 | M 18 |
| T 19 | 1 50 34 | 25°48'28 | 11♂52 | 29♂43 | 7°25 | 29°27 | 21°14 | 0°43 | 13°49 | 25°14 | 18°22 | 1° 6 | 1°14 | 1° 1 | 8°16 | T 19 |
| W 20 | 1 54 31 | 26°48'12 | 23°55 | 28°28 | 8°40 | 0♂11 | 21°25 | 0°39 | 13°51 | 25°17 | 18°22 | 1° 6 | 1°10 | 1° 8 | 8°16 | W 20 |
| T 21 | 1 58 27 | 27°47'57 | 5°V51 | 27°13 | 9°54 | 0°54 | 21°37 | 0°35 | 13°52 | 25°19 | 18°22 | 1° 5 | 1° 7 | 1°15 | 8°16 | T 21 |
| F 22 | 2 2 24 | 28°47'45 | 17°42 | 25°58 | 11° 9 | 1°37 | 21°49 | 0°32 | 13°54 | 25°21 | 18°21 | 1° 5 | 1° 4 | 1°21 | 8°16 | F 22 |
| S 23 | 2 6 20 | 29°47'34 | 29°30 | 24°48 | 12°24 | 2°21 | 22° 0 | 0°28 | 13°55 | 25°23 | 18°21 | 1°D 5 | 1° 1 | 1°28 | 8°15 | S 23 |
| S 24 | 2 10 17 | 0♂47'25 | 11♂18 | 23°44 | 13°39 | 3° 4 | 22°12 | 0°24 | 13°57 | 25°25 | 18°21 | 1°R 5 | 0°58 | 1°35 | 8°15 | S 24 |
| M 25 | 2 14 13 | 1°47'19 | 23° 7 | 22°47 | 14°54 | 3°47 | 22°23 | 0°20 | 13°58 | 25°28 | 18°21 | 1° 5 | 0°55 | 1°41 | 8°14 | M 25 |
| T 26 | 2 18 10 | 2°47'14 | 5♂1 | 22° 0 | 16° 9 | 4°31 | 22°34 | 0°17 | 14° 0 | 25°30 | 18°21 | 1° 5 | 0°51 | 1°48 | 8°13 | T 26 |
| W 27 | 2 22 7 | 3°47'11 | 17° 1 | 21°23 | 17°24 | 5°15 | 22°46 | 0°13 | 14° 1 | 25°32 | 18°20 | 1° 4 | 0°48 | 1°55 | 8°13 | W 27 |
| T 28 | 2 26 3 | 4°47'11 | 29°11 | 20°58 | 18°39 | 5°58 | 22°57 | 0°10 | 14° 2 | 25°34 | 18°20 | 1° 4 | 0°45 | 2° 1 | 8°12 | T 28 |
| F 29 | 2 30 0 | 5°47'13 | 11♂33 | 20°44 | 19°54 | 6°42 | 23° 8 | 0° 7 | 14° 3 | 25°37 | 18°20 | 1° 4 | 0°42 | 2° 8 | 8°11 | F 29 |
| S 30 | 2 33 56 | 6°47'16 | 24°12 | 20°D41 | 21° 9 | 7°26 | 23°19 | 0° 3 | 14° 5 | 25°39 | 18°20 | 1° 3 | 0°39 | 2°15 | 8°10 | S 30 |
| S 31 | 2 37 53 | 7♂47'22 | 7♂10 | 20♂50 | 22♂24 | 8♂10 | 23♂30 | 0°V 0 | 14♂6 | 25♂41 | 18♂20 | 1°D 3 | 0♂35 | 2♂21 | 8♂9 | S 31 |

| Day | ☉ | ☽ | ♂ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|------|-------|-------|------|-------|------|------|------|-------|------|------|------|------|------|-------|------|------|
| F 1 | 3s10 | 18n49 | 4s37 | 15s36 | 3s12 | 7n 8 | 1n21 | 17s20 | 0s31 | 5n52 | 1n 1 | 1s36 | 2s38 | 17n29 | 0n38 | F 1 |
| S 2 | 3 33 | 17 34 | 5 4 | 15 54 | 3 16 | 6 40 | 1 22 | 17 33 | 0 32 | 5 47 | 1 1 | 1 38 | 2 38 | 17 28 | 0 38 | S 2 |
| S 3 | 3 57 | 15 23 | 5 16 | 16 11 | 3 20 | 6 12 | 1 23 | 17 45 | 0 32 | 5 42 | 1 2 | 1 40 | 2 38 | 17 28 | 0 38 | S 3 |
| M 4 | 4 20 | 12 19 | 5 11 | 16 24 | 3 22 | 5 44 | 1 24 | 17 58 | 0 33 | 5 37 | 1 2 | 1 42 | 2 38 | 17 27 | 0 38 | M 4 |
| T 5 | 4 43 | 8 27 | 4 48 | 16 36 | 3 24 | 5 16 | 1 25 | 18 10 | 0 33 | 5 32 | 1 2 | 1 44 | 2 38 | 17 27 | 0 38 | T 5 |
| W 6 | 5 6 | 4 0 | 4 6 | 16 44 | 3 26 | 4 47 | 1 26 | 18 22 | 0 34 | 5 28 | 1 2 | 1 45 | 2 38 | 17 26 | 0 38 | W 6 |
| T 7 | 5 29 | 0s50 | 3 7 | 16 50 | 3 26 | 4 19 | 1 27 | 18 33 | 0 35 | 5 23 | 1 2 | 1 47 | 2 38 | 17 25 | 0 38 | T 7 |
| F 8 | 5 52 | 5 41 | 1 55 | 16 53 | 3 25 | 3 50 | 1 28 | 18 45 | 0 35 | 5 18 | 1 2 | 1 49 | 2 38 | 17 25 | 0 38 | F 8 |
| S 9 | 6 15 | 10 14 | 0 33 | 16 52 | 3 23 | 3 21 | 1 29 | 18 57 | 0 36 | 5 13 | 1 2 | 1 51 | 2 38 | 17 24 | 0 38 | S 9 |
| S 10 | 6 38 | 14 6 | 0n51 | 16 48 | 3 20 | 2 52 | 1 29 | 19 8 | 0 36 | 5 9 | 1 2 | 1 52 | 2 38 | 17 23 | 0 38 | S 10 |
| M 11 | 7 1 | 16 59 | 2 10 | 16 39 | 3 15 | 2 23 | 1 30 | 19 19 | 0 37 | 5 4 | 1 2 | 1 54 | 2 38 | 17 23 | 0 38 | M 11 |
| T 12 | 7 24 | 18 40 | 3 19 | 16 27 | 3 9 | 1 54 | 1 30 | 19 30 | 0 37 | 4 59 | 1 3 | 1 56 | 2 38 | 17 22 | 0 38 | T 12 |
| W 13 | 7 46 | 19 6 | 4 14 | 16 10 | 3 2 | 1 25 | 1 31 | 19 41 | 0 38 | 4 55 | 1 3 | 1 57 | 2 38 | 17 22 | 0 38 | W 13 |
| T 14 | 8 9 | 18 22 | 4 52 | 15 48 | 2 52 | 0 55 | 1 31 | 19 52 | 0 39 | 4 50 | 1 3 | 1 59 | 2 38 | 17 21 | 0 39 | T 14 |
| F 15 | 8 31 | 16 36 | 5 13 | 15 22 | 2 41 | 0 26 | 1 31 | 20 3 | 0 39 | 4 45 | 1 3 | 2 1 | 2 37 | 17 21 | 0 39 | F 15 |
| S 16 | 8 53 | 14 2 | 5 17 | 14 51 | 2 28 | 0s 4 | 1 32 | 20 13 | 0 40 | 4 41 | 1 3 | 2 2 | 2 37 | 17 20 | 0 39 | S 16 |
| S 17 | 9 15 | 10 51 | 5 5 | 14 16 | 2 13 | 0 33 | 1 32 | 20 24 | 0 40 | 4 36 | 1 3 | 2 4 | 2 37 | 17 20 | 0 39 | S 17 |
| M 18 | 9 37 | 7 15 | 4 39 | 13 37 | 1 56 | 1 3 | 1 32 | 20 34 | 0 41 | 4 32 | 1 3 | 2 5 | 2 37 | 17 19 | 0 39 | M 18 |
| T 19 | 9 59 | 3 24 | 4 1 | 12 55 | 1 38 | 1 32 | 1 32 | 20 44 | 0 41 | 4 27 | 1 3 | 2 7 | 2 37 | 17 19 | 0 39 | T 19 |
| W 20 | 10 21 | 0n32 | 3 12 | 12 10 | 1 19 | 2 2 | 1 32 | 20 53 | 0 42 | 4 23 | 1 4 | 2 8 | 2 37 | 17 18 | 0 39 | W 20 |
| T 21 | 10 42 | 4 24 | 2 16 | 11 24 | 0 59 | 2 31 | 1 32 | 21 3 | 0 42 | 4 18 | 1 4 | 2 10 | 2 37 | 17 18 | 0 39 | T 21 |
| F 22 | 11 3 | 8 5 | 1 14 | 10 38 | 0 38 | 3 1 | 1 31 | 21 12 | 0 43 | 4 14 | 1 4 | 2 11 | 2 37 | 17 18 | 0 39 | F 22 |
| S 23 | 11 25 | 11 27 | 0 9 | 9 53 | 0 18 | 3 30 | 1 31 | 21 22 | 0 43 | 4 9 | 1 4 | 2 13 | 2 37 | 17 17 | 0 39 | S 23 |
| S 24 | 11 46 | 14 20 | 0s57 | 9 11 | 0n 3 | 4 0 | 1 31 | 21 31 | 0 44 | 4 5 | 1 4 | 2 14 | 2 37 | 17 17 | 0 39 | S 24 |
| M 25 | 12 6 | 16 39 | 2 0 | 8 31 | 0 22 | 4 29 | 1 30 | 21 39 | 0 44 | 4 0 | 1 4 | 2 15 | 2 36 | 17 16 | 0 39 | M 25 |
| T 26 | 12 27 | 18 14 | 2 58 | 7 57 | 0 41 | 4 58 | 1 30 | 21 48 | 0 45 | 3 56 | 1 4 | 2 17 | 2 36 | 17 16 | 0 39 | T 26 |
| W 27 | 12 48 | 19 2 | 3 49 | 7 27 | 0 58 | 5 28 | 1 29 | 21 56 | 0 45 | 3 52 | 1 4 | 2 18 | 2 36 | 17 16 | 0 39 | W 27 |
| T 28 | 13 8 | 18 58 | 4 30 | 7 4 | 1 13 | 5 57 | 1 29 | 22 5 | 0 46 | 3 47 | 1 5 | 2 19 | 2 36 | 17 15 | 0 39 | T 28 |
| F 29 | 13 28 | 17 59 | 5 0 | 6 46 | 1 27 | 6 26 | 1 28 | 22 13 | 0 46 | 3 43 | 1 5 | 2 20 | 2 36 | 17 15 | 0 39 | F 29 |
| S 30 | 13 48 | 16 7 | 5 16 | 6 34 | 1 39 | 6 55 | 1 27 | 22 20 | 0 47 | 3 39 | 1 5 | 2 22 | 2 36 | 17 15 | 0 39 | S 30 |
| S 31 | 14s 7 | 13n24 | 5s16 | 6s28 | 1n49 | 7s23 | 1n27 | 22s28 | 0s47 | 3n35 | 1n 5 | 2s23 | 2s36 | 17n15 | 0n39 | S 31 |

Julian Day Number = 2375117.5, Delta T = 21.50 sec
Ecliptic obliquity = 23°27'52, Nutation = 0°00'09, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 21°49'07, Lahiri = 20°56'08Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1790

geocentric

NOVEMBER 1790

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♂ | ♀ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | ♂ | Day |
|-----|---------|----------|-------|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|------|-------|-----|
| M 1 | 2 41 49 | 8♉47°30 | 20♊31 | 21♈10 | 23♈39 | 8♉54 | 23♈41 | 29°R57 | 14♊7 | 25♈43 | 18°D20 | 1♉3 | 0♉32 | 2♉28 | 8°R 8 | M 1 |
| T 2 | 2 45 46 | 9°47'40 | 4♉17 | 21°39 | 24°54 | 9°38 | 23°52 | 29°H54 | 14° 8 | 25°45 | 18°20 | 1° 4 | 0°29 | 2°34 | 8° 6 | T 2 |
| W 3 | 2 49 42 | 10°47'52 | 18°29 | 22°17 | 26° 9 | 10°22 | 24° 3 | 29°51 | 14° 9 | 25°48 | 18°20 | 1° 4 | 0°26 | 2°41 | 8° 5 | W 3 |
| T 4 | 2 53 39 | 11°48'06 | 3♈4 | 23° 3 | 27°25 | 11° 6 | 24°13 | 29°48 | 14°10 | 25°50 | 18°20 | 1° 5 | 0°23 | 2°48 | 8° 4 | T 4 |
| F 5 | 2 57 36 | 12°48'22 | 17°59 | 23°56 | 28°40 | 11°51 | 24°24 | 29°45 | 14°10 | 25°52 | 18°20 | 1° 6 | 0°20 | 2°54 | 8° 2 | F 5 |
| S 6 | 3 1 32 | 13°48'41 | 3♉7 | 24°56 | 29°55 | 12°35 | 24°34 | 29°42 | 14°11 | 25°54 | 18°20 | 1°R 6 | 0°16 | 3° 1 | 8° 1 | S 6 |
| S 7 | 3 5 29 | 14°49'00 | 18°19 | 26° 1 | 1♉10 | 13°19 | 24°45 | 29°40 | 14°12 | 25°56 | 18°21 | 1° 6 | 0°13 | 3° 8 | 7°59 | S 7 |
| M 8 | 3 9 25 | 15°49'22 | 3♉26 | 27°11 | 2°25 | 14° 4 | 24°55 | 29°37 | 14°13 | 25°58 | 18°21 | 1° 5 | 0°10 | 3°14 | 7°57 | M 8 |
| T 9 | 3 13 22 | 16°49'45 | 18°18 | 28°25 | 3°41 | 14°48 | 25° 5 | 29°35 | 14°13 | 26° 1 | 18°21 | 1° 3 | 0° 7 | 3°21 | 7°55 | T 9 |
| W10 | 3 17 18 | 17°50'10 | 2♉48 | 29°43 | 4°56 | 15°33 | 25°15 | 29°33 | 14°14 | 26° 3 | 18°21 | 1° 1 | 0° 4 | 3°28 | 7°53 | W10 |
| T11 | 3 21 15 | 18°50'36 | 16°51 | 1♉3 | 6°11 | 16°18 | 25°25 | 29°30 | 14°14 | 26° 5 | 18°21 | 0°58 | 0° 1 | 3°34 | 7°51 | T11 |
| F12 | 3 25 11 | 19°51'04 | 0♉27 | 2°26 | 7°27 | 17° 2 | 25°35 | 29°28 | 14°15 | 26° 7 | 18°22 | 0°57 | 29°57 | 3°41 | 7°49 | F12 |
| S13 | 3 29 8 | 20°51'33 | 13°35 | 3°51 | 8°42 | 17°47 | 25°45 | 29°26 | 14°15 | 26° 9 | 18°22 | 0°56 | 29°54 | 3°48 | 7°47 | S13 |
| S14 | 3 33 5 | 21°52'03 | 26°20 | 5°18 | 9°57 | 18°32 | 25°55 | 29°24 | 14°15 | 26°11 | 18°22 | 0°D55 | 29°51 | 3°54 | 7°45 | S14 |
| M15 | 3 37 1 | 22°52'34 | 8♉44 | 6°47 | 11°13 | 19°17 | 26° 5 | 29°22 | 14°16 | 26°13 | 18°23 | 0°56 | 29°48 | 4° 1 | 7°43 | M15 |
| T16 | 3 40 58 | 23°53'07 | 20°52 | 8°16 | 12°28 | 20° 2 | 26°14 | 29°21 | 14°16 | 26°15 | 18°23 | 0°58 | 29°45 | 4° 7 | 7°40 | T16 |
| W17 | 3 44 54 | 24°53'41 | 2°V49 | 9°47 | 13°43 | 20°47 | 26°24 | 29°19 | 14°16 | 26°17 | 18°24 | 1° 0 | 29°41 | 4°14 | 7°38 | W17 |
| T18 | 3 48 51 | 25°54'16 | 14°39 | 11°18 | 14°59 | 21°32 | 26°33 | 29°17 | 14°16 | 26°19 | 18°24 | 1° 1 | 29°38 | 4°21 | 7°35 | T18 |
| F19 | 3 52 47 | 26°54'52 | 26°26 | 12°50 | 16°14 | 22°17 | 26°42 | 29°16 | 14°R16 | 26°21 | 18°24 | 1°R 2 | 29°35 | 4°27 | 7°33 | F19 |
| S20 | 3 56 44 | 27°55'30 | 8♉13 | 14°23 | 17°29 | 23° 2 | 26°51 | 29°15 | 14°16 | 26°23 | 18°25 | 1° 2 | 29°32 | 4°34 | 7°30 | S20 |
| S21 | 4 0 40 | 28°56'09 | 20° 4 | 15°55 | 18°45 | 23°47 | 27° 0 | 29°13 | 14°16 | 26°25 | 18°25 | 1° 0 | 29°29 | 4°41 | 7°27 | S21 |
| M22 | 4 4 37 | 29°56'49 | 2♉0 | 17°29 | 20° 0 | 24°32 | 27° 9 | 29°12 | 14°16 | 26°27 | 18°26 | 0°57 | 29°26 | 4°47 | 7°25 | M22 |
| T23 | 4 8 34 | 0♉57°31 | 14° 3 | 19° 2 | 21°16 | 25°18 | 27°18 | 29°11 | 14°16 | 26°29 | 18°27 | 0°53 | 29°22 | 4°54 | 7°22 | T23 |
| W24 | 4 12 30 | 1°58'15 | 26°15 | 20°36 | 22°31 | 26° 3 | 27°27 | 29°10 | 14°16 | 26°31 | 18°27 | 0°48 | 29°19 | 5° 1 | 7°19 | W24 |
| T25 | 4 16 27 | 2°58'59 | 8♉37 | 22° 9 | 23°47 | 26°49 | 27°35 | 29° 9 | 14°15 | 26°33 | 18°28 | 0°42 | 29°16 | 5° 7 | 7°16 | T25 |
| F26 | 4 20 23 | 3°59'45 | 21°10 | 23°43 | 25° 2 | 27°34 | 27°43 | 29° 9 | 14°15 | 26°35 | 18°28 | 0°36 | 29°13 | 5°14 | 7°13 | F26 |
| S27 | 4 24 20 | 5° 0'33 | 3♉56 | 25°17 | 26°17 | 28°20 | 27°52 | 29° 8 | 14°15 | 26°37 | 18°29 | 0°31 | 29°10 | 5°21 | 7°10 | S27 |
| S28 | 4 28 16 | 6° 1'22 | 16°57 | 26°51 | 27°33 | 29° 5 | 28° 0 | 29° 8 | 14°14 | 26°38 | 18°30 | 0°28 | 29° 7 | 5°27 | 7° 6 | S28 |
| M29 | 4 32 13 | 7° 2'12 | 0♉15 | 28°25 | 28°48 | 29°51 | 28° 8 | 29° 7 | 14°14 | 26°40 | 18°31 | 0°26 | 29° 3 | 5°34 | 7° 3 | M29 |
| T30 | 4 36 9 | 8♉3'04 | 13♉52 | 29♉59 | 0♉4 | 0♉36 | 28♉16 | 29♉7 | 14♉13 | 26♉42 | 18°31 | 0°D26 | 29♉0 | 5♉41 | 7° 0 | T30 |

| 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 |
| M 1 | 14s27 | 9n55 | 5s 0 | 6s27 | 1n57 | 7s52 | 1n26 | 22s36 | 0s48 | 3n31 | 1n 5 | 2s24 | 2s35 | 17n14 | 0n39 | 8s23 | 1n41 | 24s17 | 9s25 | 11s51 | 11s40 | 12n11 | 16n30 | 6s43 | 1n10 |
| T 2 | 14 46 | 5 49 | 4 26 | 6 32 | 2 4 | 8 20 | 1 25 | 22 43 | 0 48 | 3 26 | 1 5 | 2 25 | 2 35 | 17 14 | 0 39 | 8 24 | 1 41 | 24 17 | 9 25 | 11 51 | 11 39 | 12 12 | 16 30 | 6 44 | 1n11 |
| W 3 | 15 5 | 1 15 | 3 35 | 6 41 | 2 9 | 8 48 | 1 24 | 22 50 | 0 49 | 3 22 | 1 6 | 2 26 | 2 35 | 17 14 | 0 39 | 8 25 | 1 41 | 24 16 | 9 24 | 11 52 | 11 38 | 12 14 | 16 29 | 6 44 | 1n12 |
| T 4 | 15 23 | 3s30 | 2 30 | 6 55 | 2 12 | 9 16 | 1 23 | 22 56 | 0 49 | 3 18 | 1 6 | 2 27 | 2 35 | 17 14 | 0 39 | 8 25 | 1 41 | 24 16 | 9 24 | 11 52 | 11 37 | 12 15 | 16 29 | 6 45 | 1n13 |
| F 5 | 15 42 | 8 10 | 1 12 | 7 13 | 2 15 | 9 44 | 1 22 | 23 3 | 0 49 | 3 14 | 1 6 | 2 28 | 2 35 | 17 13 | 0 39 | 8 26 | 1 41 | 24 16 | 9 24 | 11 52 | 11 36 | 12 16 | 16 28 | 6 46 | 1n14 |
| S 6 | 16 0 | 12 23 | 0n11 | 7 33 | 2 16 | 10 12 | 1 20 | 23 9 | 0 50 | 3 10 | 1 6 | 2 29 | 2 35 | 17 13 | 0 39 | 8 27 | 1 41 | 24 16 | 9 24 | 11 52 | 11 35 | 12 18 | 16 28 | 6 46 | 1n15 |
| S 7 | 16 18 | 15 48 | 1 34 | 7 57 | 2 16 | 10 39 | 1 19 | 23 15 | 0 50 | 3 6 | 1 6 | 2 30 | 2 34 | 17 13 | 0 39 | 8 28 | 1 41 | 24 15 | 9 24 | 11 52 | 11 34 | 12 19 | 16 27 | 6 47 | 1n16 |
| M 8 | 16 36 | 18 5 | 2 50 | 8 23 | 2 15 | 11 6 | 1 18 | 23 21 | 0 51 | 3 2 | 1 6 | 2 30 | 2 34 | 17 13 | 0 40 | 8 28 | 1 41 | 24 15 | 9 23 | 11 52 | 11 33 | 12 21 | 16 27 | 6 47 | 1n17 |
| T 9 | 16 53 | 19 5 | 3 53 | 8 51 | 2 13 | 11 33 | 1 17 | 23 27 | 0 51 | 2 58 | 1 7 | 2 31 | 2 34 | 17 13 | 0 40 | 8 29 | 1 41 | 24 15 | 9 23 | 11 51 | 11 31 | 12 22 | 16 26 | 6 48 | 1n18 |
| W10 | 17 10 | 18 47 | 4 39 | 9 21 | 2 10 | 12 0 | 1 15 | 23 32 | 0 52 | 2 55 | 1 7 | 2 32 | 2 34 | 17 13 | 0 40 | 8 30 | 1 41 | 24 15 | 9 23 | 11 50 | 11 30 | 12 24 | 16 26 | 6 49 | 1n19 |
| T11 | 17 27 | 17 19 | 5 7 | 9 52 | 2 7 | 12 26 | 1 14 | 23 37 | 0 52 | 2 51 | 1 7 | 2 33 | 2 34 | 17 12 | 0 40 | 8 31 | 1 41 | 24 14 | 9 23 | 11 49 | 11 29 | 12 25 | 16 25 | 6 49 | 1n20 |
| F12 | 17 43 | 14 55 | 5 16 | 10 24 | 2 3 | 12 52 | 1 12 | 23 42 | 0 52 | 2 47 | 1 7 | 2 33 | 2 33 | 17 12 | 0 40 | 8 31 | 1 41 | 24 14 | 9 23 | 11 49 | 11 28 | 12 27 | 16 25 | 6 50 | 1n21 |
| S13 | 17 59 | 11 50 | 5 9 | 10 57 | 1 59 | 13 18 | 1 11 | 23 47 | 0 53 | 2 43 | 1 7 | 2 34 | 2 33 | 17 12 | 0 40 | 8 32 | 1 41 | 24 14 | 9 23 | 11 48 | 11 27 | 12 28 | 16 25 | 6 50 | 1n22 |
| S14 | 18 15 | 8 16 | 4 46 | 11 31 | 1 54 | 13 43 | 1 9 | 23 51 | 0 53 | 2 39 | 1 8 | 2 35 | 2 33 | 17 12 | 0 40 | 8 33 | 1 41 | 24 14 | 9 22 | 11 48 | 11 26 | 12 29 | 16 24 | 6 51 | 1n23 |
| M15 | 18 31 | 4 26 | 4 10 | 12 5 | 1 49 | 14 8 | 1 7 | 23 55 | 0 54 | 2 36 | 1 8 | 2 35 | 2 33 | 17 12 | 0 40 | 8 34 | 1 41 | 24 13 | 9 22 | 11 49 | 11 25 | 12 31 | 16 24 | 6 51 | 1n24 |
| T16 | 18 46 | 0 30 | 3 24 | 12 39 | 1 43 | 14 33 | 1 6 | 23 59 | 0 54 | 2 32 | 1 8 | 2 36 | 2 33 | 17 12 | 0 40 | 8 34 | 1 41 | 24 13 | 9 22 | 11 49 | 11 24 | 12 32 | 16 23 | 6 52 | 1n25 |
| W17 | 19 1 | 3n24 | 2 30 | 13 13 | 1 37 | 14 57 | 1 4 | 24 3 | 0 54 | 2 29 | 1 8 | 2 36 | 2 32 | 17 12 | 0 40 | 8 35 | 1 41 | 24 13 | 9 22 | 11 50 | 11 22 | 12 34 | 16 23 | 6 52 | 1n26 |
| T18 | 19 15 | 7 9 | 1 29 | 13 47 | 1 31 | 15 21 | 1 2 | 24 6 | 0 55 | 2 25 | 1 8 | 2 37 | 2 32 | 17 12 | 0 40 | 8 36 | 1 41 | 24 12 | 9 22 | 11 50 | 11 21 | 12 35 | 16 23 | 6 53 | 1n27 |
| F19 | 19 29 | 10 36 | 0 25 | 14 22 | 1 25 | 15 45 | 1 0 | 24 9 | 0 55 | 2 22 | 1 8 | 2 37 | 2 32 | 17 12 | 0 40 | 8 36 | 1 41 | 24 12 | 9 21 | 11 51 | 11 20 | 12 36 | 16 22 | 6 53 | 1n28 |
| S20 | 19 43 | 13 38 | 0s39 | 14 55 | 1 18 | 16 8 | 0 59 | 24 12 | 0 55 | 2 18 | 1 9 | 2 37 | 2 32 | 17 12 | 0 40 | 8 37 | 1 41 | 24 12 | 9 21 | 11 51 | 11 19 | 12 38 | 16 22 | 6 54 | 1n29 |
| S21 | 19 57 | 16 8 | 1 43 | 15 29 | 1 12 | 16 31 | 0 57 | 24 15 | 0 56 | 2 15 | 1 9 | 2 38 | 2 32 | 17 12 | 0 40 | 8 38 | 1 41 | 24 11 | 9 21 | 11 50 | 11 18 | 12 39 | 16 22 | 6 54 | 1n30 |
| M22 | 20 10 | 17 56 | 2 42 | 16 2 | 1 5 | 16 53 | 0 55 | 24 17 | 0 56 | 2 11 | 1 9 | 2 38 | 2 31 | 17 12 | 0 40 | 8 38 | 1 41 | 24 11 | 9 21 | 11 49 | 11 17 | 12 41 | 16 21 | 6 55 | 1n31 |
| T23 | 20 22 | 18 58 | 3 34 | 16 34 | 0 58 | 17 15 | 0 53 | 24 19 | 0 57 | 2 8 | 1 9 | 2 38 | 2 31 | 17 12 | 0 40 | 8 39 | 1 41 | 24 11 | 9 21 | 11 48 | 11 16 | 12 42 | 16 21 | 6 55 | 1n32 |
| W24 | 20 35 | 19 7 | 4 18 | 17 6 | 0 51 | 17 36 | 0 51 | 24 21 | 0 57 | 2 5 | 1 10 | 2 38 | 2 31 | 17 13 | 0 40 | 8 40 | 1 41 | 24 10 | 9 20 | 11 46 | 11 15 | 12 43 | 16 21 | 6 56 | 1n33 |
| T25 | 20 47 | 18 22 | 4 49 | 17 37 | 0 44 | 17 57 | 0 49 | 24 23 | 0 57 | 2 2 | 1 10 | 2 38 | 2 31 | 17 13 | 0 40 | 8 40 | 1 41 | 24 10 | 9 20 | 11 44 | 11 13 | 12 45 | 16 20 | 6 56 | 1n34 |
| F26 | 20 58 | 16 44 | 5 8 | 18 7 | 0 37 | 18 18 | 0 46 | 24 24 | 0 58 | 1 59 | 1 10 | 2 38 | 2 30 | 17 13 | 0 40 | 8 41 | 1 42 | 24 10 | 9 20 | 11 42 | 11 12 | 12 46 | 16 20 | 6 57 | 1n35 |
| S27 | 21 9 | 14 14 | 5 11 | 18 37 | 0 30 | 18 37 | 0 44 | 24 25 | 0 58 | 1 55 | 1 10 | 2 38 | 2 30 | 17 13 | 0 40 | 8 42 | 1 42 | 24 9 | 9 20 | 11 40 | 11 11 | 12 48 | 16 20 | 6 57 | 1n36 |
| S28 | 21 20 | 11 1 | 4 59 | 19 6 | 0 23 | 18 57 | 0 42 | 24 26 | 0 58 | 1 52 | 1 10 | 2 38 | 2 30 | 17 13 | 0 40 | 8 42 | 1 42 | 24 9 | 9 20 | 11 39 | 11 10 | 12 49 | 16 19 | 6 58 | 1n37 |
| M29 | 21 30 | 7 10 | 4 31 | 19 34 | 0 16 | 19 16 | 0 40 | 24 26 | 0 58 | 1 49 | 1 11 | 2 38 | 2 30 | 17 13 | 0 40 | 8 43 | 1 42 | 24 8 | 9 20 | 11 38 | 11 9 | 12 50 | 16 19 | 6 58 | 1n38 |
| T30 | 21s40 | 2n52 | 3s47 | 20s 1 | 0n 9 | 19s34 | 0n38 | 24s27 | 0s59 | 1n46 | 1n11 | 2s38 | 2s29 | 17n14 | 0n40 | 8s44 | 1n42 | 24s 8 | 9s19 | 11s38 | 11s 8 | 12n52 | 16m19 | 6s58 | 1n39 |

ASTRODIENST EPHEMERIS for the year 1790
geocentric

DECEMBER 1790

00:00 UT

| Day | Sid.t | ☉ | ☽ | ♊ | ♋ | ♌ | ♍ | ♎ | ♏ | ♐ | ♑ | ♒ | ♓ | ♈ | ♉ | Day |
|------|---------|----------|--------|--------|-------|-------|-------|--------|--------|-------|-------|--------|-------|------|-------|------|
| W 1 | 4 40 6 | 9♊ 3'57 | 27♎48 | 1♊33 | 1♋19 | 1♌22 | 28♎24 | 29°R 7 | 14°R12 | 26♌44 | 18♋32 | 0♍27 | 28♌57 | 5♈47 | 6°R57 | W 1 |
| T 2 | 4 44 3 | 10° 4'51 | 12♌ 3 | 3° 7 | 2°35 | 2° 8 | 28°31 | 29°D 7 | 14♌12 | 26°46 | 18°33 | 0°29 | 28°54 | 5°54 | 6°53 | T 2 |
| F 3 | 4 47 59 | 11° 5'47 | 26°38 | 4°41 | 3°50 | 2°54 | 28°39 | 29°H 7 | 14°11 | 26°47 | 18°34 | 0°R30 | 28°51 | 6° 0 | 6°50 | F 3 |
| S 4 | 4 51 56 | 12° 6'44 | 11♌27 | 6°15 | 5° 6 | 3°40 | 28°46 | 29° 7 | 14°10 | 26°49 | 18°35 | 0°29 | 28°47 | 6° 7 | 6°46 | S 4 |
| S 5 | 4 55 52 | 13° 7'42 | 26°24 | 7°49 | 6°21 | 4°26 | 28°53 | 29° 7 | 14° 9 | 26°51 | 18°35 | 0°27 | 28°44 | 6°14 | 6°43 | S 5 |
| M 6 | 4 59 49 | 14° 8'42 | 11♌23 | 9°23 | 7°37 | 5°12 | 29° 1 | 29° 8 | 14° 9 | 26°52 | 18°36 | 0°22 | 28°41 | 6°20 | 6°39 | M 6 |
| T 7 | 5 3 45 | 15° 9'42 | 26°13 | 10°57 | 8°52 | 5°58 | 29° 8 | 29° 8 | 14° 8 | 26°54 | 18°37 | 0°16 | 28°38 | 6°27 | 6°35 | T 7 |
| W 8 | 5 7 42 | 16°10'43 | 10♌36 | 12°31 | 10° 8 | 6°44 | 29°14 | 29° 9 | 14° 7 | 26°56 | 18°38 | 0° 8 | 28°35 | 6°34 | 6°32 | W 8 |
| T 9 | 5 11 38 | 17°11'45 | 24°56 | 14° 5 | 11°23 | 7°30 | 29°21 | 29° 9 | 14° 6 | 26°57 | 18°39 | 0° 0 | 28°32 | 6°40 | 6°28 | T 9 |
| F 10 | 5 15 35 | 18°12'48 | 8♋39 | 15°39 | 12°39 | 8°16 | 29°28 | 29°10 | 14° 5 | 26°59 | 18°40 | 29♌53 | 28°28 | 6°47 | 6°24 | F 10 |
| S 11 | 5 19 32 | 19°13'51 | 21°55 | 17°13 | 13°54 | 9° 2 | 29°34 | 29°11 | 14° 3 | 27° 0 | 18°41 | 29°48 | 28°25 | 6°54 | 6°21 | S 11 |
| S 12 | 5 23 28 | 20°14'54 | 4♋44 | 18°47 | 15°10 | 9°49 | 29°40 | 29°12 | 14° 2 | 27° 2 | 18°42 | 29°44 | 28°22 | 7° 0 | 6°17 | S 12 |
| M13 | 5 27 25 | 21°15'58 | 17°11 | 20°22 | 16°26 | 10°35 | 29°46 | 29°13 | 14° 1 | 27° 3 | 18°43 | 29°D43 | 28°19 | 7° 7 | 6°13 | M13 |
| T 14 | 5 31 21 | 22°17'02 | 29°19 | 21°56 | 17°41 | 11°21 | 29°52 | 29°14 | 14° 0 | 27° 5 | 18°44 | 29°43 | 28°16 | 7°14 | 6° 9 | T 14 |
| W15 | 5 35 18 | 23°18'06 | 11°Y15 | 23°31 | 18°57 | 12° 8 | 29°58 | 29°16 | 13°58 | 27° 6 | 18°45 | 29°44 | 28°12 | 7°20 | 6° 5 | W15 |
| T 16 | 5 39 14 | 24°19'11 | 23° 4 | 25° 6 | 20°12 | 12°54 | 0♌ 4 | 29°17 | 13°57 | 27° 8 | 18°47 | 29°45 | 28° 9 | 7°27 | 6° 1 | T 16 |
| F 17 | 5 43 11 | 25°20'16 | 4♌50 | 26°41 | 21°28 | 13°40 | 0° 9 | 29°19 | 13°56 | 27° 9 | 18°48 | 29°R45 | 28° 6 | 7°34 | 5°57 | F 17 |
| S 18 | 5 47 7 | 26°21'22 | 16°39 | 28°16 | 22°43 | 14°27 | 0°14 | 29°21 | 13°54 | 27°11 | 18°49 | 29°43 | 28° 3 | 7°40 | 5°53 | S 18 |
| S 19 | 5 51 4 | 27°22'28 | 28°34 | 29°52 | 23°59 | 15°14 | 0°19 | 29°22 | 13°53 | 27°12 | 18°50 | 29°39 | 28° 0 | 7°47 | 5°49 | S 19 |
| M20 | 5 55 1 | 28°23'34 | 10♌38 | 1♌27 | 25°14 | 16° 0 | 0°24 | 29°24 | 13°51 | 27°13 | 18°51 | 29°33 | 27°57 | 7°53 | 5°45 | M20 |
| T 21 | 5 58 57 | 29°24'41 | 22°53 | 3° 3 | 26°30 | 16°47 | 0°29 | 29°26 | 13°49 | 27°14 | 18°53 | 29°23 | 27°53 | 8° 0 | 5°41 | T 21 |
| W22 | 6 2 54 | 0♌25'47 | 5♌21 | 4°39 | 27°45 | 17°33 | 0°34 | 29°28 | 13°48 | 27°16 | 18°54 | 29°12 | 27°50 | 8° 7 | 5°37 | W22 |
| T 23 | 6 6 50 | 1°26'55 | 18° 1 | 6°15 | 29° 1 | 18°20 | 0°38 | 29°30 | 13°46 | 27°17 | 18°55 | 29° 0 | 27°47 | 8°13 | 5°33 | T 23 |
| F 24 | 6 10 47 | 2°28'02 | 0♌54 | 7°52 | 0♌16 | 19° 7 | 0°43 | 29°33 | 13°44 | 27°18 | 18°56 | 28°49 | 27°44 | 8°20 | 5°29 | F 24 |
| S 25 | 6 14 43 | 3°29'10 | 13°58 | 9°29 | 1°32 | 19°53 | 0°47 | 29°35 | 13°43 | 27°19 | 18°58 | 28°39 | 27°41 | 8°27 | 5°25 | S 25 |
| S 26 | 6 18 40 | 4°30'19 | 27°13 | 11° 6 | 2°47 | 20°40 | 0°51 | 29°38 | 13°41 | 27°20 | 18°59 | 28°31 | 27°38 | 8°33 | 5°21 | S 26 |
| M27 | 6 22 36 | 5°31'27 | 10♎40 | 12°43 | 4° 3 | 21°27 | 0°54 | 29°40 | 13°39 | 27°22 | 19° 0 | 28°25 | 27°34 | 8°40 | 5°17 | M27 |
| T 28 | 6 26 33 | 6°32'36 | 24°18 | 14°20 | 5°18 | 22°14 | 0°58 | 29°43 | 13°37 | 27°23 | 19° 2 | 28°23 | 27°31 | 8°47 | 5°12 | T 28 |
| W29 | 6 30 30 | 7°33'46 | 8♌ 8 | 15°58 | 6°34 | 23° 1 | 1° 1 | 29°46 | 13°35 | 27°24 | 19° 3 | 28°D22 | 27°28 | 8°53 | 5° 8 | W29 |
| T 30 | 6 34 26 | 8°34'56 | 22°10 | 17°36 | 7°49 | 23°48 | 1° 5 | 29°49 | 13°33 | 27°25 | 19° 4 | 28°R22 | 27°25 | 9° 0 | 5° 4 | T 30 |
| F 31 | 6 38 23 | 9°36'06 | 6♎24 | 19°314 | 9♌ 5 | 24°35 | 1♌ 8 | 29°H52 | 13°31 | 27°26 | 19° 6 | 28°D22 | 27°22 | 9° 7 | 5° 0 | F 31 |

| Day | ☉ | ☾ | | ♊ | | ♋ | | ♌ | | ♍ | | ♎ | | ♏ | | ♐ | | ♑ | | ♒ | | ♓ | | ♈ | |
|------|-------|-------|------|-------|------|-------|------|-------|------|------|------|------|------|-------|------|------|------|-------|------|-------|-------|-------|-------|------|-----|
| | decl | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat | decl | lat |
| W 1 | 21s50 | 1s42 | 2s49 | 20s27 | 0n 2 | 19s52 | 0n36 | 24s26 | 0s59 | 1n44 | 1n11 | 2s38 | 2s29 | 17n14 | 0n40 | 8s44 | 1n42 | 24s 8 | 9s19 | 11s39 | 11s 7 | 12n53 | 16n19 | 6s59 | 7s0 |
| T 2 | 21 59 | 6 17 | 1 39 | 20 53 | 0s 5 | 20 9 | 0 33 | 24 26 | 0 59 | 1 41 | 1 11 | 2 38 | 2 29 | 17 14 | 0 41 | 8 45 | 1 42 | 24 7 | 9 19 | 11 39 | 11 6 | 12 54 | 16 19 | 6 59 | 7 0 |
| F 3 | 22 8 | 10 36 | 0 21 | 21 17 | 0 12 | 20 26 | 0 31 | 24 26 | 1 0 | 1 38 | 1 11 | 2 38 | 2 29 | 17 14 | 0 41 | 8 45 | 1 42 | 24 7 | 9 19 | 11 39 | 11 4 | 12 56 | 16 18 | 7 0 | 7 1 |
| S 4 | 22 16 | 14 21 | 0n59 | 21 40 | 0 18 | 20 42 | 0 29 | 24 25 | 1 0 | 1 35 | 1 12 | 2 37 | 2 29 | 17 15 | 0 41 | 8 46 | 1 42 | 24 6 | 9 19 | 11 39 | 11 3 | 12 57 | 16 18 | 7 0 | 7 1 |
| S 5 | 22 24 | 17 10 | 2 16 | 22 3 | 0 25 | 20 57 | 0 26 | 24 24 | 1 0 | 1 32 | 1 12 | 2 37 | 2 28 | 17 15 | 0 41 | 8 46 | 1 42 | 24 6 | 9 19 | 11 38 | 11 2 | 12 59 | 16 18 | 7 0 | 7 1 |
| M 6 | 22 31 | 18 49 | 3 23 | 22 24 | 0 31 | 21 12 | 0 24 | 24 22 | 1 0 | 1 30 | 1 12 | 2 37 | 2 28 | 17 15 | 0 41 | 8 47 | 1 42 | 24 5 | 9 18 | 11 37 | 11 1 | 13 0 | 16 18 | 7 1 | 7 2 |
| T 7 | 22 38 | 19 9 | 4 16 | 22 44 | 0 38 | 21 27 | 0 22 | 24 20 | 1 1 | 1 27 | 1 12 | 2 36 | 2 28 | 17 15 | 0 41 | 8 48 | 1 42 | 24 5 | 9 18 | 11 35 | 11 0 | 13 1 | 16 18 | 7 1 | 7 2 |
| W 8 | 22 45 | 18 11 | 4 51 | 23 3 | 0 44 | 21 40 | 0 19 | 24 18 | 1 1 | 1 25 | 1 13 | 2 36 | 2 28 | 17 16 | 0 41 | 8 48 | 1 42 | 24 4 | 9 18 | 11 32 | 10 59 | 13 3 | 16 17 | 7 1 | 7 2 |
| T 9 | 22 51 | 16 8 | 5 7 | 23 21 | 0 50 | 21 53 | 0 17 | 24 16 | 1 1 | 1 22 | 1 13 | 2 35 | 2 27 | 17 16 | 0 41 | 8 49 | 1 42 | 24 4 | 9 18 | 11 29 | 10 58 | 13 4 | 16 17 | 7 2 | 7 3 |
| F 10 | 22 56 | 13 12 | 5 5 | 23 37 | 0 56 | 22 6 | 0 15 | 24 14 | 1 1 | 1 20 | 1 13 | 2 35 | 2 27 | 17 16 | 0 41 | 8 49 | 1 42 | 24 4 | 9 18 | 11 27 | 10 57 | 13 5 | 16 17 | 7 2 | 7 3 |
| S 11 | 23 2 | 9 42 | 4 46 | 23 53 | 1 2 | 22 17 | 0 12 | 24 11 | 1 2 | 1 18 | 1 13 | 2 34 | 2 27 | 17 17 | 0 41 | 8 50 | 1 42 | 24 3 | 9 18 | 11 25 | 10 55 | 13 7 | 16 17 | 7 2 | 7 3 |
| S 12 | 23 6 | 5 51 | 4 13 | 24 7 | 1 8 | 22 28 | 0 10 | 24 8 | 1 2 | 1 15 | 1 14 | 2 34 | 2 27 | 17 17 | 0 41 | 8 50 | 1 42 | 24 3 | 9 17 | 11 23 | 10 54 | 13 8 | 16 17 | 7 2 | 7 3 |
| M13 | 23 11 | 1 52 | 3 29 | 24 20 | 1 13 | 22 39 | 0 7 | 24 4 | 1 2 | 1 13 | 1 14 | 2 33 | 2 26 | 17 18 | 0 41 | 8 51 | 1 42 | 24 2 | 9 17 | 11 23 | 10 53 | 13 9 | 16 17 | 7 3 | 7 4 |
| T 14 | 23 14 | 2n 7 | 2 37 | 24 31 | 1 18 | 22 49 | 0 5 | 24 1 | 1 2 | 1 11 | 1 14 | 2 32 | 2 26 | 17 18 | 0 41 | 8 51 | 1 42 | 24 2 | 9 17 | 11 23 | 10 52 | 13 11 | 16 17 | 7 3 | 7 4 |
| W15 | 23 18 | 5 58 | 1 38 | 24 42 | 1 23 | 22 58 | 0 3 | 23 57 | 1 3 | 1 9 | 1 14 | 2 31 | 2 26 | 17 18 | 0 41 | 8 52 | 1 42 | 24 1 | 9 17 | 11 23 | 10 51 | 13 12 | 16 17 | 7 3 | 7 4 |
| T 16 | 23 21 | 9 32 | 0 36 | 24 51 | 1 28 | 23 6 | 0 0 | 23 53 | 1 3 | 1 7 | 1 15 | 2 31 | 2 26 | 17 19 | 0 41 | 8 52 | 1 42 | 24 1 | 9 17 | 11 24 | 10 50 | 13 13 | 16 17 | 7 3 | 7 4 |
| F 17 | 23 23 | 12 43 | 0s27 | 24 58 | 1 33 | 23 13 | 0s 2 | 23 48 | 1 3 | 1 5 | 1 15 | 2 30 | 2 25 | 17 19 | 0 41 | 8 53 | 1 42 | 24 0 | 9 17 | 11 24 | 10 49 | 13 15 | 16 17 | 7 4 | 7 5 |
| S 18 | 23 25 | 15 24 | 1 29 | 25 5 | 1 38 | 23 20 | 0 5 | 23 44 | 1 3 | 1 3 | 1 15 | 2 29 | 2 25 | 17 20 | 0 41 | 8 53 | 1 43 | 24 0 | 9 17 | 11 23 | 10 47 | 13 16 | 16 17 | 7 4 | 7 5 |
| S 19 | 23 26 | 17 27 | 2 28 | 25 10 | 1 42 | 23 27 | 0 7 | 23 39 | 1 3 | 1 1 | 1 15 | 2 28 | 2 25 | 17 20 | 0 41 | 8 53 | 1 43 | 23 59 | 9 16 | 11 22 | 10 46 | 13 17 | 16 17 | 7 4 | 7 5 |
| M20 | 23 27 | 18 45 | 3 21 | 25 13 | 1 46 | 23 32 | 0 9 | 23 33 | 1 4 | 1 0 | 1 16 | 2 27 | 2 25 | 17 21 | 0 41 | 8 54 | 1 43 | 23 59 | 9 16 | 11 19 | 10 45 | 13 19 | 16 17 | 7 4 | 7 5 |
| T 21 | 23 28 | 19 12 | 4 5 | 25 15 | 1 49 | 23 37 | 0 12 | 23 28 | 1 4 | 0 58 | 1 16 | 2 26 | 2 24 | 17 21 | 0 41 | 8 54 | 1 43 | 23 58 | 9 16 | 11 16 | 10 44 | 13 20 | 16 17 | 7 4 | 7 5 |
| W22 | 23 28 | 18 44 | 4 38 | 25 16 | 1 53 | 23 41 | 0 14 | 23 22 | 1 4 | 0 56 | 1 16 | 2 25 | 2 24 | 17 22 | 0 41 | 8 55 | 1 43 | 23 58 | 9 16 | 11 12 | 10 43 | 13 21 | 16 17 | 7 5 | 7 6 |
| T 23 | 23 27 | 17 20 | 4 58 | 25 15 | 1 56 | 23 44 | 0 16 | 23 16 | 1 4 | 0 55 | 1 16 | 2 24 | 2 24 | 17 22 | 0 41 | 8 55 | 1 43 | 23 57 | 9 16 | 11 8 | 10 42 | 13 23 | 16 17 | 7 5 | 7 6 |
| F 24 | 23 26 | 15 3 | 5 3 | 25 13 | 1 59 | 23 47 | 0 19 | 23 10 | 1 4 | 0 53 | 1 17 | 2 23 | 2 24 | 17 23 | 0 41 | 8 55 | 1 43 | 23 56 | 9 16 | 11 4 | 10 41 | 13 24 | 16 17 | 7 5 | 7 6 |
| S 25 | 23 25 | 11 59 | 4 53 | 25 9 | 2 1 | 23 48 | 0 21 | 23 3 | 1 4 | 0 52 | 1 17 | 2 22 | 2 24 | 17 23 | 0 41 | 8 56 | 1 43 | 23 56 | 9 16 | 11 0 | 10 40 | 13 25 | 16 17 | 7 5 | 7 6 |
| S 26 | 23 23 | 8 16 | 4 27 | 25 3 | 2 4 | 23 49 | 0 23 | 22 56 | 1 4 | 0 51 | 1 17 | 2 20 | 2 23 | 17 24 | 0 41 | 8 56 | 1 43 | 23 55 | 9 16 | 10 57 | 10 38 | 13 27 | 16 17 | 7 5 | 7 6 |
| M27 | 23 21 | 4 6 | 3 45 | 24 56 | 2 5 | 23 50 | 0 26 | 22 49 | 1 5 | 0 49 | 1 18 | 2 19 | 2 23 | 17 24 | 0 41 | 8 56 | 1 43 | 23 55 | 9 15 | 10 55 | 10 37 | 13 28 | 16 17 | 7 5 | 7 6 |
| T 28 | 23 18 | 0s21 | 2 51 | 24 48 | 2 7 | 23 49 | 0 28 | 22 42 | 1 5 | 0 48 | 1 18 | 2 18 | 2 23 | 17 25 | 0 41 | 8 57 | 1 43 | 23 54 | 9 15 | 10 55 | 10 36 | 13 29 | 16 17 | 7 5 | 7 6 |
| W29 | 23 15 | 4 51 | 1 46 | 24 38 | 2 8 | 23 48 | 0 30 | 22 34 | 1 5 | 0 47 | 1 18 | 2 17 | 2 23 | 17 26 | 0 41 | 8 57 | 1 43 | 23 54 | 9 15 | 10 54 | 10 35 | 13 30 | 16 17 | 7 5 | 7 6 |
| T 30 | 23 11 | 9 9 | 0 33 | 24 26 | 2 9 | 23 46 | 0 32 | 22 26 | 1 5 | 0 46 | 1 18 | 2 15 | 2 22 | 17 26 | 0 42 | 8 57 | 1 43 | 23 53 | 9 15 | 10 54 | 10 34 | 13 32 | 16 17 | 7 5 | 7 6 |
| F 31 | 23s 7 | 13s 0 | 0n43 | 24s13 | 2s 9 | 23s44 | 0s35 | 22s18 | 1s 5 | 0n45 | 1n19 | 2s14 | 2s22 | 17n27 | 0n42 | 8s58 | 1n43 | 23s53 | 9s15 | 10s54 | 10s33 | 13n33 | 16n17 | 7s | 7s |