



# Astrodienst Ephemeris Tables for the year 1792

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 1792  
geocentric

JANUARY 1792

00:00 UT

| Day  | Sid.t   | ☉        | ☽     | ♂      | ♀     | ♂     | ♂     | ♂      | ♂     | ♂      | ♂     | ♂     | ♂    | ♂     | ♂     | Day  |
|------|---------|----------|-------|--------|-------|-------|-------|--------|-------|--------|-------|-------|------|-------|-------|------|
| S 1  | 6 41 22 | 10♂22'38 | 8♂15  | 29♂34  | 23♂32 | 28♂40 | 28♂25 | 12♂19  | 18♂22 | 29♂35  | 20♂32 | 7♂58  | 7♂59 | 19♂52 | 15♂59 | S 1  |
| M 2  | 6 45 18 | 11♂23'48 | 20♂42 | 0♂40   | 24♂34 | 29♂ 0 | 28♂33 | 12♂21  | 18♂20 | 29♂36  | 20♂33 | 7♂58  | 7♂56 | 19♂58 | 15♂55 | M 2  |
| T 3  | 6 49 15 | 12♂24'58 | 2♂52  | 1♂41   | 25♂36 | 29♂19 | 28♂40 | 12♂23  | 18♂18 | 29♂37  | 20♂35 | 7♂57  | 7♂52 | 20♂ 5 | 15♂51 | T 3  |
| W 4  | 6 53 11 | 13♂26'07 | 14♂51 | 2♂36   | 26♂39 | 29♂38 | 28♂47 | 12♂25  | 18♂16 | 29♂38  | 20♂36 | 7♂54  | 7♂49 | 20♂12 | 15♂46 | W 4  |
| T 5  | 6 57 8  | 14♂27'16 | 26♂44 | 3♂24   | 27♂42 | 29♂57 | 28♂54 | 12♂27  | 18♂14 | 29♂39  | 20♂38 | 7♂47  | 7♂46 | 20♂18 | 15♂42 | T 5  |
| F 6  | 7 1 4   | 15♂28'25 | 8♂34  | 4♂ 3   | 28♂45 | 0♂15  | 29♂ 1 | 12♂30  | 18♂12 | 29♂40  | 20♂39 | 7♂38  | 7♂43 | 20♂25 | 15♂38 | F 6  |
| S 7  | 7 5 1   | 16♂29'33 | 20♂25 | 4♂34   | 29♂49 | 0♂33  | 29♂ 8 | 12♂32  | 18♂10 | 29♂40  | 20♂41 | 7♂26  | 7♂40 | 20♂32 | 15♂33 | S 7  |
| S 8  | 7 8 58  | 17♂30'41 | 2♂19  | 4♂55   | 0♂53  | 0♂50  | 29♂15 | 12♂35  | 18♂ 8 | 29♂41  | 20♂42 | 7♂12  | 7♂36 | 20♂39 | 15♂29 | S 8  |
| M 9  | 7 12 54 | 18♂31'48 | 14♂18 | 5♂R 6  | 1♂57  | 1♂ 7  | 29♂21 | 12♂37  | 18♂ 6 | 29♂42  | 20♂44 | 6♂57  | 7♂33 | 20♂45 | 15♂25 | M 9  |
| T 10 | 7 16 51 | 19♂32'55 | 26♂22 | 5♂ 5   | 3♂ 2  | 1♂23  | 29♂28 | 12♂40  | 18♂ 4 | 29♂43  | 20♂45 | 6♂43  | 7♂30 | 20♂52 | 15♂21 | T 10 |
| W11  | 7 20 47 | 20♂34'02 | 8♂33  | 4♂53   | 4♂ 7  | 1♂39  | 29♂34 | 12♂43  | 18♂ 1 | 29♂43  | 20♂47 | 6♂30  | 7♂27 | 20♂59 | 15♂16 | W11  |
| T 12 | 7 24 44 | 21♂35'08 | 20♂51 | 4♂29   | 5♂12  | 1♂55  | 29♂40 | 12♂46  | 17♂59 | 29♂44  | 20♂48 | 6♂20  | 7♂24 | 21♂ 6 | 15♂12 | T 12 |
| F 13 | 7 28 40 | 22♂36'14 | 3♂18  | 3♂54   | 6♂17  | 2♂10  | 29♂46 | 12♂49  | 17♂57 | 29♂45  | 20♂50 | 6♂13  | 7♂21 | 21♂12 | 15♂ 8 | F 13 |
| S 14 | 7 32 37 | 23♂37'20 | 15♂55 | 3♂ 7   | 7♂23  | 2♂24  | 29♂52 | 12♂52  | 17♂55 | 29♂45  | 20♂51 | 6♂ 8  | 7♂17 | 21♂19 | 15♂ 4 | S 14 |
| S 15 | 7 36 33 | 24♂38'25 | 28♂46 | 2♂11   | 8♂29  | 2♂38  | 29♂57 | 12♂55  | 17♂52 | 29♂46  | 20♂53 | 6♂ 7  | 7♂14 | 21♂26 | 14♂59 | S 15 |
| M16  | 7 40 30 | 25♂39'30 | 11♂52 | 1♂ 6   | 9♂35  | 2♂52  | 0♂ 3  | 12♂59  | 17♂50 | 29♂46  | 20♂55 | 6♂D 6 | 7♂11 | 21♂32 | 14♂55 | M16  |
| T 17 | 7 44 27 | 26♂40'35 | 25♂17 | 29♂55  | 10♂41 | 3♂ 5  | 0♂ 8  | 13♂ 2  | 17♂48 | 29♂47  | 20♂56 | 6♂R 7 | 7♂ 8 | 21♂39 | 14♂51 | T 17 |
| W18  | 7 48 23 | 27♂41'39 | 9♂ 3  | 28♂39  | 11♂48 | 3♂17  | 0♂13  | 13♂ 5  | 17♂45 | 29♂47  | 20♂58 | 6♂ 6  | 7♂ 5 | 21♂46 | 14♂47 | W18  |
| T 19 | 7 52 20 | 28♂42'43 | 23♂11 | 27♂22  | 12♂55 | 3♂29  | 0♂18  | 13♂ 9  | 17♂43 | 29♂48  | 20♂59 | 6♂ 4  | 7♂ 2 | 21♂53 | 14♂43 | T 19 |
| F 20 | 7 56 16 | 29♂43'47 | 7♂41  | 26♂ 5  | 14♂ 2 | 3♂41  | 0♂23  | 13♂13  | 17♂40 | 29♂48  | 21♂ 1 | 5♂59  | 6♂58 | 21♂59 | 14♂39 | F 20 |
| S 21 | 8 0 13  | 0♂44'50  | 22♂29 | 24♂51  | 15♂ 9 | 3♂52  | 0♂28  | 13♂17  | 17♂38 | 29♂49  | 21♂ 3 | 5♂52  | 6♂55 | 22♂ 6 | 14♂35 | S 21 |
| S 22 | 8 4 9   | 1♂45'53  | 7♂29  | 23♂41  | 16♂16 | 4♂ 2  | 0♂32  | 13♂21  | 17♂35 | 29♂49  | 21♂ 4 | 5♂42  | 6♂52 | 22♂13 | 14♂31 | S 22 |
| M23  | 8 8 6   | 2♂46'55  | 22♂31 | 22♂38  | 17♂24 | 4♂12  | 0♂37  | 13♂25  | 17♂33 | 29♂49  | 21♂ 6 | 5♂32  | 6♂49 | 22♂19 | 14♂27 | M23  |
| T 24 | 8 12 2  | 3♂47'56  | 7♂27  | 21♂42  | 18♂31 | 4♂21  | 0♂41  | 13♂29  | 17♂30 | 29♂49  | 21♂ 8 | 5♂22  | 6♂46 | 22♂26 | 14♂23 | T 24 |
| W25  | 8 15 59 | 4♂48'56  | 22♂ 7 | 20♂55  | 19♂39 | 4♂29  | 0♂45  | 13♂33  | 17♂28 | 29♂50  | 21♂10 | 5♂14  | 6♂42 | 22♂33 | 14♂19 | W25  |
| T 26 | 8 19 56 | 5♂49'55  | 6♂24  | 20♂16  | 20♂47 | 4♂37  | 0♂49  | 13♂37  | 17♂25 | 29♂50  | 21♂11 | 5♂ 8  | 6♂39 | 22♂40 | 14♂15 | T 26 |
| F 27 | 8 23 52 | 6♂50'53  | 20♂13 | 19♂46  | 21♂56 | 4♂44  | 0♂52  | 13♂41  | 17♂23 | 29♂50  | 21♂13 | 5♂ 5  | 6♂36 | 22♂46 | 14♂11 | F 27 |
| S 28 | 8 27 49 | 7♂51'50  | 3♂34  | 19♂25  | 23♂ 4 | 4♂51  | 0♂56  | 13♂46  | 17♂20 | 29♂50  | 21♂15 | 5♂D 3 | 6♂33 | 22♂53 | 14♂ 7 | S 28 |
| S 29 | 8 31 45 | 8♂52'46  | 16♂29 | 19♂12  | 24♂13 | 4♂56  | 0♂59  | 13♂50  | 17♂17 | 29♂50  | 21♂16 | 5♂ 4  | 6♂30 | 23♂ 0 | 14♂ 3 | S 29 |
| M30  | 8 35 42 | 9♂53'40  | 29♂ 1 | 19♂D 8 | 25♂21 | 5♂ 2  | 1♂ 2  | 13♂55  | 17♂15 | 29♂50  | 21♂18 | 5♂ 5  | 6♂27 | 23♂ 6 | 14♂ 0 | M30  |
| T 31 | 8 39 38 | 10♂54'33 | 11♂15 | 19♂11  | 26♂30 | 5♂ 6  | 1♂ 5  | 14♂Y 0 | 17♂12 | 29♂R50 | 21♂20 | 5♂R 5 | 6♂23 | 23♂13 | 13♂56 | T 31 |

| Day  | ☉     | ☾     |      | ♀     |      | ♀     |      | ♂    |      | ♂     |      | ♂    |      | ♂     |      | ♂    |      | ♂     |      | ♂    |      | ♂     |       | ♂    |     | ♂    |     | ♂    |     |
|------|-------|-------|------|-------|------|-------|------|------|------|-------|------|------|------|-------|------|------|------|-------|------|------|------|-------|-------|------|-----|------|-----|------|-----|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl | lat  | decl  | lat   | decl | lat | decl | lat | decl | lat |
| S 1  | 23s 3 | 3n15  | 0s 1 | 21s29 | 1s14 | 15s27 | 3n20 | 2n58 | 2n39 | 9s46  | 1n15 | 2n33 | 2s31 | 16n 2 | 0n43 | 9s43 | 1n44 | 23s45 | 9s36 | 3s10 | 3s10 | 18n12 | 15n 2 | 7s32 |     |      |     |      |     |
| M 2  | 22 58 | 7 3   | 1 7  | 21 4  | 1 4  | 15 42 | 3 20 | 2 51 | 2 40 | 9 48  | 1 15 | 2 34 | 2 31 | 16 2  | 0 43 | 9 43 | 1 44 | 23 44 | 9 36 | 3 10 | 3 9  | 18 12 | 15 2  | 7 32 |     |      |     |      |     |
| T 3  | 22 53 | 10 29 | 2 8  | 20 39 | 0 52 | 15 57 | 3 19 | 2 44 | 2 41 | 9 51  | 1 15 | 2 35 | 2 30 | 16 3  | 0 43 | 9 43 | 1 44 | 23 43 | 9 36 | 3 9  | 3 8  | 18 12 | 15 2  | 7 32 |     |      |     |      |     |
| W 4  | 22 47 | 13 25 | 3 2  | 20 15 | 0 40 | 16 12 | 3 19 | 2 38 | 2 43 | 9 53  | 1 15 | 2 36 | 2 30 | 16 3  | 0 43 | 9 44 | 1 44 | 23 43 | 9 36 | 3 8  | 3 6  | 18 13 | 15 3  | 7 32 |     |      |     |      |     |
| T 5  | 22 41 | 15 46 | 3 47 | 19 50 | 0 26 | 16 27 | 3 18 | 2 32 | 2 44 | 9 55  | 1 15 | 2 38 | 2 30 | 16 4  | 0 43 | 9 44 | 1 44 | 23 42 | 9 36 | 3 6  | 3 5  | 18 13 | 15 3  | 7 32 |     |      |     |      |     |
| F 6  | 22 34 | 17 26 | 4 23 | 19 27 | 0 11 | 16 41 | 3 17 | 2 26 | 2 45 | 9 58  | 1 16 | 2 39 | 2 30 | 16 5  | 0 44 | 9 44 | 1 44 | 23 42 | 9 36 | 3 2  | 3 4  | 18 13 | 15 3  | 7 32 |     |      |     |      |     |
| S 7  | 22 27 | 18 21 | 4 47 | 19 4  | 0n 5 | 16 56 | 3 16 | 2 20 | 2 46 | 10 0  | 1 16 | 2 40 | 2 29 | 16 5  | 0 44 | 9 44 | 1 44 | 23 41 | 9 36 | 2 57 | 3 3  | 18 13 | 15 4  | 7 32 |     |      |     |      |     |
| S 8  | 22 19 | 18 28 | 4 59 | 18 42 | 0 21 | 17 10 | 3 15 | 2 14 | 2 48 | 10 2  | 1 16 | 2 41 | 2 29 | 16 6  | 0 44 | 9 45 | 1 44 | 23 41 | 9 36 | 2 52 | 3 1  | 18 13 | 15 4  | 7 32 |     |      |     |      |     |
| M 9  | 22 11 | 17 46 | 4 57 | 18 23 | 0 39 | 17 24 | 3 14 | 2 8  | 2 49 | 10 4  | 1 16 | 2 42 | 2 29 | 16 7  | 0 44 | 9 45 | 1 45 | 23 40 | 9 36 | 2 46 | 3 0  | 18 14 | 15 5  | 7 32 |     |      |     |      |     |
| T 10 | 22 2  | 16 16 | 4 43 | 18 5  | 0 57 | 17 38 | 3 13 | 2 3  | 2 50 | 10 6  | 1 16 | 2 44 | 2 29 | 16 7  | 0 44 | 9 45 | 1 45 | 23 39 | 9 36 | 2 40 | 2 59 | 18 14 | 15 5  | 7 32 |     |      |     |      |     |
| W11  | 21 53 | 14 2  | 4 15 | 17 50 | 1 16 | 17 51 | 3 11 | 1 58 | 2 52 | 10 8  | 1 17 | 2 45 | 2 28 | 16 8  | 0 44 | 9 45 | 1 45 | 23 39 | 9 35 | 2 35 | 2 58 | 18 14 | 15 6  | 7 32 |     |      |     |      |     |
| T 12 | 21 44 | 11 10 | 3 35 | 17 38 | 1 35 | 18 4  | 3 10 | 1 53 | 2 53 | 10 10 | 1 17 | 2 46 | 2 28 | 16 9  | 0 44 | 9 45 | 1 45 | 23 38 | 9 35 | 2 31 | 2 56 | 18 14 | 15 6  | 7 32 |     |      |     |      |     |
| F 13 | 21 34 | 7 45  | 2 44 | 17 28 | 1 53 | 18 17 | 3 8  | 1 48 | 2 54 | 10 12 | 1 17 | 2 48 | 2 28 | 16 10 | 0 44 | 9 46 | 1 45 | 23 38 | 9 35 | 2 28 | 2 55 | 18 14 | 15 7  | 7 32 |     |      |     |      |     |
| S 14 | 21 24 | 3 57  | 1 45 | 17 21 | 2 11 | 18 30 | 3 6  | 1 44 | 2 56 | 10 14 | 1 17 | 2 49 | 2 28 | 16 10 | 0 44 | 9 46 | 1 45 | 23 37 | 9 35 | 2 26 | 2 54 | 18 14 | 15 7  | 7 32 |     |      |     |      |     |
| S 15 | 21 13 | 0s 6  | 0 39 | 17 17 | 2 29 | 18 42 | 3 4  | 1 39 | 2 57 | 10 16 | 1 17 | 2 51 | 2 27 | 16 11 | 0 44 | 9 46 | 1 45 | 23 36 | 9 35 | 2 26 | 2 53 | 18 15 | 15 8  | 7 32 |     |      |     |      |     |
| M16  | 21 2  | 4 14  | 0n31 | 17 16 | 2 44 | 18 54 | 3 2  | 1 35 | 2 58 | 10 17 | 1 18 | 2 52 | 2 27 | 16 12 | 0 44 | 9 46 | 1 45 | 23 36 | 9 35 | 2 26 | 2 51 | 18 15 | 15 8  | 7 32 |     |      |     |      |     |
| T 17 | 20 50 | 8 14  | 1 40 | 17 17 | 2 58 | 19 6  | 3 0  | 1 31 | 3 0  | 10 19 | 1 18 | 2 54 | 2 27 | 16 13 | 0 44 | 9 46 | 1 45 | 23 35 | 9 35 | 2 26 | 2 50 | 18 15 | 15 9  | 7 32 |     |      |     |      |     |
| W18  | 20 39 | 11 55 | 2 46 | 17 21 | 3 10 | 19 17 | 2 58 | 1 27 | 3 1  | 10 21 | 1 18 | 2 55 | 2 27 | 16 13 | 0 44 | 9 46 | 1 45 | 23 35 | 9 35 | 2 26 | 2 49 | 18 15 | 15 9  | 7 32 |     |      |     |      |     |
| T 19 | 20 26 | 14 59 | 3 43 | 17 27 | 3 20 | 19 28 | 2 56 | 1 24 | 3 2  | 10 22 | 1 18 | 2 57 | 2 26 | 16 14 | 0 44 | 9 46 | 1 45 | 23 34 | 9 35 | 2 25 | 2 47 | 18 15 | 15 10 | 7 32 |     |      |     |      |     |
| F 20 | 20 14 | 17 13 | 4 27 | 17 34 | 3 27 | 19 38 | 2 53 | 1 21 | 3 4  | 10 24 | 1 18 | 2 59 | 2 26 | 16 15 | 0 44 | 9 46 | 1 45 | 23 34 | 9 35 | 2 23 | 2 46 | 18 16 | 15 10 | 7 32 |     |      |     |      |     |
| S 21 | 20 1  | 18 20 | 4 55 | 17 43 | 3 31 | 19 48 | 2 51 | 1 18 | 3 5  | 10 25 | 1 19 | 3 0  | 2 26 | 16 16 | 0 44 | 9 46 | 1 45 | 23 33 | 9 35 | 2 20 | 2 45 | 18 16 | 15 11 | 7 32 |     |      |     |      |     |
| S 22 | 19 47 | 18 13 | 5 3  | 17 53 | 3 33 | 19 58 | 2 48 | 1 15 | 3 6  | 10 27 | 1 19 | 3 2  | 2 26 | 16 16 | 0 44 | 9 46 | 1 45 | 23 32 | 9 35 | 2 16 | 2 44 | 18 16 | 15 12 | 7 31 |     |      |     |      |     |
| M23  | 19 33 | 16 49 | 4 50 | 18 4  | 3 33 | 20 7  | 2 46 | 1 12 | 3 8  | 10 28 | 1 19 | 3 4  | 2 25 | 16 17 | 0 44 | 9 47 | 1 45 | 23 32 | 9 35 | 2 12 | 2 42 | 18 16 | 15 12 | 7 31 |     |      |     |      |     |
| T 24 | 19 19 | 14 16 | 4 17 | 18 15 | 3 30 | 20 16 | 2 43 | 1 10 | 3 9  | 10 29 | 1 19 | 3 6  | 2 25 | 16 18 | 0 44 | 9 47 | 1 45 | 23 31 | 9 35 | 2 8  | 2 41 | 18 16 | 15 13 | 7 31 |     |      |     |      |     |
| W25  | 19 5  | 10 52 | 3 28 | 18 27 | 3 26 | 20 24 | 2 40 | 1 8  | 3 10 | 10 30 | 1 19 | 3 8  | 2 25 | 16 19 | 0 44 | 9 47 | 1 46 | 23 31 | 9 35 | 2 5  | 2 40 | 18 16 | 15 13 | 7 31 |     |      |     |      |     |
| T 26 | 18 50 | 6 54  | 2 27 | 18 38 | 3 20 | 20 32 | 2 37 | 1 6  | 3 12 | 10 31 | 1 20 | 3 9  | 2 25 | 16 20 | 0 44 | 9 47 | 1 46 | 23 30 | 9 35 | 2 2  | 2 39 | 18 16 | 15 14 | 7 31 |     |      |     |      |     |
| F 27 | 18 35 | 2 41  | 1 19 | 18 50 | 3 13 | 20 39 | 2 34 | 1 4  | 3 13 | 10 32 | 1 20 | 3 11 | 2 24 | 16 20 | 0 44 | 9 47 | 1 46 | 23 29 | 9 35 | 2 1  | 2 37 | 18 17 | 15 15 | 7 30 |     |      |     |      |     |
| S 28 | 18 19 | 1n32  | 0 8  | 19 1  | 3 4  | 20 46 | 2 31 | 1 3  | 3 14 | 10 33 | 1 20 | 3 13 | 2 24 | 16 21 | 0 44 | 9 47 | 1 46 | 23 29 | 9 35 | 2 1  | 2 36 | 18 17 | 15 15 | 7 30 |     |      |     |      |     |
| S 29 | 18 3  | 5 33  | 1s 1 | 19 12 | 2 55 | 20 52 | 2 28 | 1 2  | 3 16 | 10 34 | 1 20 | 3 15 | 2 24 | 16 22 | 0 44 | 9 47 | 1 46 | 23 28 | 9 35 | 2 1  | 2 35 | 18 17 | 15 16 | 7 30 |     |      |     |      |     |
| M30  | 17 47 | 9 11  | 2 5  | 19 23 | 2 45 | 20 58 | 2 25 | 1 1  | 3 17 | 10 35 | 1 21 | 3 17 | 2 24 | 16 23 | 0 44 | 9 46 | 1 46 | 23 28 | 9 35 | 2 1  | 2 34 | 18 17 | 15 16 | 7 30 |     |      |     |      |     |
| T 31 | 17s31 | 12n20 | 3s 2 | 19s33 | 2n34 | 21s 4 | 2n22 | 1n 0 | 3n18 | 10s36 | 1n21 | 3n19 | 2s24 | 16n24 | 0n44 | 9s46 | 1n46 | 23s27 | 9s35 | 2s 1 | 2s32 | 18n17 | 15n17 | 7s29 |     |      |     |      |     |

Julian Day Number = 2375574.5, Delta T = 21.25 sec  
Ecliptic obliquity = 23°27'49", Nutation = 0°00'03", out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 21°50'10", Lahiri = 20°57'11"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1792  
geocentric

FEBRUARY 1792

00:00 UT

| Day  | Sid.t    | ☉   | ☽   | ♊  | ♋  | ♌   | ♍   | ♎                               | ♏                               | ♐                               | ♑                               | ♒   | ♓                              | ♈   | ♉   | Day  |
|------|----------|---|---|--|--|---|---|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---|--------------------------------|---|---|------|
| W 1  | 8 43 35  | 11 <sup>h</sup> 55 <sup>m</sup> 24 <sup>s</sup> | 23 <sup>h</sup> 16 <sup>m</sup>                 | 19 <sup>h</sup> 32 <sup>m</sup>                | 27 <sup>h</sup> 39 <sup>m</sup>              | 5 <sup>h</sup> 10 <sup>m</sup>                | 1 <sup>h</sup> 8 <sup>m</sup>                 | 14 <sup>h</sup> 4 <sup>m</sup>  | 17 <sup>h</sup> 10 <sup>m</sup> | 29 <sup>h</sup> 50 <sup>m</sup> | 21 <sup>h</sup> 21 <sup>m</sup> | 5 <sup>h</sup> 5 <sup>m</sup>                 | 6 <sup>h</sup> 20 <sup>m</sup> | 23 <sup>h</sup> 12 <sup>m</sup>                 | 13 <sup>h</sup> 53 <sup>m</sup>                 | W 1  |
| T 2  | 8 47 31  | 12 <sup>h</sup> 56 <sup>m</sup> 14 <sup>s</sup> | 5 <sup>h</sup> 11 <sup>m</sup> 0 <sup>s</sup>   | 19 <sup>h</sup> 38 <sup>m</sup>                | 28 <sup>h</sup> 48 <sup>m</sup>              | 5 <sup>h</sup> 13 <sup>m</sup>                | 1 <sup>h</sup> 10 <sup>m</sup>                | 14 <sup>h</sup> 9 <sup>m</sup>  | 17 <sup>h</sup> 17 <sup>m</sup> | 29 <sup>h</sup> 50 <sup>m</sup> | 21 <sup>h</sup> 23 <sup>m</sup> | 5 <sup>h</sup> 2 <sup>m</sup>                 | 6 <sup>h</sup> 17 <sup>m</sup> | 23 <sup>h</sup> 27 <sup>m</sup>                 | 13 <sup>h</sup> 54 <sup>m</sup>                 | T 2  |
| F 3  | 8 51 28  | 13 <sup>h</sup> 57 <sup>m</sup> 03 <sup>s</sup> | 17 <sup>h</sup> 0 <sup>m</sup>                  | 20 <sup>h</sup> 1 <sup>m</sup>                 | 29 <sup>h</sup> 57 <sup>m</sup>              | 5 <sup>h</sup> 16 <sup>m</sup>                | 1 <sup>h</sup> 13 <sup>m</sup>                | 14 <sup>h</sup> 14 <sup>m</sup> | 17 <sup>h</sup> 4 <sup>m</sup>  | 29 <sup>h</sup> 50 <sup>m</sup> | 21 <sup>h</sup> 25 <sup>m</sup> | 4 <sup>h</sup> 57 <sup>m</sup>                | 6 <sup>h</sup> 14 <sup>m</sup> | 23 <sup>h</sup> 33 <sup>m</sup>                 | 13 <sup>h</sup> 46 <sup>m</sup>                 | F 3  |
| S 4  | 8 55 25  | 14 <sup>h</sup> 57 <sup>m</sup> 50 <sup>s</sup> | 28 <sup>h</sup> 52 <sup>m</sup>                 | 20 <sup>h</sup> 30 <sup>m</sup>                | 1 <sup>h</sup> 3 <sup>m</sup> 6 <sup>s</sup> | 5 <sup>h</sup> 18 <sup>m</sup>                | 1 <sup>h</sup> 15 <sup>m</sup>                | 14 <sup>h</sup> 19 <sup>m</sup> | 17 <sup>h</sup> 2 <sup>m</sup>  | 29 <sup>h</sup> 50 <sup>m</sup> | 21 <sup>h</sup> 27 <sup>m</sup> | 4 <sup>h</sup> 49 <sup>m</sup>                | 6 <sup>h</sup> 11 <sup>m</sup> | 23 <sup>h</sup> 40 <sup>m</sup>                 | 13 <sup>h</sup> 42 <sup>m</sup>                 | S 4  |
| S 5  | 8 59 21  | 15 <sup>h</sup> 58 <sup>m</sup> 36 <sup>s</sup> | 10 <sup>h</sup> 54 <sup>m</sup> 9 <sup>s</sup>  | 21 <sup>h</sup> 4 <sup>m</sup>                 | 2 <sup>h</sup> 16 <sup>m</sup>               | 5 <sup>h</sup> 19 <sup>m</sup>                | 1 <sup>h</sup> 17 <sup>m</sup>                | 14 <sup>h</sup> 24 <sup>m</sup> | 16 <sup>h</sup> 59 <sup>m</sup> | 29 <sup>h</sup> 50 <sup>m</sup> | 21 <sup>h</sup> 28 <sup>m</sup> | 4 <sup>h</sup> 41 <sup>m</sup>                | 6 <sup>h</sup> 8 <sup>m</sup>  | 23 <sup>h</sup> 47 <sup>m</sup>                 | 13 <sup>h</sup> 39 <sup>m</sup>                 | S 5  |
| M 6  | 9 3 18   | 16 <sup>h</sup> 59 <sup>m</sup> 20 <sup>s</sup> | 22 <sup>h</sup> 53 <sup>m</sup>                 | 21 <sup>h</sup> 43 <sup>m</sup>                | 3 <sup>h</sup> 25 <sup>m</sup>               | 5 <sup>h</sup> 19 <sup>m</sup>                | 1 <sup>h</sup> 19 <sup>m</sup>                | 14 <sup>h</sup> 29 <sup>m</sup> | 16 <sup>h</sup> 57 <sup>m</sup> | 29 <sup>h</sup> 50 <sup>m</sup> | 21 <sup>h</sup> 30 <sup>m</sup> | 4 <sup>h</sup> 31 <sup>m</sup>                | 6 <sup>h</sup> 4 <sup>m</sup>  | 23 <sup>h</sup> 53 <sup>m</sup>                 | 13 <sup>h</sup> 35 <sup>m</sup>                 | M 6  |
| T 7  | 9 7 14   | 18 <sup>h</sup> 0 <sup>m</sup> 03 <sup>s</sup>  | 5 <sup>h</sup> 12 <sup>m</sup> 6 <sup>s</sup>   | 22 <sup>h</sup> 26 <sup>m</sup>                | 4 <sup>h</sup> 35 <sup>m</sup>               | 5 <sup>h</sup> 19 <sup>m</sup>                | 1 <sup>h</sup> 20 <sup>m</sup>                | 14 <sup>h</sup> 35 <sup>m</sup> | 16 <sup>h</sup> 54 <sup>m</sup> | 29 <sup>h</sup> 49 <sup>m</sup> | 21 <sup>h</sup> 32 <sup>m</sup> | 4 <sup>h</sup> 22 <sup>m</sup>                | 6 <sup>h</sup> 1 <sup>m</sup>  | 24 <sup>h</sup> 0 <sup>m</sup>                  | 13 <sup>h</sup> 32 <sup>m</sup>                 | T 7  |
| W 8  | 9 11 11  | 19 <sup>h</sup> 0 <sup>m</sup> 45 <sup>s</sup>  | 17 <sup>h</sup> 29 <sup>m</sup>                 | 23 <sup>h</sup> 13 <sup>m</sup>                | 5 <sup>h</sup> 45 <sup>m</sup>               | 5 <sup>h</sup> 18 <sup>m</sup>                | 1 <sup>h</sup> 22 <sup>m</sup>                | 14 <sup>h</sup> 40 <sup>m</sup> | 16 <sup>h</sup> 51 <sup>m</sup> | 29 <sup>h</sup> 49 <sup>m</sup> | 21 <sup>h</sup> 34 <sup>m</sup> | 4 <sup>h</sup> 14 <sup>m</sup>                | 5 <sup>h</sup> 58 <sup>m</sup> | 24 <sup>h</sup> 7 <sup>m</sup>                  | 13 <sup>h</sup> 29 <sup>m</sup>                 | W 8  |
| T 9  | 9 15 7   | 20 <sup>h</sup> 1 <sup>m</sup> 25 <sup>s</sup>  | 0 <sup>h</sup> 17 <sup>m</sup> 3 <sup>s</sup>   | 24 <sup>h</sup> 3 <sup>m</sup>                 | 6 <sup>h</sup> 55 <sup>m</sup>               | 5 <sup>h</sup> 16 <sup>m</sup>                | 1 <sup>h</sup> 23 <sup>m</sup>                | 14 <sup>h</sup> 45 <sup>m</sup> | 16 <sup>h</sup> 49 <sup>m</sup> | 29 <sup>h</sup> 49 <sup>m</sup> | 21 <sup>h</sup> 35 <sup>m</sup> | 4 <sup>h</sup> 7 <sup>m</sup>                 | 5 <sup>h</sup> 55 <sup>m</sup> | 24 <sup>h</sup> 14 <sup>m</sup>                 | 13 <sup>h</sup> 26 <sup>m</sup>                 | T 9  |
| F 10 | 9 19 4   | 21 <sup>h</sup> 2 <sup>m</sup> 04 <sup>s</sup>  | 12 <sup>h</sup> 48 <sup>m</sup>                 | 24 <sup>h</sup> 57 <sup>m</sup>                | 8 <sup>h</sup> 5 <sup>m</sup>                | 5 <sup>h</sup> 13 <sup>m</sup>                | 1 <sup>h</sup> 24 <sup>m</sup>                | 14 <sup>h</sup> 51 <sup>m</sup> | 16 <sup>h</sup> 46 <sup>m</sup> | 29 <sup>h</sup> 49 <sup>m</sup> | 21 <sup>h</sup> 37 <sup>m</sup> | 4 <sup>h</sup> 3 <sup>m</sup>                 | 5 <sup>h</sup> 52 <sup>m</sup> | 24 <sup>h</sup> 20 <sup>m</sup>                 | 13 <sup>h</sup> 23 <sup>m</sup>                 | F 10 |
| S 11 | 9 23 0   | 22 <sup>h</sup> 2 <sup>m</sup> 41 <sup>s</sup>  | 25 <sup>h</sup> 45 <sup>m</sup>                 | 25 <sup>h</sup> 54 <sup>m</sup>                | 9 <sup>h</sup> 15 <sup>m</sup>               | 5 <sup>h</sup> 10 <sup>m</sup>                | 1 <sup>h</sup> 25 <sup>m</sup>                | 14 <sup>h</sup> 56 <sup>m</sup> | 16 <sup>h</sup> 43 <sup>m</sup> | 29 <sup>h</sup> 48 <sup>m</sup> | 21 <sup>h</sup> 39 <sup>m</sup> | 4 <sup>h</sup> 1 <sup>m</sup>                 | 5 <sup>h</sup> 48 <sup>m</sup> | 24 <sup>h</sup> 27 <sup>m</sup>                 | 13 <sup>h</sup> 20 <sup>m</sup>                 | S 11 |
| S 12 | 9 26 57  | 23 <sup>h</sup> 3 <sup>m</sup> 17 <sup>s</sup>  | 8 <sup>h</sup> 53 <sup>m</sup>                  | 26 <sup>h</sup> 54 <sup>m</sup>                | 10 <sup>h</sup> 25 <sup>m</sup>              | 5 <sup>h</sup> 6 <sup>m</sup>                 | 1 <sup>h</sup> 26 <sup>m</sup>                | 15 <sup>h</sup> 2 <sup>m</sup>  | 16 <sup>h</sup> 41 <sup>m</sup> | 29 <sup>h</sup> 48 <sup>m</sup> | 21 <sup>h</sup> 41 <sup>m</sup> | 4 <sup>h</sup> 0 <sup>m</sup>                 | 5 <sup>h</sup> 45 <sup>m</sup> | 24 <sup>h</sup> 34 <sup>m</sup>                 | 13 <sup>h</sup> 17 <sup>m</sup>                 | S 12 |
| M13  | 9 30 54  | 24 <sup>h</sup> 3 <sup>m</sup> 52 <sup>s</sup>  | 22 <sup>h</sup> 13 <sup>m</sup>                 | 27 <sup>h</sup> 57 <sup>m</sup>                | 11 <sup>h</sup> 35 <sup>m</sup>              | 5 <sup>h</sup> 1 <sup>m</sup>                 | 1 <sup>h</sup> 26 <sup>m</sup>                | 15 <sup>h</sup> 8 <sup>m</sup>  | 16 <sup>h</sup> 38 <sup>m</sup> | 29 <sup>h</sup> 47 <sup>m</sup> | 21 <sup>h</sup> 42 <sup>m</sup> | 4 <sup>h</sup> 1 <sup>m</sup>                 | 5 <sup>h</sup> 42 <sup>m</sup> | 24 <sup>h</sup> 41 <sup>m</sup>                 | 13 <sup>h</sup> 14 <sup>m</sup>                 | M13  |
| T 14 | 9 34 50  | 25 <sup>h</sup> 4 <sup>m</sup> 26 <sup>s</sup>  | 5 <sup>h</sup> 11 <sup>m</sup> 46 <sup>s</sup>  | 29 <sup>h</sup> 2 <sup>m</sup>                 | 12 <sup>h</sup> 46 <sup>m</sup>              | 4 <sup>h</sup> 55 <sup>m</sup>                | 1 <sup>h</sup> 27 <sup>m</sup>                | 15 <sup>h</sup> 13 <sup>m</sup> | 16 <sup>h</sup> 36 <sup>m</sup> | 29 <sup>h</sup> 47 <sup>m</sup> | 21 <sup>h</sup> 44 <sup>m</sup> | 4 <sup>h</sup> 3 <sup>m</sup>                 | 5 <sup>h</sup> 39 <sup>m</sup> | 24 <sup>h</sup> 47 <sup>m</sup>                 | 13 <sup>h</sup> 11 <sup>m</sup>                 | T 14 |
| W15  | 9 38 47  | 26 <sup>h</sup> 4 <sup>m</sup> 58 <sup>s</sup>  | 19 <sup>h</sup> 34 <sup>m</sup>                 | 0 <sup>h</sup> 8 <sup>m</sup> 9 <sup>s</sup>   | 13 <sup>h</sup> 56 <sup>m</sup>              | 4 <sup>h</sup> 48 <sup>m</sup>                | 1 <sup>h</sup> 27 <sup>m</sup>                | 15 <sup>h</sup> 19 <sup>m</sup> | 16 <sup>h</sup> 33 <sup>m</sup> | 29 <sup>h</sup> 46 <sup>m</sup> | 21 <sup>h</sup> 46 <sup>m</sup> | 4 <sup>h</sup> 0 <sup>m</sup> 4 <sup>s</sup>  | 5 <sup>h</sup> 36 <sup>m</sup> | 24 <sup>h</sup> 54 <sup>m</sup>                 | 13 <sup>h</sup> 9 <sup>m</sup>                  | W15  |
| T 16 | 9 42 43  | 27 <sup>h</sup> 5 <sup>m</sup> 30 <sup>s</sup>  | 3 <sup>h</sup> 17 <sup>m</sup> 35 <sup>s</sup>  | 1 <sup>h</sup> 18 <sup>m</sup>                 | 15 <sup>h</sup> 7 <sup>m</sup>               | 4 <sup>h</sup> 41 <sup>m</sup>                | 1 <sup>h</sup> 27 <sup>m</sup>                | 15 <sup>h</sup> 25 <sup>m</sup> | 16 <sup>h</sup> 30 <sup>m</sup> | 29 <sup>h</sup> 46 <sup>m</sup> | 21 <sup>h</sup> 48 <sup>m</sup> | 4 <sup>h</sup> 4 <sup>m</sup>                 | 5 <sup>h</sup> 33 <sup>m</sup> | 25 <sup>h</sup> 1 <sup>m</sup>                  | 13 <sup>h</sup> 6 <sup>m</sup>                  | T 16 |
| F 17 | 9 46 40  | 28 <sup>h</sup> 6 <sup>m</sup> 00 <sup>s</sup>  | 17 <sup>h</sup> 50 <sup>m</sup>                 | 2 <sup>h</sup> 30 <sup>m</sup>                 | 16 <sup>h</sup> 17 <sup>m</sup>              | 4 <sup>h</sup> 33 <sup>m</sup>                | 1 <sup>h</sup> 26 <sup>m</sup>                | 15 <sup>h</sup> 31 <sup>m</sup> | 16 <sup>h</sup> 28 <sup>m</sup> | 29 <sup>h</sup> 45 <sup>m</sup> | 21 <sup>h</sup> 49 <sup>m</sup> | 4 <sup>h</sup> 3 <sup>m</sup>                 | 5 <sup>h</sup> 29 <sup>m</sup> | 25 <sup>h</sup> 7 <sup>m</sup>                  | 13 <sup>h</sup> 4 <sup>m</sup>                  | F 17 |
| S 18 | 9 50 36  | 29 <sup>h</sup> 6 <sup>m</sup> 29 <sup>s</sup>  | 2 <sup>h</sup> 31 <sup>m</sup> 6 <sup>s</sup>   | 3 <sup>h</sup> 43 <sup>m</sup>                 | 17 <sup>h</sup> 28 <sup>m</sup>              | 4 <sup>h</sup> 24 <sup>m</sup>                | 1 <sup>h</sup> 26 <sup>m</sup>                | 15 <sup>h</sup> 37 <sup>m</sup> | 16 <sup>h</sup> 25 <sup>m</sup> | 29 <sup>h</sup> 45 <sup>m</sup> | 21 <sup>h</sup> 51 <sup>m</sup> | 3 <sup>h</sup> 59 <sup>m</sup>                | 5 <sup>h</sup> 26 <sup>m</sup> | 25 <sup>h</sup> 14 <sup>m</sup>                 | 13 <sup>h</sup> 1 <sup>m</sup>                  | S 18 |
| S 19 | 9 54 33  | 0 <sup>h</sup> 17 <sup>m</sup> 6 <sup>s</sup>   | 16 <sup>h</sup> 49 <sup>m</sup>                 | 4 <sup>h</sup> 58 <sup>m</sup>                 | 18 <sup>h</sup> 39 <sup>m</sup>              | 4 <sup>h</sup> 14 <sup>m</sup>                | 1 <sup>h</sup> 25 <sup>m</sup>                | 15 <sup>h</sup> 43 <sup>m</sup> | 16 <sup>h</sup> 23 <sup>m</sup> | 29 <sup>h</sup> 44 <sup>m</sup> | 21 <sup>h</sup> 53 <sup>m</sup> | 3 <sup>h</sup> 55 <sup>m</sup>                | 5 <sup>h</sup> 23 <sup>m</sup> | 25 <sup>h</sup> 21 <sup>m</sup>                 | 12 <sup>h</sup> 59 <sup>m</sup>                 | S 19 |
| M20  | 9 58 29  | 1 <sup>h</sup> 7 <sup>m</sup> 22 <sup>s</sup>   | 1 <sup>h</sup> 24 <sup>m</sup> 52 <sup>s</sup>  | 6 <sup>h</sup> 14 <sup>m</sup>                 | 19 <sup>h</sup> 50 <sup>m</sup>              | 4 <sup>h</sup> 4 <sup>m</sup>                 | 1 <sup>h</sup> 25 <sup>m</sup>                | 15 <sup>h</sup> 49 <sup>m</sup> | 16 <sup>h</sup> 20 <sup>m</sup> | 29 <sup>h</sup> 44 <sup>m</sup> | 21 <sup>h</sup> 55 <sup>m</sup> | 3 <sup>h</sup> 50 <sup>m</sup>                | 5 <sup>h</sup> 20 <sup>m</sup> | 25 <sup>h</sup> 28 <sup>m</sup>                 | 12 <sup>h</sup> 57 <sup>m</sup>                 | M20  |
| T 21 | 10 2 26  | 2 <sup>h</sup> 7 <sup>m</sup> 47 <sup>s</sup>   | 15 <sup>h</sup> 55 <sup>m</sup>                 | 7 <sup>h</sup> 32 <sup>m</sup>                 | 21 <sup>h</sup> 1 <sup>m</sup>               | 3 <sup>h</sup> 53 <sup>m</sup>                | 1 <sup>h</sup> 24 <sup>m</sup>                | 15 <sup>h</sup> 55 <sup>m</sup> | 16 <sup>h</sup> 18 <sup>m</sup> | 29 <sup>h</sup> 43 <sup>m</sup> | 21 <sup>h</sup> 56 <sup>m</sup> | 3 <sup>h</sup> 45 <sup>m</sup>                | 5 <sup>h</sup> 17 <sup>m</sup> | 25 <sup>h</sup> 34 <sup>m</sup>                 | 12 <sup>h</sup> 54 <sup>m</sup>                 | T 21 |
| W22  | 10 6 23  | 3 <sup>h</sup> 8 <sup>m</sup> 10 <sup>s</sup>   | 0 <sup>h</sup> 17 <sup>m</sup> 14 <sup>s</sup>  | 8 <sup>h</sup> 52 <sup>m</sup>                 | 22 <sup>h</sup> 12 <sup>m</sup>              | 3 <sup>h</sup> 41 <sup>m</sup>                | 1 <sup>h</sup> 22 <sup>m</sup>                | 16 <sup>h</sup> 1 <sup>m</sup>  | 16 <sup>h</sup> 15 <sup>m</sup> | 29 <sup>h</sup> 42 <sup>m</sup> | 21 <sup>h</sup> 58 <sup>m</sup> | 3 <sup>h</sup> 41 <sup>m</sup>                | 5 <sup>h</sup> 13 <sup>m</sup> | 25 <sup>h</sup> 41 <sup>m</sup>                 | 12 <sup>h</sup> 52 <sup>m</sup>                 | W22  |
| T 23 | 10 10 19 | 4 <sup>h</sup> 8 <sup>m</sup> 31 <sup>s</sup>   | 14 <sup>h</sup> 17 <sup>m</sup>                 | 10 <sup>h</sup> 13 <sup>m</sup>                | 23 <sup>h</sup> 23 <sup>m</sup>              | 3 <sup>h</sup> 28 <sup>m</sup>                | 1 <sup>h</sup> 21 <sup>m</sup>                | 16 <sup>h</sup> 8 <sup>m</sup>  | 16 <sup>h</sup> 13 <sup>m</sup> | 29 <sup>h</sup> 41 <sup>m</sup> | 22 <sup>h</sup> 0 <sup>m</sup>  | 3 <sup>h</sup> 38 <sup>m</sup>                | 5 <sup>h</sup> 10 <sup>m</sup> | 25 <sup>h</sup> 48 <sup>m</sup>                 | 12 <sup>h</sup> 50 <sup>m</sup>                 | T 23 |
| F 24 | 10 14 16 | 5 <sup>h</sup> 8 <sup>m</sup> 50 <sup>s</sup>   | 27 <sup>h</sup> 59 <sup>m</sup>                 | 11 <sup>h</sup> 35 <sup>m</sup>                | 24 <sup>h</sup> 34 <sup>m</sup>              | 3 <sup>h</sup> 14 <sup>m</sup>                | 1 <sup>h</sup> 19 <sup>m</sup>                | 16 <sup>h</sup> 14 <sup>m</sup> | 16 <sup>h</sup> 10 <sup>m</sup> | 29 <sup>h</sup> 41 <sup>m</sup> | 22 <sup>h</sup> 1 <sup>m</sup>  | 3 <sup>h</sup> 0 <sup>m</sup> 37 <sup>s</sup> | 5 <sup>h</sup> 7 <sup>m</sup>  | 25 <sup>h</sup> 54 <sup>m</sup>                 | 12 <sup>h</sup> 48 <sup>m</sup>                 | F 24 |
| S 25 | 10 18 12 | 6 <sup>h</sup> 9 <sup>m</sup> 07 <sup>s</sup>   | 11 <sup>h</sup> 17 <sup>m</sup> 18 <sup>s</sup> | 12 <sup>h</sup> 59 <sup>m</sup>                | 25 <sup>h</sup> 45 <sup>m</sup>              | 3 <sup>h</sup> 0 <sup>m</sup>                 | 1 <sup>h</sup> 18 <sup>m</sup>                | 16 <sup>h</sup> 20 <sup>m</sup> | 16 <sup>h</sup> 8 <sup>m</sup>  | 29 <sup>h</sup> 40 <sup>m</sup> | 22 <sup>h</sup> 3 <sup>m</sup>  | 3 <sup>h</sup> 37 <sup>m</sup>                | 5 <sup>h</sup> 4 <sup>m</sup>  | 26 <sup>h</sup> 1 <sup>m</sup>                  | 12 <sup>h</sup> 46 <sup>m</sup>                 | S 25 |
| S 26 | 10 22 9  | 7 <sup>h</sup> 9 <sup>m</sup> 23 <sup>s</sup>   | 24 <sup>h</sup> 14 <sup>m</sup>                 | 14 <sup>h</sup> 24 <sup>m</sup>                | 26 <sup>h</sup> 56 <sup>m</sup>              | 2 <sup>h</sup> 45 <sup>m</sup>                | 1 <sup>h</sup> 16 <sup>m</sup>                | 16 <sup>h</sup> 27 <sup>m</sup> | 16 <sup>h</sup> 5 <sup>m</sup>  | 29 <sup>h</sup> 39 <sup>m</sup> | 22 <sup>h</sup> 5 <sup>m</sup>  | 3 <sup>h</sup> 38 <sup>m</sup>                | 5 <sup>h</sup> 1 <sup>m</sup>  | 26 <sup>h</sup> 8 <sup>m</sup>                  | 12 <sup>h</sup> 45 <sup>m</sup>                 | S 26 |
| M27  | 10 26 5  | 8 <sup>h</sup> 9 <sup>m</sup> 36 <sup>s</sup>   | 6 <sup>h</sup> 15 <sup>m</sup> 50 <sup>s</sup>  | 15 <sup>h</sup> 50 <sup>m</sup>                | 28 <sup>h</sup> 7 <sup>m</sup>               | 2 <sup>h</sup> 29 <sup>m</sup>                | 1 <sup>h</sup> 14 <sup>m</sup>                | 16 <sup>h</sup> 33 <sup>m</sup> | 16 <sup>h</sup> 3 <sup>m</sup>  | 29 <sup>h</sup> 38 <sup>m</sup> | 22 <sup>h</sup> 7 <sup>m</sup>  | 3 <sup>h</sup> 39 <sup>m</sup>                | 4 <sup>h</sup> 58 <sup>m</sup> | 26 <sup>h</sup> 15 <sup>m</sup>                 | 12 <sup>h</sup> 43 <sup>m</sup>                 | M27  |
| T 28 | 10 30 2  | 9 <sup>h</sup> 9 <sup>m</sup> 48 <sup>s</sup>   | 19 <sup>h</sup> 8 <sup>m</sup>                  | 17 <sup>h</sup> 17 <sup>m</sup>                | 29 <sup>h</sup> 19 <sup>m</sup>              | 2 <sup>h</sup> 13 <sup>m</sup>                | 1 <sup>h</sup> 11 <sup>m</sup>                | 16 <sup>h</sup> 40 <sup>m</sup> | 16 <sup>h</sup> 1 <sup>m</sup>  | 29 <sup>h</sup> 37 <sup>m</sup> | 22 <sup>h</sup> 8 <sup>m</sup>  | 3 <sup>h</sup> 41 <sup>m</sup>                | 4 <sup>h</sup> 54 <sup>m</sup> | 26 <sup>h</sup> 21 <sup>m</sup>                 | 12 <sup>h</sup> 41 <sup>m</sup>                 | T 28 |
| W29  | 10 33 58 | 10 <sup>h</sup> 17 <sup>m</sup> 57 <sup>s</sup> | 1 <sup>h</sup> 11 <sup>m</sup> 13 <sup>s</sup>  | 18 <sup>h</sup> 44 <sup>m</sup> 6 <sup>s</sup> | 0 <sup>h</sup> 30 <sup>m</sup>               | 1 <sup>h</sup> 5 <sup>m</sup> 56 <sup>s</sup> | 1 <sup>h</sup> 11 <sup>m</sup> 9 <sup>s</sup> | 16 <sup>h</sup> 46 <sup>m</sup> | 15 <sup>h</sup> 58 <sup>m</sup> | 29 <sup>h</sup> 36 <sup>m</sup> | 22 <sup>h</sup> 10 <sup>m</sup> | 3 <sup>h</sup> 42 <sup>m</sup>                | 4 <sup>h</sup> 51 <sup>m</sup> | 26 <sup>h</sup> 12 <sup>m</sup> 40 <sup>s</sup> | 12 <sup>h</sup> 39 <sup>m</sup> 40 <sup>s</sup> | W29  |

| Day  | ☉     | ☽     |      | ♊     |      | ♋     |      | ♌    |      | ♍     |      | ♎    |      | ♏     |      | ♐    |      | ♑     |      | ♒    | ♓    | ♈     | ♉     |      |
|------|-------|-------|------|-------|------|-------|------|------|------|-------|------|------|------|-------|------|------|------|-------|------|------|------|-------|-------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl | decl | ♈     | decl  | lat  |
| W 1  | 17s14 | 14n55 | 3s49 | 19s42 | 2n23 | 21s 8 | 2n18 | 1n 0 | 3n20 | 10s37 | 1n21 | 3n21 | 2s23 | 16n24 | 0n44 | 9s46 | 1n46 | 23s27 | 9s35 | 2s 1 | 2s31 | 18n17 | 15n18 | 7s29 |
| T 2  | 16 57 | 16 49 | 4 26 | 19 51 | 2 12 | 21 13 | 2 15 | 1 0  | 3 21 | 10 37 | 1 21 | 3 23 | 2 23 | 16 25 | 0 44 | 9 46 | 1 46 | 23 26 | 9 35 | 2 0  | 2 30 | 18 17 | 15 18 | 7 29 |
| F 3  | 16 39 | 17 59 | 4 52 | 19 59 | 2 0  | 21 16 | 2 12 | 1 0  | 3 22 | 10 38 | 1 21 | 3 25 | 2 23 | 16 26 | 0 44 | 9 46 | 1 46 | 23 26 | 9 35 | 1 58 | 2 29 | 18 18 | 15 19 | 7 28 |
| S 4  | 16 22 | 18 23 | 5 5  | 20 6  | 1 49 | 21 19 | 2 8  | 1 1  | 3 24 | 10 39 | 1 22 | 3 28 | 2 23 | 16 27 | 0 44 | 9 46 | 1 46 | 23 25 | 9 35 | 1 55 | 2 27 | 18 18 | 15 20 | 7 28 |
| S 5  | 16 4  | 17 57 | 5 5  | 20 13 | 1 37 | 21 22 | 2 5  | 1 1  | 3 25 | 10 39 | 1 22 | 3 30 | 2 22 | 16 28 | 0 44 | 9 46 | 1 46 | 23 24 | 9 35 | 1 52 | 2 26 | 18 18 | 15 20 | 7 28 |
| M 6  | 15 46 | 16 44 | 4 51 | 20 18 | 1 26 | 21 24 | 2 1  | 1 2  | 3 26 | 10 39 | 1 22 | 3 32 | 2 22 | 16 28 | 0 44 | 9 46 | 1 46 | 23 24 | 9 35 | 1 48 | 2 25 | 18 18 | 15 21 | 7 27 |
| T 7  | 15 27 | 14 44 | 4 24 | 20 22 | 1 15 | 21 26 | 1 57 | 1 4  | 3 27 | 10 40 | 1 22 | 3 34 | 2 22 | 16 29 | 0 44 | 9 46 | 1 46 | 23 23 | 9 35 | 1 44 | 2 24 | 18 18 | 15 22 | 7 27 |
| W 8  | 15 8  | 12 3  | 3 44 | 20 25 | 1 4  | 21 27 | 1 54 | 1 5  | 3 29 | 10 40 | 1 23 | 3 36 | 2 22 | 16 30 | 0 44 | 9 46 | 1 46 | 23 23 | 9 35 | 1 41 | 2 22 | 18 18 | 15 22 | 7 27 |
| T 9  | 14 49 | 8 46  | 2 53 | 20 27 | 0 53 | 21 27 | 1 50 | 1 7  | 3 30 | 10 40 | 1 23 | 3 39 | 2 22 | 16 31 | 0 44 | 9 45 | 1 46 | 23 22 | 9 35 | 1 38 | 2 21 | 18 18 | 15 23 | 7 26 |
| F 10 | 14 30 | 5 2   | 1 52 | 20 29 | 0 42 | 21 27 | 1 47 | 1 9  | 3 31 | 10 41 | 1 23 | 3 41 | 2 21 | 16 32 | 0 44 | 9 45 | 1 47 | 23 22 | 9 35 | 1 37 | 2 20 | 18 18 | 15 24 | 7 26 |
| S 11 | 14 11 | 1 1   | 0 45 | 20 28 | 0 31 | 21 26 | 1 43 | 1 12 | 3 32 | 10 41 | 1 23 | 3 43 | 2 21 | 16 32 | 0 44 | 9 45 | 1 47 | 23 21 | 9 35 | 1 36 | 2 19 | 18 18 | 15 24 | 7 25 |
| S 12 | 13 51 | 3s 7  | 0n26 | 20 27 | 0 21 | 21 24 | 1 39 | 1 14 | 3 33 | 10 41 | 1 24 | 3 46 | 2 21 | 16 33 | 0 44 | 9 45 | 1 47 | 23 21 | 9 35 | 1 36 | 2 17 | 18 18 | 15 25 | 7 25 |
| M13  | 13 31 | 7 9   | 1 37 | 20 25 | 0 11 | 21 22 | 1 35 | 1 17 | 3 34 | 10 41 | 1 24 | 3 48 | 2 21 | 16 34 | 0 44 | 9 45 | 1 47 | 23 20 | 9 35 | 1 36 | 2 16 | 18 19 | 15 26 | 7 25 |
| T14  | 13 11 | 10 53 | 2 44 | 20 21 | 0 1  | 21 20 | 1 32 | 1 21 | 3 36 | 10 41 | 1 24 | 3 50 | 2 21 | 16 35 | 0 44 | 9 44 | 1 47 | 23 20 | 9 35 | 1 37 | 2 15 | 18 19 | 15 27 | 7 24 |
| W15  | 12 50 | 14 4  | 3 42 | 20 16 | 0s 8 | 21 17 | 1 28 | 1 24 | 3 37 | 10 40 | 1 24 | 3 53 | 2 21 | 16 36 | 0 44 | 9 44 | 1 47 | 23 19 | 9 35 | 1 37 | 2 13 | 18 19 | 15 27 | 7 24 |
| T 16 | 12 30 | 16 30 | 4 29 | 20 10 | 0 17 | 21 13 | 1 24 | 1 28 | 3 38 | 10 40 | 1 24 | 3 55 | 2 20 | 16 36 | 0 44 | 9 44 | 1 47 | 23 18 | 9 36 | 1 37 | 2 12 | 18 19 | 15 28 | 7 23 |
| F 17 | 12 9  | 17 57 | 4 59 | 20 3  | 0 26 | 21 9  | 1 20 | 1 32 | 3 39 | 10 40 | 1 25 | 3 57 | 2 20 | 16 37 | 0 44 | 9 44 | 1 47 | 23 18 | 9 36 | 1 37 | 2 11 | 18 19 | 15 29 | 7 23 |
| S 18 | 11 48 | 18 16 | 5 11 | 19 54 | 0 34 | 21 4  | 1 16 | 1 36 | 3 40 | 10 39 | 1 25 | 4 0  | 2 20 | 16 38 | 0 44 | 9 44 | 1 47 | 23 17 | 9 36 | 1 35 | 2 10 | 18 19 | 15 29 | 7 22 |
| S 19 | 11 27 | 17 23 | 5 4  | 19 44 | 0 43 | 20 58 | 1 13 | 1 41 | 3 40 | 10 39 | 1 25 | 4 2  | 2 20 | 16 39 | 0 44 | 9 43 | 1 47 | 23 17 | 9 36 | 1 33 | 2 8  | 18 19 | 15 30 | 7 22 |
| M20  | 11 5  | 15 22 | 4 36 | 19 33 | 0 51 | 20 52 | 1 9  | 1 46 | 3 41 | 10 39 | 1 25 | 4 5  | 2 20 | 16 39 | 0 44 | 9 43 | 1 47 | 23 16 | 9 36 | 1 31 | 2 7  | 18 19 | 15 31 | 7 21 |
| T 21 | 10 44 | 12 24 | 3 51 | 19 20 | 0 58 | 20 45 | 1 5  | 1 51 | 3 42 | 10 38 | 1 25 | 4 7  | 2 19 | 16 40 | 0 44 | 9 43 | 1 47 | 23 16 | 9 36 | 1 29 | 2 6  | 18 19 | 15 31 | 7 21 |
| W22  | 10 22 | 8 43  | 2 52 | 19 7  | 1 5  | 20 38 | 1 1  | 1 57 | 3 43 | 10 37 | 1 26 | 4 10 | 2 19 | 16 41 | 0 44 | 9 42 | 1 47 | 23 15 | 9 36 | 1 28 | 2 5  | 18 19 | 15 32 | 7 20 |
| T 23 | 10 0  | 4 36  | 1 44 | 18 52 | 1 12 | 20 30 | 0 57 | 2 2  | 3 43 | 10 37 | 1 26 | 4 13 | 2 19 | 16 42 | 0 44 | 9 42 | 1 47 | 23 15 | 9 36 | 1 27 | 2 3  | 18 19 | 15 33 | 7 20 |
| F 24 | 9 38  | 0 20  | 0 31 | 18 35 | 1 19 | 20 21 | 0 53 | 2 8  | 3 44 | 10 36 | 1 26 | 4 15 | 2 19 | 16 42 | 0 44 | 9 42 | 1 47 | 23 15 | 9 36 | 1 26 | 2 2  | 18 19 | 15 34 | 7 19 |
| S 25 | 9 16  | 3n50  | 0s42 | 18 18 | 1 25 | 20 12 | 0 50 | 2 14 | 3 45 | 10 35 | 1 26 | 4 18 | 2 19 | 16 43 | 0 44 | 9 41 | 1 47 | 23 14 | 9 36 | 1 26 | 2 1  | 18 19 | 15 34 | 7 19 |
| S 26 | 8 54  | 7 41  | 1 51 | 17 59 | 1 31 | 20 3  | 0 46 | 2 21 | 3 45 | 10 34 | 1 27 | 4 20 | 2 19 | 16 44 | 0 44 | 9 41 | 1 47 | 23 14 | 9 36 | 1 27 | 2 0  | 18 20 | 15 35 | 7 18 |
| M27  | 8 31  | 11 6  | 2 52 | 17 38 | 1 36 | 19 52 | 0 42 | 2 27 | 3 46 | 10 33 | 1 27 | 4 23 | 2 19 | 16 44 | 0 44 | 9 41 | 1 47 | 23 13 | 9 37 | 1 27 | 1 58 | 18 20 | 15 36 | 7 18 |
| T 28 | 8 9   | 13 55 | 3 45 | 17 17 | 1 42 | 19 40 | 0 38 | 2 34 | 3 46 | 10 32 | 1 27 | 4 26 | 2 18 | 16 45 | 0 44 | 9 40 | 1 48 | 23 13 | 9 37 | 1 28 | 1 57 | 18 20 | 15 36 | 7 17 |
| W29  | 7s46  | 16n 5 | 4s26 | 16s54 | 1s46 | 19s30 | 0n34 | 2n41 | 3n46 | 10s31 | 1n27 | 4n28 | 2s18 | 16n46 | 0n44 | 9s40 | 1n48 | 23s12 | 9s37 | 1s28 | 1s56 | 18n20 | 15n37 | 7s16 |

# ASTRODIENST EPHEMERIS for the year 1792

## geocentric

MARCH 1792

00:00 UT

| Day  | Sid.t    | ☉         | ☽     | ♂      | ♀     | ♂      | ♂      | ♂      | ♂      | ♂      | ♂      | ♂     | ♂    | ♂      | ♂      | Day  |
|------|----------|-----------|-------|--------|-------|--------|--------|--------|--------|--------|--------|-------|------|--------|--------|------|
| T 1  | 10 37 55 | 11♈10'05  | 13♏9  | 20♏16  | 1♏42  | 1°R38  | 1°R 6  | 16°V53 | 15°R56 | 29°R35 | 22°♏12 | 3°R43 | 4♏48 | 26♏35  | 12°R39 | T 1  |
| F 2  | 10 41 51 | 12°10'10  | 25° 1 | 21°47  | 2°53  | 1♏20   | 1♏ 3   | 17° 0  | 15°Ω54 | 29°♏35 | 22°13  | 3♏42  | 4°45 | 26°42  | 12°♏37 | F 2  |
| S 3  | 10 45 48 | 13°10'13  | 6♏55  | 23°19  | 4° 5  | 1° 1   | 1° 0   | 17° 7  | 15°52  | 29°34  | 22°15  | 3°40  | 4°42 | 26°48  | 12°36  | S 3  |
| S 4  | 10 49 45 | 14°10'14  | 18°53 | 24°52  | 5°16  | 0°42   | 0°57   | 17°13  | 15°49  | 29°33  | 22°17  | 3°38  | 4°39 | 26°55  | 12°35  | S 4  |
| M 5  | 10 53 41 | 15°10'13  | 1♏ 1  | 26°26  | 6°28  | 0°22   | 0°54   | 17°20  | 15°47  | 29°32  | 22°18  | 3°35  | 4°35 | 27° 2  | 12°34  | M 5  |
| T 6  | 10 57 38 | 16°10'10  | 13°21 | 28° 2  | 7°40  | 0° 2   | 0°50   | 17°27  | 15°45  | 29°30  | 22°20  | 3°32  | 4°32 | 27° 8  | 12°33  | T 6  |
| W 7  | 11 1 34  | 17°10'05  | 25°55 | 29°38  | 8°51  | 29°♏41 | 0°46   | 17°34  | 15°43  | 29°29  | 22°21  | 3°30  | 4°29 | 27°15  | 12°32  | W 7  |
| T 8  | 11 5 31  | 18° 9'57  | 8♏44  | 1♈16   | 10° 3 | 29°19  | 0°42   | 17°41  | 15°41  | 29°28  | 22°23  | 3°28  | 4°26 | 27°22  | 12°31  | T 8  |
| F 9  | 11 9 27  | 19° 9'48  | 21°49 | 2°55   | 11°15 | 28°58  | 0°38   | 17°48  | 15°39  | 29°27  | 22°25  | 3°27  | 4°23 | 27°29  | 12°31  | F 9  |
| S 10 | 11 13 24 | 20° 9'37  | 5♏ 9  | 4°35   | 12°27 | 28°36  | 0°34   | 17°55  | 15°37  | 29°26  | 22°26  | 3°D26 | 4°19 | 27°35  | 12°30  | S 10 |
| S 11 | 11 17 20 | 21° 9'23  | 18°42 | 6°17   | 13°39 | 28°13  | 0°30   | 18° 2  | 15°35  | 29°25  | 22°28  | 3°27  | 4°16 | 27°42  | 12°30  | S 11 |
| M12  | 11 21 17 | 22° 9'08  | 2♏27  | 7°59   | 14°51 | 27°50  | 0°25   | 18° 9  | 15°33  | 29°24  | 22°29  | 3°28  | 4°13 | 27°49  | 12°29  | M12  |
| T 13 | 11 25 14 | 23° 8'52  | 16°23 | 9°43   | 16° 3 | 27°28  | 0°20   | 18°16  | 15°31  | 29°22  | 22°31  | 3°28  | 4°10 | 27°55  | 12°29  | T 13 |
| W14  | 11 29 10 | 24° 8'33  | 0♏26  | 11°28  | 17°15 | 27° 4  | 0°16   | 18°23  | 15°29  | 29°21  | 22°32  | 3°29  | 4° 7 | 28° 2  | 12°29  | W14  |
| T 15 | 11 33 7  | 25° 8'13  | 14°34 | 13°14  | 18°27 | 26°41  | 0°11   | 18°30  | 15°27  | 29°20  | 22°34  | 3°30  | 4° 4 | 28° 9  | 12°D29 | T 15 |
| F 16 | 11 37 3  | 26° 7'51  | 28°46 | 15° 1  | 19°39 | 26°18  | 0° 5   | 18°38  | 15°25  | 29°19  | 22°36  | 3°R30 | 4° 0 | 28°16  | 12°29  | F 16 |
| S 17 | 11 41 0  | 27° 7'27  | 13♏ 0 | 16°50  | 20°51 | 25°54  | 0° 0   | 18°45  | 15°23  | 29°17  | 22°37  | 3°30  | 3°57 | 28°22  | 12°29  | S 17 |
| S 18 | 11 44 56 | 28° 7'02  | 27°11 | 18°40  | 22° 3 | 25°31  | 29°♏55 | 18°52  | 15°22  | 29°16  | 22°39  | 3°29  | 3°54 | 28°29  | 12°29  | S 18 |
| M19  | 11 48 53 | 29° 6'35  | 11♏19 | 20°31  | 23°15 | 25° 7  | 29°49  | 19° 0  | 15°20  | 29°15  | 22°40  | 3°29  | 3°51 | 28°36  | 12°29  | M19  |
| T 20 | 11 52 49 | 0°V 6'06  | 25°20 | 22°23  | 24°28 | 24°44  | 29°43  | 19° 7  | 15°18  | 29°13  | 22°41  | 3°28  | 3°48 | 28°43  | 12°30  | T 20 |
| W21  | 11 56 46 | 1° 5'35   | 9♏10  | 24°17  | 25°40 | 24°20  | 29°38  | 19°14  | 15°17  | 29°12  | 22°43  | 3°28  | 3°45 | 28°49  | 12°30  | W21  |
| T 22 | 12 0 43  | 2° 5'02   | 22°48 | 26°12  | 26°52 | 23°57  | 29°32  | 19°22  | 15°15  | 29°10  | 22°44  | 3°28  | 3°41 | 28°56  | 12°31  | T 22 |
| F 23 | 12 4 39  | 3° 4'28   | 6°V10 | 28° 8  | 28° 4 | 23°34  | 29°25  | 19°29  | 15°14  | 29° 9  | 22°46  | 3°28  | 3°38 | 29° 3  | 12°31  | F 23 |
| S 24 | 12 8 36  | 4° 3'51   | 19°16 | 0°V 6  | 29°17 | 23°12  | 29°19  | 19°36  | 15°12  | 29° 8  | 22°47  | 3°28  | 3°35 | 29° 9  | 12°32  | S 24 |
| S 25 | 12 12 32 | 5° 3'12   | 2♏ 5  | 2° 4   | 0♏29  | 22°49  | 29°13  | 19°44  | 15°11  | 29° 6  | 22°48  | 3°28  | 3°32 | 29°16  | 12°33  | S 25 |
| M26  | 12 16 29 | 6° 2'30   | 14°37 | 4° 4   | 1°42  | 22°27  | 29° 6  | 19°51  | 15° 9  | 29° 5  | 22°50  | 3°27  | 3°29 | 29°23  | 12°34  | M26  |
| T 27 | 12 20 25 | 7° 1'47   | 26°55 | 6° 5   | 2°54  | 22° 6  | 29° 0  | 19°59  | 15° 8  | 29° 3  | 22°51  | 3°27  | 3°25 | 29°30  | 12°35  | T 27 |
| W28  | 12 24 22 | 8° 1'02   | 9♏ 1  | 8° 7   | 4° 6  | 21°44  | 28°53  | 20° 6  | 15° 7  | 29° 2  | 22°53  | 3°27  | 3°22 | 29°36  | 12°36  | W28  |
| T 29 | 12 28 18 | 9° 0'14   | 20°59 | 10° 9  | 5°19  | 21°23  | 28°46  | 20°14  | 15° 5  | 29° 0  | 22°54  | 3°26  | 3°19 | 29°43  | 12°38  | T 29 |
| F 30 | 12 32 15 | 9°59'24   | 2♏52  | 12°13  | 6°31  | 21° 3  | 28°40  | 20°21  | 15° 4  | 28°59  | 22°55  | 3°26  | 3°16 | 29°50  | 12°39  | F 30 |
| S 31 | 12 36 11 | 10°V58'31 | 14♏46 | 14°V17 | 7♏44  | 20°♏43 | 28°♏33 | 20°V29 | 15°Ω 3 | 28°♏57 | 22°♏56 | 3°D26 | 3♏13 | 29°V56 | 12°♏40 | 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 |
| T 1  | 7s23 | 17n31 | 4s55 | 16s30 | 1s51 | 19s18 | 0n31 | 2n49 | 3n46 | 10s30 | 1n27 | 4n31 | 2s18 | 16n47 | 0n44 | 9s40 | 1n48 | 23s12 | 9s37 | 1s29 | 1s55 | 18n20 | 15n38 | 7s16 |     |      |     |
| F 2  | 7 0  | 18 11 | 5 11 | 16 4  | 1 55 | 19 6  | 0 27 | 2 56 | 3 47 | 10 29 | 1 28 | 4 34 | 2 18 | 16 47 | 0 44 | 9 39 | 1 48 | 23 11 | 9 37 | 1 28 | 1 53 | 18 20 | 15 38 | 7 15 |     |      |     |
| S 3  | 6 37 | 18 3  | 5 14 | 15 38 | 1 59 | 18 53 | 0 23 | 3 3  | 3 47 | 10 28 | 1 28 | 4 36 | 2 18 | 16 48 | 0 44 | 9 39 | 1 48 | 23 11 | 9 37 | 1 28 | 1 52 | 18 20 | 15 39 | 7 15 |     |      |     |
| S 4  | 6 14 | 17 7  | 5 4  | 15 10 | 2 2  | 18 39 | 0 20 | 3 11 | 3 47 | 10 27 | 1 28 | 4 39 | 2 18 | 16 49 | 0 44 | 9 38 | 1 48 | 23 11 | 9 37 | 1 27 | 1 51 | 18 20 | 15 40 | 7 14 |     |      |     |
| M 5  | 5 51 | 15 24 | 4 40 | 14 40 | 2 5  | 18 25 | 0 16 | 3 19 | 3 47 | 10 25 | 1 28 | 4 42 | 2 18 | 16 49 | 0 44 | 9 38 | 1 48 | 23 10 | 9 38 | 1 26 | 1 50 | 18 20 | 15 40 | 7 14 |     |      |     |
| T 6  | 5 28 | 12 57 | 4 2  | 14 10 | 2 7  | 18 10 | 0 12 | 3 27 | 3 46 | 10 24 | 1 28 | 4 44 | 2 18 | 16 50 | 0 44 | 9 38 | 1 48 | 23 10 | 9 38 | 1 24 | 1 48 | 18 20 | 15 41 | 7 13 |     |      |     |
| W 7  | 5 4  | 9 52  | 3 13 | 13 38 | 2 9  | 17 55 | 0 9  | 3 35 | 3 46 | 10 22 | 1 29 | 4 47 | 2 17 | 16 50 | 0 44 | 9 37 | 1 48 | 23 9  | 9 38 | 1 23 | 1 47 | 18 20 | 15 42 | 7 12 |     |      |     |
| T 8  | 4 41 | 6 16  | 2 12 | 13 4  | 2 11 | 17 40 | 0 5  | 3 43 | 3 46 | 10 21 | 1 29 | 4 50 | 2 17 | 16 51 | 0 44 | 9 37 | 1 48 | 23 9  | 9 38 | 1 23 | 1 46 | 18 20 | 15 42 | 7 12 |     |      |     |
| F 9  | 4 18 | 2 16  | 1 4  | 12 30 | 2 12 | 17 23 | 0 2  | 3 52 | 3 45 | 10 19 | 1 29 | 4 53 | 2 17 | 16 52 | 0 44 | 9 36 | 1 48 | 23 9  | 9 38 | 1 22 | 1 44 | 18 20 | 15 43 | 7 11 |     |      |     |
| S 10 | 3 54 | 1s54  | 0n 9 | 11 54 | 2 13 | 17 7  | 0s 2 | 4 0  | 3 45 | 10 18 | 1 29 | 4 55 | 2 17 | 16 52 | 0 44 | 9 36 | 1 48 | 23 8  | 9 38 | 1 22 | 1 43 | 18 20 | 15 44 | 7 11 |     |      |     |
| S 11 | 3 31 | 6 3   | 1 23 | 11 17 | 2 13 | 16 50 | 0 5  | 4 8  | 3 44 | 10 16 | 1 29 | 4 58 | 2 17 | 16 53 | 0 44 | 9 35 | 1 48 | 23 8  | 9 39 | 1 22 | 1 42 | 18 20 | 15 44 | 7 10 |     |      |     |
| M12  | 3 7  | 9 56  | 2 34 | 10 39 | 2 13 | 16 32 | 0 9  | 4 17 | 3 43 | 10 14 | 1 29 | 5 1  | 2 17 | 16 53 | 0 44 | 9 35 | 1 48 | 23 7  | 9 39 | 1 23 | 1 41 | 18 20 | 15 45 | 7 9  |     |      |     |
| T 13 | 2 43 | 13 18 | 3 36 | 9 59  | 2 13 | 16 14 | 0 12 | 4 25 | 3 43 | 10 12 | 1 30 | 5 4  | 2 17 | 16 54 | 0 44 | 9 35 | 1 48 | 23 7  | 9 39 | 1 23 | 1 39 | 18 20 | 15 46 | 7 9  |     |      |     |
| W14  | 2 20 | 15 56 | 4 26 | 9 18  | 2 12 | 15 55 | 0 15 | 4 33 | 3 42 | 10 10 | 1 30 | 5 7  | 2 17 | 16 54 | 0 44 | 9 34 | 1 48 | 23 7  | 9 39 | 1 23 | 1 38 | 18 20 | 15 46 | 7 8  |     |      |     |
| T 15 | 1 56 | 17 36 | 5 0  | 8 36  | 2 10 | 15 36 | 0 18 | 4 42 | 3 41 | 10 9  | 1 30 | 5 9  | 2 17 | 16 55 | 0 44 | 9 34 | 1 48 | 23 6  | 9 39 | 1 23 | 1 37 | 18 20 | 15 47 | 7 8  |     |      |     |
| F 16 | 1 32 | 18 12 | 5 16 | 7 53  | 2 8  | 15 17 | 0 22 | 4 50 | 3 40 | 10 7  | 1 30 | 5 12 | 2 16 | 16 55 | 0 44 | 9 33 | 1 48 | 23 6  | 9 39 | 1 24 | 1 36 | 18 20 | 15 48 | 7 7  |     |      |     |
| S 17 | 1 9  | 17 39 | 5 13 | 7 8   | 2 6  | 14 57 | 0 25 | 4 58 | 3 39 | 10 5  | 1 30 | 5 15 | 2 16 | 16 56 | 0 44 | 9 33 | 1 48 | 23 6  | 9 40 | 1 23 | 1 34 | 18 20 | 15 48 | 7 6  |     |      |     |
| S 18 | 0 45 | 16 0  | 4 50 | 6 23  | 2 3  | 14 37 | 0 28 | 5 6  | 3 37 | 10 3  | 1 30 | 5 18 | 2 16 | 16 56 | 0 44 | 9 32 | 1 48 | 23 5  | 9 40 | 1 23 | 1 33 | 18 20 | 15 49 | 7 6  |     |      |     |
| M19  | 0 21 | 13 23 | 4 11 | 5 36  | 2 0  | 14 16 | 0 31 | 5 15 | 3 36 | 10 1  | 1 30 | 5 21 | 2 16 | 16 57 | 0 44 | 9 32 | 1 48 | 23 5  | 9 40 | 1 23 | 1 32 | 18 20 | 15 49 | 7 5  |     |      |     |
| T 20 | 0n 2 | 10 1  | 3 16 | 4 48  | 1 56 | 13 55 | 0 34 | 5 23 | 3 34 | 9 58  | 1 31 | 5 23 | 2 16 | 16 57 | 0 44 | 9 31 | 1 48 | 23 5  | 9 40 | 1 23 | 1 31 | 18 20 | 15 50 | 7 4  |     |      |     |
| W21  | 0 26 | 6 7   | 2 11 | 3 58  | 1 51 | 13 33 | 0 37 | 5 30 | 3 33 | 9 56  | 1 31 | 5 26 | 2 16 | 16 58 | 0 44 | 9 31 | 1 48 | 23 4  | 9 40 | 1 23 | 1 29 | 18 20 | 15 51 | 7 4  |     |      |     |
| T 22 | 0 50 | 1 58  | 0 59 | 3 8   | 1 46 | 13 12 | 0 40 | 5 38 | 3 31 | 9 54  | 1 31 | 5 29 | 2 16 | 16 58 | 0 44 | 9 30 | 1 48 | 23 4  | 9 41 | 1 23 | 1 28 | 18 20 | 15 51 | 7 3  |     |      |     |
| F 23 | 1 13 | 2n13  | 0s15 | 2 17  | 1 41 | 12 49 | 0 43 | 5 46 | 3 30 | 9 52  | 1 31 | 5 32 | 2 16 | 16 59 | 0 44 | 9 29 | 1 49 | 23 4  | 9 41 | 1 23 | 1 27 | 18 20 | 15 52 | 7 3  |     |      |     |
| S 24 | 1 37 | 6 13  | 1 27 | 1 25  | 1 35 | 12 27 | 0 45 | 5 53 | 3 28 | 9 49  | 1 31 | 5 35 | 2 16 | 16 59 | 0 43 | 9 29 | 1 49 | 23 4  | 9 41 | 1 23 | 1 26 | 18 20 | 15 52 | 7 2  |     |      |     |
| S 25 | 2 1  | 9 50  | 2 32 | 0 31  | 1 28 | 12 4  | 0 48 | 6 0  | 3 26 | 9 47  | 1 31 | 5 38 | 2 16 | 17 0  | 0 43 | 9 28 | 1 49 | 23 3  | 9 41 | 1 23 | 1 24 | 18 20 | 15 53 | 7 1  |     |      |     |
| M26  | 2 24 | 12 55 | 3 29 | 0n23  | 1 21 | 11 40 | 0 51 | 6 7  | 3 24 | 9 45  | 1 31 | 5 41 | 2 16 | 17 0  | 0 43 | 9 28 | 1 49 | 23 3  | 9 41 | 1 23 | 1 23 | 18 20 | 15 53 | 7 1  |     |      |     |
| T 27 | 2 48 | 15 21 | 4 15 | 1 18  | 1 13 | 11 17 | 0 53 | 6 14 | 3 22 | 9 42  | 1 31 | 5 43 | 2 16 | 17 0  | 0 43 | 9 27 | 1 49 | 23 3  | 9 42 | 1 22 | 1 22 | 18 20 | 15 54 | 7 0  |     |      |     |
| W28  | 3 11 | 17 4  | 4 49 | 2 13  | 1 5  | 10 53 | 0 56 | 6 21 | 3 20 | 9 40  | 1 31 | 5 46 | 2 16 | 17 1  | 0 43 | 9 27 | 1 49 | 23 3  | 9 42 | 1 22 | 1 20 | 18 20 | 15 54 | 6 59 |     |      |     |
| T 29 | 3 34 | 18 1  | 5 10 | 3 9   | 0 57 | 10 29 | 0 58 | 6 27 | 3 18 | 9 37  | 1 31 | 5 49 | 2 16 | 17 1  | 0 43 | 9 26 | 1 49 | 23 2  | 9 42 | 1 22 | 1 19 | 18 20 | 15 55 | 6 59 |     |      |     |
| F 30 | 3 58 | 18 9  | 5 17 | 4 6   | 0 48 | 10 4  | 1 1  | 6 33 | 3 16 | 9 35  | 1 32 | 5 52 | 2 16 | 17 1  | 0 43 | 9 26 | 1 49 | 23 2  | 9 42 | 1 22 | 1 18 | 18 20 | 15 55 | 6 58 |     |      |     |
| S 31 | 4n21 | 17n30 | 5s11 | 5n 3  | 0s38 | 9s39  | 1s 3 | 6n39 | 3n14 | 9s32  | 1n32 | 5n55 | 2s16 | 17n 2 | 0n43 | 9s25 | 1n49 | 23s 2 | 9s43 | 1s22 | 1s17 | 18n20 | 15n56 | 6s57 |     |      |     |

# ASTRODIENST EPHEMERIS for the year 1792

## geocentric

APRIL 1792

00:00 UT

| Day  | Sid.t    | ☉        | ☽      | ♂     | ♀      | ♂      | ♂      | ♂      | ♂      | ♂      | ♂     | ♂     | ♂    | ♂    | ♂     | Day  |
|------|----------|----------|--------|-------|--------|--------|--------|--------|--------|--------|-------|-------|------|------|-------|------|
| S 1  | 12 40 8  | 11°57'36 | 26°44  | 16°21 | 8°56   | 20°R24 | 28°R26 | 20°Y36 | 15°R 2 | 28°R56 | 22°58 | 3°26  | 3°10 | 0°3  | 12°42 | S 1  |
| M 2  | 12 44 5  | 12°56'39 | 8°52   | 18°25 | 10° 9  | 20°R 5 | 28°18  | 20°44  | 15° 1  | 28°54  | 22°59 | 3°27  | 3° 6 | 0°10 | 12°44 | M 2  |
| T 3  | 12 48 1  | 13°55'40 | 21°14  | 20°30 | 11°21  | 19°47  | 28°11  | 20°52  | 15° 0  | 28°52  | 23° 0 | 3°28  | 3° 3 | 0°17 | 12°45 | T 3  |
| W 4  | 12 51 58 | 14°54'38 | 3°53   | 22°34 | 12°34  | 19°30  | 28° 4  | 20°59  | 14°59  | 28°51  | 23° 1 | 3°29  | 3° 0 | 0°23 | 12°47 | W 4  |
| T 5  | 12 55 54 | 15°53'34 | 16°51  | 24°37 | 13°46  | 19°13  | 27°57  | 21° 7  | 14°58  | 28°49  | 23° 2 | 3°30  | 2°57 | 0°30 | 12°49 | T 5  |
| F 6  | 12 59 51 | 16°52'28 | 0°11   | 26°40 | 14°59  | 18°57  | 27°49  | 21°14  | 14°57  | 28°48  | 23° 4 | 3°R30 | 2°54 | 0°37 | 12°51 | F 6  |
| S 7  | 13 3 47  | 17°51'20 | 13°52  | 28°41 | 16°11  | 18°42  | 27°42  | 21°22  | 14°57  | 28°46  | 23° 5 | 3°30  | 2°50 | 0°44 | 12°53 | S 7  |
| S 8  | 13 7 44  | 18°50'09 | 27°51  | 0°40  | 17°24  | 18°27  | 27°34  | 21°30  | 14°56  | 28°44  | 23° 6 | 3°29  | 2°47 | 0°50 | 12°55 | S 8  |
| M 9  | 13 11 40 | 19°48'57 | 12°5   | 2°37  | 18°37  | 18°13  | 27°27  | 21°37  | 14°55  | 28°43  | 23° 7 | 3°27  | 2°44 | 0°57 | 12°58 | M 9  |
| T 10 | 13 15 37 | 20°47'43 | 26°29  | 4°32  | 19°49  | 18° 0  | 27°19  | 21°45  | 14°54  | 28°41  | 23° 8 | 3°25  | 2°41 | 1° 4 | 13° 0 | T 10 |
| W 11 | 13 19 34 | 21°46'27 | 10°57  | 6°25  | 21° 2  | 17°47  | 27°12  | 21°52  | 14°54  | 28°40  | 23° 9 | 3°23  | 2°38 | 1°10 | 13° 2 | W 11 |
| T 12 | 13 23 30 | 22°45'10 | 25°25  | 8°14  | 22°15  | 17°35  | 27° 4  | 22° 0  | 14°53  | 28°38  | 23°10 | 3°21  | 2°35 | 1°17 | 13° 5 | T 12 |
| F 13 | 13 27 27 | 23°43'51 | 9°347  | 10° 0 | 23°27  | 17°24  | 26°57  | 22° 8  | 14°53  | 28°36  | 23°11 | 3°19  | 2°31 | 1°24 | 13° 7 | F 13 |
| S 14 | 13 31 23 | 24°42'30 | 24° 1  | 11°42 | 24°40  | 17°14  | 26°49  | 22°15  | 14°52  | 28°35  | 23°12 | 3°D19 | 2°28 | 1°31 | 13°10 | S 14 |
| S 15 | 13 35 20 | 25°41'07 | 8°3    | 13°20 | 25°53  | 17° 5  | 26°41  | 22°23  | 14°52  | 28°33  | 23°13 | 3°19  | 2°25 | 1°37 | 13°13 | S 15 |
| M 16 | 13 39 16 | 26°39'43 | 21°53  | 14°55 | 27° 6  | 16°56  | 26°34  | 22°30  | 14°52  | 28°31  | 23°14 | 3°20  | 2°22 | 1°44 | 13°16 | M 16 |
| T 17 | 13 43 13 | 27°38'17 | 5°30   | 16°25 | 28°18  | 16°48  | 26°26  | 22°38  | 14°51  | 28°30  | 23°15 | 3°22  | 2°19 | 1°51 | 13°19 | T 17 |
| W 18 | 13 47 9  | 28°36'50 | 18°54  | 17°50 | 29°31  | 16°41  | 26°18  | 22°46  | 14°51  | 28°28  | 23°16 | 3°23  | 2°16 | 1°57 | 13°22 | W 18 |
| T 19 | 13 51 6  | 29°35'20 | 2°Y 6  | 19°11 | 0°Y44  | 16°35  | 26°10  | 22°53  | 14°51  | 28°27  | 23°17 | 3°R24 | 2°12 | 2° 4 | 13°25 | T 19 |
| F 20 | 13 55 3  | 0°33'49  | 15° 5  | 20°28 | 1°57   | 16°29  | 26° 3  | 23° 1  | 14°51  | 28°25  | 23°18 | 3°23  | 2° 9 | 2°11 | 13°28 | F 20 |
| S 21 | 13 58 59 | 1°32'16  | 27°51  | 21°39 | 3° 9   | 16°25  | 25°55  | 23° 8  | 14°D51 | 28°23  | 23°18 | 3°21  | 2° 6 | 2°18 | 13°31 | S 21 |
| S 22 | 14 2 56  | 2°30'41  | 10°26  | 22°45 | 4°22   | 16°21  | 25°48  | 23°16  | 14°51  | 28°22  | 23°19 | 3°18  | 2° 3 | 2°24 | 13°35 | S 22 |
| M 23 | 14 6 52  | 3°29'05  | 22°49  | 23°47 | 5°35   | 16°17  | 25°40  | 23°24  | 14°51  | 28°20  | 23°20 | 3°13  | 2° 0 | 2°31 | 13°38 | M 23 |
| T 24 | 14 10 49 | 4°27'26  | 5°II 1 | 24°43 | 6°48   | 16°15  | 25°32  | 23°31  | 14°51  | 28°18  | 23°21 | 3° 8  | 1°56 | 2°38 | 13°42 | T 24 |
| W 25 | 14 14 45 | 5°25'46  | 17° 4  | 25°34 | 8° 1   | 16°14  | 25°25  | 23°39  | 14°51  | 28°17  | 23°22 | 3° 2  | 1°53 | 2°45 | 13°45 | W 25 |
| T 26 | 14 18 42 | 6°24'04  | 29° 0  | 26°20 | 9°13   | 16°13  | 25°17  | 23°46  | 14°51  | 28°15  | 23°22 | 2°57  | 1°50 | 2°51 | 13°49 | T 26 |
| F 27 | 14 22 38 | 7°22'19  | 10°52  | 27° 1 | 10°26  | 16°D13 | 25°10  | 23°54  | 14°52  | 28°13  | 23°23 | 2°53  | 1°47 | 2°58 | 13°53 | F 27 |
| S 28 | 14 26 35 | 8°20'33  | 22°45  | 27°36 | 11°39  | 16°13  | 25° 3  | 24° 1  | 14°52  | 28°12  | 23°24 | 2°50  | 1°44 | 3° 5 | 13°57 | S 28 |
| S 29 | 14 30 31 | 9°18'44  | 4°242  | 28° 6 | 12°52  | 16°15  | 24°55  | 24° 8  | 14°52  | 28°10  | 23°24 | 2°D49 | 1°41 | 3°11 | 14° 1 | S 29 |
| M 30 | 14 34 28 | 10°16'54 | 16°247 | 28°30 | 14°Y 5 | 16°17  | 24°48  | 24°Y16 | 14°53  | 28° 9  | 23°25 | 2°49  | 1°37 | 3°18 | 14° 5 | M 30 |

| Day  | ☉     | ☽     | ♂    | ♀     | ♂    | ♂    | ♂    | ♂    | ♂    | ♂    | ♂    | ♂    | ♂    | ♂     | ♂    | Day  |
|------|-------|-------|------|-------|------|------|------|------|------|------|------|------|------|-------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl | lat  | decl | lat  | decl | lat  | decl | lat  | decl  | lat  |      |
| S 1  | 4n44  | 16n 4 | 4s15 | 6n 0  | 0s28 | 9s14 | 1s 5 | 6n44 | 3n11 | 9s30 | 1n32 | 5n58 | 2s15 | 17n 2 | 0n43 | S 1  |
| M 2  | 5 7   | 13 54 | 4 18 | 6 57  | 0 18 | 8 49 | 1 8  | 6 49 | 3 9  | 9 27 | 1 32 | 6 1  | 2 15 | 17 2  | 0 43 | M 2  |
| T 3  | 5 30  | 11 4  | 3 33 | 7 54  | 0 7  | 8 23 | 1 10 | 6 54 | 3 6  | 9 25 | 1 32 | 6 4  | 2 15 | 17 2  | 0 43 | T 3  |
| W 4  | 5 53  | 7 40  | 2 37 | 8 50  | 0n 3 | 7 57 | 1 12 | 6 59 | 3 4  | 9 22 | 1 32 | 6 6  | 2 15 | 17 3  | 0 43 | W 4  |
| T 5  | 6 16  | 3 48  | 1 31 | 9 46  | 0 15 | 7 31 | 1 14 | 7 3  | 3 2  | 9 19 | 1 32 | 6 9  | 2 15 | 17 3  | 0 43 | T 5  |
| F 6  | 6 38  | 0s21  | 0 18 | 10 42 | 0 26 | 7 5  | 1 16 | 7 7  | 2 59 | 9 17 | 1 32 | 6 12 | 2 15 | 17 3  | 0 43 | F 6  |
| S 7  | 7 1   | 4 36  | 0n57 | 11 36 | 0 37 | 6 39 | 1 17 | 7 11 | 2 57 | 9 14 | 1 32 | 6 15 | 2 15 | 17 3  | 0 43 | S 7  |
| S 8  | 7 23  | 8 41  | 2 11 | 12 28 | 0 48 | 6 12 | 1 19 | 7 15 | 2 54 | 9 11 | 1 32 | 6 18 | 2 15 | 17 4  | 0 43 | S 8  |
| M 9  | 7 45  | 12 21 | 3 17 | 13 20 | 1 0  | 5 45 | 1 21 | 7 18 | 2 51 | 9 9  | 1 32 | 6 21 | 2 15 | 17 4  | 0 43 | M 9  |
| T 10 | 8 8   | 15 18 | 4 12 | 14 9  | 1 11 | 5 18 | 1 23 | 7 20 | 2 49 | 9 6  | 1 32 | 6 23 | 2 15 | 17 4  | 0 43 | T 10 |
| W 11 | 8 30  | 17 18 | 4 51 | 14 57 | 1 21 | 4 51 | 1 24 | 7 23 | 2 46 | 9 3  | 1 32 | 6 26 | 2 15 | 17 4  | 0 43 | W 11 |
| T 12 | 8 52  | 18 11 | 5 12 | 15 43 | 1 32 | 4 23 | 1 26 | 7 25 | 2 44 | 9 1  | 1 32 | 6 29 | 2 15 | 17 4  | 0 43 | T 12 |
| F 13 | 9 13  | 17 54 | 5 13 | 16 26 | 1 42 | 3 56 | 1 27 | 7 27 | 2 41 | 8 58 | 1 32 | 6 32 | 2 15 | 17 4  | 0 43 | F 13 |
| S 14 | 9 35  | 16 29 | 4 55 | 17 7  | 1 51 | 3 28 | 1 28 | 7 29 | 2 38 | 8 55 | 1 32 | 6 35 | 2 15 | 17 4  | 0 43 | S 14 |
| S 15 | 9 56  | 14 6  | 4 19 | 17 46 | 2 0  | 3 0  | 1 29 | 7 30 | 2 36 | 8 52 | 1 32 | 6 38 | 2 15 | 17 4  | 0 43 | S 15 |
| M 16 | 10 18 | 10 56 | 3 29 | 18 22 | 2 9  | 2 33 | 1 31 | 7 31 | 2 33 | 8 50 | 1 32 | 6 40 | 2 15 | 17 4  | 0 43 | M 16 |
| T 17 | 10 39 | 7 13  | 2 27 | 18 56 | 2 16 | 2 5  | 1 32 | 7 31 | 2 30 | 8 47 | 1 32 | 6 43 | 2 15 | 17 5  | 0 43 | T 17 |
| W 18 | 11 0  | 3 11  | 1 19 | 19 27 | 2 23 | 1 37 | 1 33 | 7 32 | 2 28 | 8 44 | 1 32 | 6 46 | 2 15 | 17 5  | 0 43 | W 18 |
| T 19 | 11 20 | 0n57  | 0 7  | 19 56 | 2 29 | 1 8  | 1 34 | 7 32 | 2 25 | 8 41 | 1 32 | 6 49 | 2 15 | 17 5  | 0 43 | T 19 |
| F 20 | 11 41 | 4 58  | 1s 4 | 20 22 | 2 34 | 0 40 | 1 35 | 7 31 | 2 22 | 8 39 | 1 32 | 6 52 | 2 15 | 17 5  | 0 43 | F 20 |
| S 21 | 12 1  | 8 42  | 2 10 | 20 45 | 2 39 | 0 12 | 1 35 | 7 31 | 2 20 | 8 36 | 1 32 | 6 54 | 2 15 | 17 5  | 0 43 | S 21 |
| S 22 | 12 21 | 11 58 | 3 9  | 21 5  | 2 42 | 0n16 | 1 36 | 7 30 | 2 17 | 8 33 | 1 32 | 6 57 | 2 15 | 17 5  | 0 43 | S 22 |
| M 23 | 12 41 | 14 39 | 3 58 | 21 23 | 2 44 | 0 44 | 1 37 | 7 29 | 2 14 | 8 31 | 1 31 | 7 0  | 2 15 | 17 4  | 0 43 | M 23 |
| T 24 | 13 1  | 16 39 | 4 35 | 21 39 | 2 46 | 1 13 | 1 37 | 7 27 | 2 12 | 8 28 | 1 31 | 7 3  | 2 15 | 17 4  | 0 43 | T 24 |
| W 25 | 13 21 | 17 52 | 5 0  | 21 51 | 2 46 | 1 41 | 1 38 | 7 25 | 2 9  | 8 25 | 1 31 | 7 5  | 2 16 | 17 4  | 0 42 | W 25 |
| T 26 | 13 40 | 18 17 | 5 11 | 22 2  | 2 45 | 2 9  | 1 38 | 7 23 | 2 7  | 8 23 | 1 31 | 7 8  | 2 16 | 17 4  | 0 42 | T 26 |
| F 27 | 13 59 | 17 54 | 5 8  | 22 9  | 2 43 | 2 38 | 1 38 | 7 21 | 2 4  | 8 20 | 1 31 | 7 11 | 2 16 | 17 4  | 0 42 | F 27 |
| S 28 | 14 18 | 16 44 | 4 53 | 22 15 | 2 40 | 3 6  | 1 39 | 7 18 | 2 1  | 8 18 | 1 31 | 7 13 | 2 16 | 17 4  | 0 42 | S 28 |
| S 29 | 14 37 | 14 49 | 4 25 | 22 17 | 2 36 | 3 34 | 1 39 | 7 15 | 1 59 | 8 15 | 1 31 | 7 16 | 2 16 | 17 4  | 0 42 | S 29 |
| M 30 | 14n55 | 12n15 | 3s44 | 22n18 | 2n31 | 4n 2 | 1s39 | 7n12 | 1n56 | 8s12 | 1n31 | 7n19 | 2s16 | 17n 4 | 0n42 | M 30 |

Julian Day Number = 2375665.5, Delta T = 21.19 sec

Ecliptic obliquity = 23°27'50, Nutation = 0°00'01, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 21°50'23, Lahiri = 20°57'23Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1792

## geocentric

MAY 1792

00:00 UT

| Day  | Sid.t    | ☉        | ☽     | ♂      | ♀     | ♂     | ♂      | ♂     | ♂     | ♂      | ♂      | ♂     | ♂     | ♂    | ♂     | Day  |
|------|----------|----------|-------|--------|-------|-------|--------|-------|-------|--------|--------|-------|-------|------|-------|------|
| T 1  | 14 38 25 | 11♈15'01 | 29♎ 7 | 28♏49  | 15♏18 | 16♏20 | 24°R41 | 24♏23 | 14♎53 | 28°R 7 | 23♏25  | 2♎50  | 1♎34  | 3♎25 | 14♎ 9 | T 1  |
| W 2  | 14 42 21 | 12°13'07 | 11♏45 | 29° 3  | 16°31 | 16°24 | 24♎34  | 24°31 | 14°54 | 28♎ 6  | 23°26  | 2°52  | 1°31  | 3°32 | 14°13 | W 2  |
| T 3  | 14 46 18 | 13°11'11 | 24°46 | 29°11  | 17°43 | 16°28 | 24°27  | 24°38 | 14°55 | 28° 4  | 23°27  | 2°53  | 1°28  | 3°38 | 14°17 | T 3  |
| F 4  | 14 50 14 | 14° 9'12 | 8♏11  | 29°R14 | 18°56 | 16°33 | 24°20  | 24°45 | 14°55 | 28° 2  | 23°27  | 2°R53 | 1°25  | 3°45 | 14°21 | F 4  |
| S 5  | 14 54 11 | 15° 7'12 | 22° 3 | 29°12  | 20° 9 | 16°39 | 24°13  | 24°53 | 14°56 | 28° 1  | 23°28  | 2°51  | 1°21  | 3°52 | 14°26 | S 5  |
| S 6  | 14 58 7  | 16° 5'10 | 6♏19  | 29° 5  | 21°22 | 16°45 | 24° 7  | 25° 0 | 14°57 | 27°59  | 23°28  | 2°48  | 1°18  | 3°59 | 14°30 | S 6  |
| M 7  | 15 2 4   | 17° 3'07 | 20°56 | 28°54  | 22°35 | 16°52 | 24° 0  | 25° 7 | 14°57 | 27°58  | 23°28  | 2°43  | 1°15  | 4° 5 | 14°34 | M 7  |
| T 8  | 15 6 0   | 18° 1'02 | 5♏47  | 28°38  | 23°48 | 17° 0 | 23°54  | 25°15 | 14°58 | 27°56  | 23°29  | 2°36  | 1°12  | 4°12 | 14°39 | T 8  |
| W 9  | 15 9 57  | 18°58'56 | 20°42 | 28°18  | 25° 1 | 17° 8 | 23°47  | 25°22 | 14°59 | 27°55  | 23°29  | 2°29  | 1° 9  | 4°19 | 14°44 | W 9  |
| T 10 | 15 13 54 | 19°56'48 | 5♏34  | 27°54  | 26°14 | 17°17 | 23°41  | 25°29 | 15° 0 | 27°53  | 23°30  | 2°23  | 1° 6  | 4°25 | 14°48 | T 10 |
| F 11 | 15 17 50 | 20°54'39 | 20°15 | 27°27  | 27°27 | 17°27 | 23°35  | 25°36 | 15° 1 | 27°52  | 23°30  | 2°18  | 1° 2  | 4°32 | 14°53 | F 11 |
| S 12 | 15 21 47 | 21°52'29 | 4♏39  | 26°58  | 28°40 | 17°37 | 23°29  | 25°43 | 15° 2 | 27°50  | 23°30  | 2°15  | 0°59  | 4°39 | 14°58 | S 12 |
| S 13 | 15 25 43 | 22°50'18 | 18°44 | 26°26  | 29°53 | 17°48 | 23°23  | 25°50 | 15° 3 | 27°49  | 23°31  | 2°D13 | 0°56  | 4°46 | 15° 3 | S 13 |
| M14  | 15 29 40 | 23°48'05 | 2♏28  | 25°52  | 1♎ 6  | 17°59 | 23°17  | 25°57 | 15° 5 | 27°47  | 23°31  | 2°13  | 0°53  | 4°52 | 15° 8 | M14  |
| T 15 | 15 33 36 | 24°45'51 | 15°53 | 25°18  | 2°19  | 18°11 | 23°11  | 26° 4 | 15° 6 | 27°46  | 23°31  | 2°14  | 0°50  | 4°59 | 15°13 | T 15 |
| W16  | 15 37 33 | 25°43'36 | 29° 0 | 24°43  | 3°32  | 18°23 | 23° 6  | 26°11 | 15° 7 | 27°45  | 23°31  | 2°R15 | 0°47  | 5° 6 | 15°18 | W16  |
| T 17 | 15 41 29 | 26°41'20 | 11♏52 | 24° 8  | 4°45  | 18°36 | 23° 0  | 26°18 | 15° 8 | 27°43  | 23°31  | 2°15  | 0°43  | 5°12 | 15°23 | T 17 |
| F 18 | 15 45 26 | 27°39'03 | 24°32 | 23°34  | 5°58  | 18°50 | 22°55  | 26°25 | 15°10 | 27°42  | 23°32  | 2°12  | 0°40  | 5°19 | 15°28 | F 18 |
| S 19 | 15 49 23 | 28°36'45 | 7♎ 0  | 23° 2  | 7°11  | 19° 4 | 22°50  | 26°32 | 15°11 | 27°40  | 23°32  | 2° 8  | 0°37  | 5°26 | 15°33 | S 19 |
| S 20 | 15 53 19 | 29°34'26 | 19°19 | 22°31  | 8°24  | 19°19 | 22°45  | 26°39 | 15°13 | 27°39  | 23°32  | 2° 0  | 0°34  | 5°33 | 15°38 | S 20 |
| M21  | 15 57 16 | 0♏32'05  | 1♏30  | 22° 3  | 9°37  | 19°34 | 22°40  | 26°46 | 15°14 | 27°38  | 23°32  | 1°51  | 0°31  | 5°39 | 15°44 | M21  |
| T 22 | 16 1 12  | 1°29'43  | 13°34 | 21°38  | 10°50 | 19°49 | 22°35  | 26°53 | 15°16 | 27°36  | 23°32  | 1°40  | 0°27  | 5°46 | 15°49 | T 22 |
| W23  | 16 5 9   | 2°27'20  | 25°32 | 21°16  | 12° 3 | 20° 5 | 22°31  | 26°59 | 15°17 | 27°35  | 23°32  | 1°29  | 0°24  | 5°53 | 15°54 | W23  |
| T 24 | 16 9 5   | 3°24'56  | 7♎25  | 20°57  | 13°16 | 20°22 | 22°27  | 27° 6 | 15°19 | 27°34  | 23°R32 | 1°18  | 0°21  | 6° 0 | 16° 0 | T 24 |
| F 25 | 16 13 2  | 4°22'30  | 19°16 | 20°43  | 14°29 | 20°39 | 22°22  | 27°13 | 15°21 | 27°33  | 23°32  | 1° 8  | 0°18  | 6° 6 | 16° 5 | F 25 |
| S 26 | 16 16 58 | 5°20'03  | 1♎ 8  | 20°32  | 15°42 | 20°57 | 22°18  | 27°19 | 15°22 | 27°31  | 23°32  | 1° 1  | 0°15  | 6°13 | 16°11 | S 26 |
| S 27 | 16 20 55 | 6°17'35  | 13° 4 | 20°26  | 16°55 | 21°15 | 22°14  | 27°26 | 15°24 | 27°30  | 23°32  | 0°56  | 0°12  | 6°20 | 16°17 | S 27 |
| M28  | 16 24 52 | 7°15'05  | 25° 7 | 20°D24 | 18° 8 | 21°33 | 22°11  | 27°32 | 15°26 | 27°29  | 23°32  | 0°53  | 0° 8  | 6°26 | 16°22 | M28  |
| T 29 | 16 28 48 | 8°12'34  | 7♏24  | 20°26  | 19°21 | 21°52 | 22° 7  | 27°39 | 15°28 | 27°28  | 23°32  | 0°D53 | 0° 5  | 6°33 | 16°28 | T 29 |
| W30  | 16 32 45 | 9°10'01  | 19°58 | 20°33  | 20°34 | 22°12 | 22° 4  | 27°45 | 15°30 | 27°27  | 23°32  | 0°53  | 0° 2  | 6°40 | 16°34 | W30  |
| T 31 | 16 36 41 | 10♏ 7'28 | 2♎55  | 20♎44  | 21♎47 | 22♏31 | 22♎ 0  | 27♏51 | 15♎32 | 27♎26  | 23♎31  | 0°R53 | 29♏59 | 6♎47 | 16♎40 | T 31 |

| Day  | ☉     | ☽     | ♂    | ♀     | ♂    | ♂     | ♂    | ♂    | ♂    | ♂    | ♂    | ♂    | ♂    | ♂     | ♂    | Day  |
|------|-------|-------|------|-------|------|-------|------|------|------|------|------|------|------|-------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl | lat  | decl | lat  | decl  | lat  |      |
| T 1  | 15n13 | 9n 5  | 2s53 | 22n15 | 2n24 | 4n30  | 1s39 | 7n 9 | 1n54 | 8s10 | 1n31 | 7n21 | 2s16 | 17n 4 | 0n42 | T 1  |
| W 2  | 15 31 | 5 26  | 1 52 | 22 11 | 2 16 | 4 58  | 1 39 | 7 5  | 1 51 | 8 8  | 1 31 | 7 24 | 2 16 | 17 3  | 0 42 | W 2  |
| T 3  | 15 49 | 1 25  | 0 44 | 22 4  | 2 7  | 5 26  | 1 39 | 7 1  | 1 49 | 8 5  | 1 30 | 7 27 | 2 16 | 17 3  | 0 42 | T 3  |
| F 4  | 16 6  | 2s49  | 0n29 | 21 55 | 1 57 | 5 54  | 1 39 | 6 57 | 1 46 | 8 3  | 1 30 | 7 29 | 2 16 | 17 3  | 0 42 | F 4  |
| S 5  | 16 23 | 7 1   | 1 42 | 21 44 | 1 46 | 6 22  | 1 38 | 6 52 | 1 44 | 8 0  | 1 30 | 7 32 | 2 16 | 17 3  | 0 42 | S 5  |
| S 6  | 16 40 | 10 57 | 2 51 | 21 30 | 1 34 | 6 50  | 1 38 | 6 48 | 1 42 | 7 58 | 1 30 | 7 35 | 2 16 | 17 2  | 0 42 | S 6  |
| M 7  | 16 57 | 14 18 | 3 50 | 21 15 | 1 21 | 7 17  | 1 38 | 6 43 | 1 39 | 7 56 | 1 30 | 7 37 | 2 16 | 17 2  | 0 42 | M 7  |
| T 8  | 17 13 | 16 47 | 4 35 | 20 57 | 1 6  | 7 44  | 1 37 | 6 38 | 1 37 | 7 54 | 1 30 | 7 40 | 2 16 | 17 2  | 0 42 | T 8  |
| W 9  | 17 29 | 18 8  | 5 1  | 20 38 | 0 51 | 8 12  | 1 37 | 6 32 | 1 35 | 7 51 | 1 29 | 7 42 | 2 16 | 17 2  | 0 42 | W 9  |
| T 10 | 17 45 | 18 14 | 5 7  | 20 17 | 0 35 | 8 39  | 1 36 | 6 27 | 1 32 | 7 49 | 1 29 | 7 45 | 2 16 | 17 1  | 0 42 | T 10 |
| F 11 | 18 0  | 17 6  | 4 53 | 19 55 | 0 19 | 9 5   | 1 35 | 6 21 | 1 30 | 7 47 | 1 29 | 7 47 | 2 17 | 17 1  | 0 42 | F 11 |
| S 12 | 18 15 | 14 54 | 4 20 | 19 32 | 0 2  | 9 32  | 1 35 | 6 15 | 1 28 | 7 45 | 1 29 | 7 50 | 2 17 | 17 1  | 0 42 | S 12 |
| S 13 | 18 30 | 11 52 | 3 32 | 19 8  | 0s15 | 9 59  | 1 34 | 6 9  | 1 26 | 7 43 | 1 29 | 7 52 | 2 17 | 17 0  | 0 42 | S 13 |
| M14  | 18 45 | 8 13  | 2 33 | 18 43 | 0 33 | 10 25 | 1 33 | 6 2  | 1 23 | 7 41 | 1 29 | 7 55 | 2 17 | 17 0  | 0 42 | M14  |
| T 15 | 18 59 | 4 14  | 1 27 | 18 17 | 0 50 | 10 51 | 1 32 | 5 55 | 1 21 | 7 39 | 1 28 | 7 57 | 2 17 | 16 59 | 0 42 | T 15 |
| W16  | 19 13 | 0 8   | 0 17 | 17 52 | 1 8  | 11 17 | 1 31 | 5 49 | 1 19 | 7 37 | 1 28 | 8 0  | 2 17 | 16 59 | 0 42 | W16  |
| T 17 | 19 26 | 3n55  | 0s51 | 17 27 | 1 25 | 11 42 | 1 30 | 5 42 | 1 17 | 7 35 | 1 28 | 8 2  | 2 17 | 16 59 | 0 42 | T 17 |
| F 18 | 19 39 | 7 42  | 1 57 | 17 3  | 1 42 | 12 7  | 1 29 | 5 34 | 1 15 | 7 34 | 1 28 | 8 4  | 2 17 | 16 58 | 0 42 | F 18 |
| S 19 | 19 52 | 11 7  | 2 55 | 16 39 | 1 58 | 12 32 | 1 28 | 5 27 | 1 13 | 7 32 | 1 27 | 8 7  | 2 17 | 16 58 | 0 42 | S 19 |
| S 20 | 20 5  | 13 59 | 3 44 | 16 16 | 2 13 | 12 57 | 1 26 | 5 19 | 1 11 | 7 30 | 1 27 | 8 9  | 2 17 | 16 57 | 0 42 | S 20 |
| M21  | 20 17 | 16 12 | 4 22 | 15 55 | 2 28 | 13 22 | 1 25 | 5 11 | 1 9  | 7 29 | 1 27 | 8 11 | 2 18 | 16 57 | 0 42 | M21  |
| T 22 | 20 29 | 17 41 | 4 49 | 15 36 | 2 41 | 13 46 | 1 24 | 5 3  | 1 7  | 7 27 | 1 27 | 8 14 | 2 18 | 16 56 | 0 42 | T 22 |
| W23  | 20 40 | 18 22 | 5 2  | 15 18 | 2 54 | 14 10 | 1 22 | 4 55 | 1 5  | 7 26 | 1 27 | 8 16 | 2 18 | 16 56 | 0 42 | W23  |
| T 24 | 20 52 | 18 14 | 5 2  | 15 2  | 3 5  | 14 33 | 1 21 | 4 47 | 1 3  | 7 24 | 1 26 | 8 18 | 2 18 | 16 55 | 0 42 | T 24 |
| F 25 | 21 2  | 17 19 | 4 49 | 14 48 | 3 16 | 14 56 | 1 19 | 4 38 | 1 1  | 7 23 | 1 26 | 8 20 | 2 18 | 16 55 | 0 41 | F 25 |
| S 26 | 21 13 | 15 39 | 4 23 | 14 37 | 3 25 | 15 19 | 1 18 | 4 30 | 0 59 | 7 22 | 1 26 | 8 23 | 2 18 | 16 54 | 0 41 | S 26 |
| S 27 | 21 23 | 13 18 | 3 46 | 14 27 | 3 33 | 15 41 | 1 16 | 4 21 | 0 57 | 7 21 | 1 26 | 8 25 | 2 18 | 16 54 | 0 41 | S 27 |
| M28  | 21 33 | 10 22 | 2 58 | 14 20 | 3 40 | 16 3  | 1 15 | 4 12 | 0 55 | 7 19 | 1 25 | 8 27 | 2 19 | 16 53 | 0 41 | M28  |
| T 29 | 21 42 | 6 55  | 2 2  | 14 15 | 3 45 | 16 25 | 1 13 | 4 3  | 0 53 | 7 18 | 1 25 | 8 29 | 2 19 | 16 52 | 0 41 | T 29 |
| W30  | 21 51 | 3 5   | 0 58 | 14 13 | 3 50 | 16 46 | 1 11 | 3 53 | 0 52 | 7 17 | 1 25 | 8 31 | 2 19 | 16 52 | 0 41 | W30  |
| T 31 | 21n59 | 1s 0  | 0n11 | 14n12 | 3s53 | 17n 7 | 1s 9 | 3n44 | 0n50 | 7s16 | 1n25 | 8n34 | 2s19 | 16n51 | 0n41 | T 31 |

Julian Day Number = 2375695.5, Delta T = 21.17 sec  
 Ecliptic obliquity = 23°27'49, Nutation = - 0°00'01, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 21°50'27, Lahiri = 20°57'27Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1792  
geocentric

JUNE 1792

00:00 UT

| Day  | Sid.t    | ☉        | ☽     | ♂     | ♀     | ♂     | ♂      | ♂      | ♂      | ♂      | ♂      | ♂     | ♂     | ♂     | ♂     | Day  |
|------|----------|----------|-------|-------|-------|-------|--------|--------|--------|--------|--------|-------|-------|-------|-------|------|
| F 1  | 16 40 38 | 11Ⅱ 4°53 | 16♂18 | 21♂ 0 | 23♂ 0 | 22♂52 | 21°R57 | 27°Y58 | 15°Q34 | 27°R25 | 23°R31 | 0°R52 | 29♂56 | 6♂53  | 16♂46 | F 1  |
| S 2  | 16 44 34 | 12° 2'17 | 0♂11  | 21°21 | 24°13 | 23°12 | 21♂55  | 28° 4  | 15°36  | 27♂23  | 23♂31  | 0♂49  | 29°53 | 7° 0  | 16°51 | S 2  |
| S 3  | 16 48 31 | 12°59'40 | 14°32 | 21°45 | 25°27 | 23°33 | 21°52  | 28°10  | 15°38  | 27°22  | 23°31  | 0°44  | 29°49 | 7° 7  | 16°57 | S 3  |
| M 4  | 16 52 27 | 13°57'02 | 29°19 | 22°14 | 26°40 | 23°54 | 21°49  | 28°16  | 15°40  | 27°21  | 23°30  | 0°36  | 29°46 | 7°13  | 17° 3 | M 4  |
| T 5  | 16 56 24 | 14°54'23 | 14♂24 | 22°47 | 27°53 | 24°16 | 21°47  | 28°22  | 15°43  | 27°20  | 23°30  | 0°27  | 29°43 | 7°20  | 17° 9 | T 5  |
| W 6  | 17 0 21  | 15°51'43 | 29°38 | 23°25 | 29° 6 | 24°38 | 21°45  | 28°28  | 15°45  | 27°19  | 23°30  | 0°16  | 29°40 | 7°27  | 17°16 | W 6  |
| T 7  | 17 4 17  | 16°49'03 | 14♂51 | 24° 6 | 0Ⅱ19  | 25° 1 | 21°43  | 28°34  | 15°47  | 27°19  | 23°29  | 0° 7  | 29°37 | 7°34  | 17°22 | T 7  |
| F 8  | 17 8 14  | 17°46'22 | 29°50 | 24°52 | 1°32  | 25°24 | 21°41  | 28°40  | 15°49  | 27°18  | 23°29  | 29♂58 | 29°33 | 7°40  | 17°28 | F 8  |
| S 9  | 17 12 10 | 18°43'40 | 14♂30 | 25°41 | 2°45  | 25°47 | 21°39  | 28°46  | 15°52  | 27°17  | 23°29  | 29°53 | 29°30 | 7°47  | 17°34 | S 9  |
| S 10 | 17 16 7  | 19°40'58 | 28°44 | 26°34 | 3°59  | 26°10 | 21°38  | 28°52  | 15°54  | 27°16  | 23°28  | 29°49 | 29°27 | 7°54  | 17°40 | S 10 |
| M11  | 17 20 3  | 20°38'15 | 12♂32 | 27°31 | 5°12  | 26°34 | 21°37  | 28°57  | 15°57  | 27°15  | 23°28  | 29°48 | 29°24 | 8° 1  | 17°46 | M11  |
| T 12 | 17 24 0  | 21°35'32 | 25°56 | 28°32 | 6°25  | 26°58 | 21°35  | 29° 3  | 15°59  | 27°14  | 23°27  | 29°48 | 29°21 | 8° 7  | 17°53 | T 12 |
| W13  | 17 27 56 | 22°32'49 | 8°Y57 | 29°36 | 7°38  | 27°23 | 21°34  | 29° 8  | 16° 2  | 27°13  | 23°27  | 29°48 | 29°18 | 8°14  | 17°59 | W13  |
| T 14 | 17 31 53 | 23°30'06 | 21°39 | 0Ⅱ44  | 8°52  | 27°47 | 21°34  | 29°14  | 16° 4  | 27°13  | 23°26  | 29°46 | 29°14 | 8°21  | 18° 5 | T 14 |
| F 15 | 17 35 50 | 24°27'22 | 4♂ 6  | 1°55  | 10° 5 | 28°13 | 21°33  | 29°19  | 16° 7  | 27°12  | 23°26  | 29°43 | 29°11 | 8°27  | 18°12 | F 15 |
| S 16 | 17 39 46 | 25°24'38 | 16°22 | 3°10  | 11°18 | 28°38 | 21°33  | 29°25  | 16°10  | 27°11  | 23°25  | 29°37 | 29° 8 | 8°34  | 18°18 | S 16 |
| S 17 | 17 43 43 | 26°21'54 | 28°30 | 4°28  | 12°31 | 29° 4 | 21°33  | 29°30  | 16°12  | 27°11  | 23°25  | 29°27 | 29° 5 | 8°41  | 18°25 | S 17 |
| M18  | 17 47 39 | 27°19'09 | 10Ⅱ31 | 5°50  | 13°45 | 29°30 | 21°D32 | 29°35  | 16°15  | 27°10  | 23°24  | 29°16 | 29° 2 | 8°48  | 18°31 | M18  |
| T 19 | 17 51 36 | 28°16'24 | 22°28 | 7°14  | 14°58 | 29°56 | 21°33  | 29°40  | 16°18  | 27° 9  | 23°24  | 29° 2 | 28°59 | 8°54  | 18°38 | T 19 |
| W20  | 17 55 32 | 29°13'39 | 4♂21  | 8°42  | 16°11 | 0♂23  | 21°33  | 29°46  | 16°20  | 27° 9  | 23°23  | 28°48 | 28°55 | 9° 1  | 18°44 | W20  |
| T 21 | 17 59 29 | 0♂10'54  | 16°13 | 10°14 | 17°25 | 0°50  | 21°33  | 29°51  | 16°23  | 27° 8  | 23°22  | 28°35 | 28°52 | 9° 8  | 18°51 | T 21 |
| F 22 | 18 3 26  | 1° 8'08  | 28° 4 | 11°48 | 18°38 | 1°17  | 21°34  | 29°56  | 16°26  | 27° 8  | 23°22  | 28°23 | 28°49 | 9°15  | 18°57 | F 22 |
| S 23 | 18 7 22  | 2° 5'21  | 9♂57  | 13°26 | 19°52 | 1°44  | 21°35  | 0♂ 0   | 16°29  | 27° 7  | 23°21  | 28°13 | 28°46 | 9°21  | 19° 4 | S 23 |
| S 24 | 18 11 19 | 3° 2'34  | 21°55 | 15° 7 | 21° 5 | 2°12  | 21°36  | 0° 5   | 16°32  | 27° 7  | 23°20  | 28° 7 | 28°43 | 9°28  | 19°10 | S 24 |
| M25  | 18 15 15 | 3°59'47  | 4♂ 0  | 16°51 | 22°18 | 2°40  | 21°37  | 0°10   | 16°35  | 27° 6  | 23°19  | 28° 3 | 28°39 | 9°35  | 19°17 | M25  |
| T 26 | 18 19 12 | 4°56'59  | 16°16 | 18°38 | 23°32 | 3° 8  | 21°39  | 0°15   | 16°38  | 27° 6  | 23°19  | 28° 1 | 28°36 | 9°41  | 19°24 | T 26 |
| W27  | 18 23 8  | 5°54'11  | 28°49 | 20°28 | 24°45 | 3°37  | 21°40  | 0°19   | 16°41  | 27° 6  | 23°18  | 28° 0 | 28°33 | 9°48  | 19°30 | W27  |
| T 28 | 18 27 5  | 6°51'22  | 11♂42 | 22°21 | 25°59 | 4° 6  | 21°42  | 0°24   | 16°44  | 27° 5  | 23°17  | 28° 0 | 28°30 | 9°55  | 19°37 | T 28 |
| F 29 | 18 31 1  | 7°48'34  | 25° 0 | 24°16 | 27°12 | 4°35  | 21°44  | 0°28   | 16°47  | 27° 5  | 23°16  | 28° 0 | 28°27 | 10° 2 | 19°44 | F 29 |
| S 30 | 18 34 58 | 8♂45'44  | 8♂46  | 26Ⅱ14 | 28Ⅱ26 | 5♂ 4  | 21♂46  | 0♂32   | 16♂50  | 27♂ 5  | 23♂15  | 27♂57 | 28♂24 | 10♂ 8 | 19♂50 | S 30 |

| Day  | ☉     | ☾     |      | ♂     |      | ♀     |      | ♂    |      | ♂    |      | ♂    |      | ♂     |      | ♂    |      | ♂     |       | ♂    |      | ♂     |       | ♂    |     |
|------|-------|-------|------|-------|------|-------|------|------|------|------|------|------|------|-------|------|------|------|-------|-------|------|------|-------|-------|------|-----|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl | lat  | decl | lat  | decl  | lat  | decl | lat  | decl  | lat   | decl | lat  | decl  | lat   | decl | lat |
| F 1  | 22n 8 | 5s10  | 1n21 | 14n14 | 3s56 | 17n27 | 1s 7 | 3n34 | 0n48 | 7s15 | 1n24 | 8n36 | 2s19 | 16n51 | 0n41 | 8s53 | 1n48 | 23s 7 | 10s 1 | 0s21 | 0n 2 | 18n11 | 16n 1 | 6s27 |     |
| S 2  | 22 15 | 9 13  | 2 29 | 14 18 | 3 57 | 17 47 | 1 5  | 3 25 | 0 46 | 7 15 | 1 24 | 8 38 | 2 19 | 16 50 | 0 41 | 8 52 | 1 48 | 23 8  | 10 1  | 0 20 | 0 3  | 18 11 | 16 0  | 6 26 |     |
| S 3  | 22 23 | 12 53 | 3 30 | 14 24 | 3 57 | 18 7  | 1 4  | 3 15 | 0 45 | 7 14 | 1 24 | 8 40 | 2 19 | 16 49 | 0 41 | 8 52 | 1 48 | 23 8  | 10 2  | 0 18 | 0 4  | 18 11 | 16 0  | 6 26 |     |
| M 4  | 22 30 | 15 49 | 4 18 | 14 32 | 3 57 | 18 26 | 1 2  | 3 5  | 0 43 | 7 13 | 1 24 | 8 42 | 2 20 | 16 49 | 0 41 | 8 52 | 1 48 | 23 8  | 10 2  | 0 14 | 0 6  | 18 10 | 16 0  | 6 26 |     |
| T 5  | 22 37 | 17 45 | 4 50 | 14 42 | 3 55 | 18 44 | 1 0  | 2 55 | 0 41 | 7 12 | 1 23 | 8 44 | 2 20 | 16 48 | 0 41 | 8 51 | 1 48 | 23 9  | 10 2  | 0 11 | 0 7  | 18 10 | 15 59 | 6 26 |     |
| W 6  | 22 43 | 18 27 | 5 1  | 14 54 | 3 52 | 19 3  | 0 57 | 2 44 | 0 40 | 7 12 | 1 23 | 8 46 | 2 20 | 16 47 | 0 41 | 8 51 | 1 48 | 23 9  | 10 2  | 0 7  | 0 8  | 18 10 | 15 59 | 6 25 |     |
| T 7  | 22 49 | 17 48 | 4 52 | 15 7  | 3 49 | 19 20 | 0 55 | 2 34 | 0 38 | 7 11 | 1 23 | 8 48 | 2 20 | 16 46 | 0 41 | 8 51 | 1 48 | 23 9  | 10 3  | 0 3  | 0 9  | 18 10 | 15 58 | 6 25 |     |
| F 8  | 22 54 | 15 56 | 4 22 | 15 22 | 3 45 | 19 37 | 0 53 | 2 23 | 0 36 | 7 11 | 1 23 | 8 50 | 2 20 | 16 46 | 0 41 | 8 51 | 1 48 | 23 10 | 10 3  | 0n 1 | 0 11 | 18 9  | 15 58 | 6 25 |     |
| S 9  | 22 59 | 13 4  | 3 35 | 15 38 | 3 40 | 19 54 | 0 51 | 2 13 | 0 35 | 7 11 | 1 22 | 8 51 | 2 20 | 16 45 | 0 41 | 8 50 | 1 48 | 23 10 | 10 3  | 0 3  | 0 12 | 18 9  | 15 57 | 6 24 |     |
| S 10 | 23 4  | 9 29  | 2 36 | 15 56 | 3 34 | 20 10 | 0 49 | 2 2  | 0 33 | 7 10 | 1 22 | 8 53 | 2 21 | 16 44 | 0 41 | 8 50 | 1 48 | 23 11 | 10 4  | 0 4  | 0 13 | 18 9  | 15 57 | 6 24 |     |
| M11  | 23 8  | 5 28  | 1 30 | 16 15 | 3 28 | 20 25 | 0 47 | 1 51 | 0 32 | 7 10 | 1 22 | 8 55 | 2 21 | 16 44 | 0 41 | 8 50 | 1 48 | 23 11 | 10 4  | 0 5  | 0 14 | 18 9  | 15 56 | 6 24 |     |
| T 12 | 23 12 | 1 18  | 0 20 | 16 35 | 3 21 | 20 40 | 0 45 | 1 40 | 0 30 | 7 10 | 1 22 | 8 57 | 2 21 | 16 43 | 0 41 | 8 50 | 1 48 | 23 12 | 10 4  | 0 5  | 0 16 | 18 8  | 15 56 | 6 24 |     |
| W13  | 23 15 | 2n49  | 0s48 | 16 57 | 3 13 | 20 55 | 0 42 | 1 29 | 0 28 | 7 10 | 1 21 | 8 59 | 2 21 | 16 42 | 0 41 | 8 49 | 1 48 | 23 12 | 10 4  | 0 5  | 0 17 | 18 8  | 15 55 | 6 24 |     |
| T 14 | 23 18 | 6 42  | 1 53 | 17 19 | 3 5  | 21 8  | 0 40 | 1 17 | 0 27 | 7 10 | 1 21 | 9 1  | 2 21 | 16 41 | 0 41 | 8 49 | 1 48 | 23 12 | 10 5  | 0 5  | 0 18 | 18 8  | 15 54 | 6 23 |     |
| F 15 | 23 21 | 10 13 | 2 51 | 17 41 | 2 56 | 21 22 | 0 38 | 1 6  | 0 25 | 7 10 | 1 21 | 9 2  | 2 21 | 16 40 | 0 41 | 8 49 | 1 47 | 23 13 | 10 5  | 0 7  | 0 19 | 18 7  | 15 54 | 6 23 |     |
| S 16 | 23 23 | 13 15 | 3 39 | 18 5  | 2 47 | 21 34 | 0 35 | 0 55 | 0 24 | 7 10 | 1 20 | 9 4  | 2 22 | 16 40 | 0 41 | 8 49 | 1 47 | 23 13 | 10 5  | 0 9  | 0 21 | 18 7  | 15 53 | 6 23 |     |
| S 17 | 23 25 | 15 39 | 4 18 | 18 29 | 2 37 | 21 46 | 0 33 | 0 43 | 0 22 | 7 10 | 1 20 | 9 6  | 2 22 | 16 39 | 0 41 | 8 48 | 1 47 | 23 14 | 10 6  | 0 13 | 0 22 | 18 7  | 15 52 | 6 23 |     |
| M18  | 23 26 | 17 22 | 4 44 | 18 53 | 2 27 | 21 58 | 0 31 | 0 31 | 0 21 | 7 10 | 1 20 | 9 7  | 2 22 | 16 38 | 0 41 | 8 48 | 1 47 | 23 14 | 10 6  | 0 18 | 0 23 | 18 7  | 15 52 | 6 23 |     |
| T 19 | 23 27 | 18 18 | 4 58 | 19 18 | 2 16 | 22 9  | 0 28 | 0 20 | 0 20 | 7 11 | 1 20 | 9 9  | 2 22 | 16 37 | 0 41 | 8 48 | 1 47 | 23 15 | 10 6  | 0 23 | 0 24 | 18 6  | 15 51 | 6 22 |     |
| W20  | 23 28 | 18 26 | 4 58 | 19 43 | 2 5  | 22 19 | 0 26 | 0 8  | 0 18 | 7 11 | 1 19 | 9 11 | 2 22 | 16 36 | 0 41 | 8 48 | 1 47 | 23 15 | 10 6  | 0 28 | 0 26 | 18 6  | 15 50 | 6 22 |     |
| T 21 | 23 28 | 17 45 | 4 46 | 20 7  | 1 54 | 22 29 | 0 23 | 0s 4 | 0 17 | 7 11 | 1 19 | 9 12 | 2 23 | 16 35 | 0 41 | 8 48 | 1 47 | 23 16 | 10 7  | 0 34 | 0 27 | 18 6  | 15 50 | 6 22 |     |
| F 22 | 23 28 | 16 18 | 4 21 | 20 32 | 1 43 | 22 38 | 0 21 | 0 16 | 0 15 | 7 12 | 1 19 | 9 14 | 2 23 | 16 34 | 0 41 | 8 48 | 1 47 | 23 16 | 10 7  | 0 39 | 0 28 | 18 6  | 15 49 | 6 22 |     |
| S 23 | 23 27 | 14 10 | 3 45 | 20 56 | 1 31 | 22 46 | 0 19 | 0 29 | 0 14 | 7 13 | 1 19 | 9 15 | 2 23 | 16 34 | 0 41 | 8 48 | 1 47 | 23 17 | 10 7  | 0 42 | 0 30 | 18 5  | 15 48 | 6 22 |     |
| S 24 | 23 26 | 11 24 | 2 58 | 21 19 | 1 19 | 22 54 | 0 16 | 0 41 | 0 13 | 7 13 | 1 18 | 9 17 | 2 23 | 16 33 | 0 41 | 8 47 | 1 47 | 23 17 | 10 8  | 0 45 | 0 31 | 18 5  | 15 48 | 6 22 |     |
| M25  | 23 24 | 8 8   | 2 3  | 21 42 | 1 7  | 23 1  | 0 14 | 0 53 | 0 11 | 7 14 | 1 18 | 9 18 | 2 23 | 16 32 | 0 41 | 8 47 | 1 47 | 23 18 | 10 8  | 0 47 | 0 32 | 18 5  | 15 47 | 6 21 |     |
| T 26 | 23 22 | 4 28  | 1 2  | 22 4  | 0 55 | 23 7  | 0 11 | 1 6  | 0 10 | 7 15 | 1 18 | 9 20 | 2 24 | 16 31 | 0 41 | 8 47 | 1 47 | 23 18 | 10 8  | 0 47 | 0 33 | 18 4  | 15 46 | 6 21 |     |
| W27  | 23 20 | 0 32  | 0n 4 | 22 24 | 0 43 | 23 13 | 0 9  | 1 18 | 0 9  | 7 15 | 1 17 | 9 21 | 2 24 | 16 30 | 0 41 | 8 47 | 1 47 | 23 19 | 10 8  | 0 48 | 0 35 | 18 4  | 15 45 | 6 21 |     |
| T 28 | 23 17 | 3s32  | 1 12 | 22 44 | 0 31 | 23 18 | 0 6  | 1 31 | 0 7  | 7 16 | 1 17 | 9 22 | 2 24 | 16 29 | 0 41 | 8 47 | 1 47 | 23 19 | 10 9  | 0 48 | 0 36 | 18 4  | 15 44 | 6 21 |     |
| F 29 | 23 14 | 7 33  | 2 18 | 23 1  | 0 19 | 23 22 | 0 4  | 1 44 | 0 6  | 7 17 | 1 17 | 9 24 | 2 24 | 16 28 | 0 41 | 8 47 | 1 47 | 23 20 | 10 9  | 0 48 | 0 37 | 18 3  | 15 44 | 6 21 |     |
| S 30 | 23n10 | 11s19 | 3n18 | 23n17 | 0s 7 | 23n26 | 0s 2 | 1s56 | 0n 5 | 7s18 | 1n17 | 9n25 | 2s25 | 16n27 | 0n41 | 8s47 | 1n47 | 23s20 | 10s 9 | 0n49 | 0n38 | 18n 3 | 15n43 | 6s21 |     |

# ASTRODIENST EPHEMERIS for the year 1792

## geocentric

JULY 1792

00:00 UT

| Day  | Sid.t    | ☉        | ☽        | ♀        | ♂        | ♂        | ♂        | ♂       | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | Day  |
|------|----------|----------|----------|----------|----------|----------|----------|---------|----------|----------|----------|----------|----------|----------|----------|------|
| S 1  | 18 38 54 | 9°42'55  | 23°11' 2 | 28°11'14 | 29°11'39 | 5°43'33  | 21°48'48 | 0°37'37 | 16°53'53 | 27°R 4   | 23°R14   | 27°R52   | 28°11'20 | 10°51'15 | 19°55'57 | S 1  |
| M 2  | 18 42 51 | 10°40'05 | 7°47'44  | 0°51'17  | 0°55'53  | 6° 3'    | 21°51'   | 0°41'   | 16°56'   | 27°4     | 23°41'14 | 27°11'44 | 28°17'   | 10°22'   | 20° 4'   | M 2  |
| T 3  | 18 46 48 | 11°37'15 | 22°49'   | 2°21'    | 2° 6'    | 6°33'    | 21°53'   | 0°45'   | 17° 0'   | 27° 4'   | 23°13'   | 27°35'   | 28°14'   | 10°28'   | 20°11'   | T 3  |
| W 4  | 18 50 44 | 12°34'26 | 8°37' 7  | 4°26'    | 3°20'    | 7° 3'    | 21°56'   | 0°49'   | 17° 3'   | 27° 4'   | 23°12'   | 27°25'   | 28°11'   | 10°35'   | 20°18'   | W 4  |
| T 5  | 18 54 41 | 13°31'36 | 23°26'   | 6°34'    | 4°33'    | 7°33'    | 21°59'   | 0°53'   | 17° 6'   | 27° 4'   | 23°11'   | 27°15'   | 28° 8'   | 10°42'   | 20°24'   | T 5  |
| F 6  | 18 58 37 | 14°28'46 | 8°36'36  | 8°42'    | 5°47'    | 8° 4'    | 22° 2'   | 0°57'   | 17° 9'   | 27° 4'   | 23°10'   | 27° 7'   | 28° 5'   | 10°49'   | 20°31'   | F 6  |
| S 7  | 19 2 34  | 15°25'57 | 23°27'   | 10°51'   | 7° 0'    | 8°35'    | 22° 6'   | 1° 0'   | 17°13'   | 27° 4'   | 23° 9'   | 27° 1'   | 28° 1'   | 10°55'   | 20°38'   | S 7  |
| S 8  | 19 6 30  | 16°23'08 | 7°35'52  | 13° 0'   | 8°14'    | 9° 6'    | 22° 9'   | 1° 4'   | 17°16'   | 27°D 4   | 23° 8'   | 26°57'   | 27°58'   | 11° 2'   | 20°45'   | S 8  |
| M 9  | 19 10 27 | 17°20'20 | 21°49'   | 15° 9'   | 9°27'    | 9°37'    | 22°13'   | 1° 8'   | 17°19'   | 27° 4'   | 23° 7'   | 26°D56   | 27°55'   | 11° 9'   | 20°52'   | M 9  |
| T 10 | 19 14 24 | 18°17'32 | 5°17'17  | 17°19'   | 10°41'   | 10° 8'   | 22°17'   | 1°11'   | 17°23'   | 27° 4'   | 23° 6'   | 26°56'   | 27°52'   | 11°15'   | 20°58'   | T 10 |
| W11  | 19 18 20 | 19°14'44 | 18°20'   | 19°27'   | 11°55'   | 10°40'   | 22°20'   | 1°15'   | 17°26'   | 27° 4'   | 23° 5'   | 26°R57   | 27°49'   | 11°22'   | 21° 5'   | W11  |
| T 12 | 19 22 17 | 20°11'58 | 1°18' 1  | 21°36'   | 13° 8'   | 11°12'   | 22°25'   | 1°18'   | 17°29'   | 27° 4'   | 23° 4'   | 26°56'   | 27°45'   | 11°29'   | 21°12'   | T 12 |
| F 13 | 19 26 13 | 21° 9'12 | 13°25'   | 23°43'   | 14°22'   | 11°44'   | 22°29'   | 1°21'   | 17°33'   | 27° 4'   | 23° 3'   | 26°54'   | 27°42'   | 11°36'   | 21°19'   | F 13 |
| S 14 | 19 30 10 | 22° 6'26 | 25°36'   | 25°50'   | 15°36'   | 12°16'   | 22°33'   | 1°24'   | 17°36'   | 27° 4'   | 23° 2'   | 26°49'   | 27°39'   | 11°42'   | 21°26'   | S 14 |
| S 15 | 19 34 6  | 23° 3'42 | 7°11'37  | 27°55'   | 16°50'   | 12°48'   | 22°38'   | 1°27'   | 17°40'   | 27° 4'   | 23° 1'   | 26°42'   | 27°36'   | 11°49'   | 21°33'   | S 15 |
| M16  | 19 38 3  | 24° 0'58 | 19°33'   | 29°59'   | 18° 3'   | 13°21'   | 22°43'   | 1°30'   | 17°43'   | 27° 5'   | 22°59'   | 26°33'   | 27°33'   | 11°56'   | 21°39'   | M16  |
| T 17 | 19 41 59 | 24°58'14 | 1°52'25  | 2°11' 1  | 19°17'   | 13°54'   | 22°48'   | 1°33'   | 17°47'   | 27° 5'   | 22°58'   | 26°22'   | 27°30'   | 12° 3'   | 21°46'   | T 17 |
| W18  | 19 45 56 | 25°55'31 | 13°17'   | 4° 2'    | 20°31'   | 14°27'   | 22°53'   | 1°36'   | 17°50'   | 27° 5'   | 22°57'   | 26°10'   | 27°26'   | 12° 9'   | 21°53'   | W18  |
| T 19 | 19 49 53 | 26°52'49 | 25° 9'   | 6° 2'    | 21°45'   | 15° 0'   | 22°58'   | 1°38'   | 17°54'   | 27° 6'   | 22°56'   | 25°59'   | 27°23'   | 12°16'   | 22° 0'   | T 19 |
| F 20 | 19 53 49 | 27°50'08 | 7°11' 4  | 8° 0'    | 22°59'   | 15°33'   | 23° 3'   | 1°41'   | 17°57'   | 27° 6'   | 22°55'   | 25°50'   | 27°20'   | 12°23'   | 22° 7'   | F 20 |
| S 21 | 19 57 46 | 28°47'27 | 19° 2'   | 9°56'    | 24°12'   | 16° 7'   | 23° 9'   | 1°43'   | 18° 1'   | 27° 6'   | 22°54'   | 25°42'   | 27°17'   | 12°29'   | 22°14'   | S 21 |
| S 22 | 20 1 42  | 29°44'46 | 1°11' 7  | 11°50'   | 25°26'   | 16°41'   | 23°14'   | 1°46'   | 18° 5'   | 27° 7'   | 22°53'   | 25°37'   | 27°14'   | 12°36'   | 22°21'   | S 22 |
| M23  | 20 5 39  | 0°42'06  | 13°19'   | 13°43'   | 26°40'   | 17°14'   | 23°20'   | 1°48'   | 18° 8'   | 27° 7'   | 22°51'   | 25°34'   | 27°11'   | 12°43'   | 22°27'   | M23  |
| T 24 | 20 9 35  | 1°39'27  | 25°42'   | 15°34'   | 27°54'   | 17°48'   | 23°26'   | 1°50'   | 18°12'   | 27° 8'   | 22°50'   | 25°D33   | 27° 7'   | 12°50'   | 22°34'   | T 24 |
| W25  | 20 13 32 | 2°36'48  | 8°45'19  | 17°24'   | 29° 8'   | 18°23'   | 23°32'   | 1°52'   | 18°15'   | 27° 8'   | 22°49'   | 25°34'   | 27° 4'   | 12°56'   | 22°41'   | W25  |
| T 26 | 20 17 28 | 3°34'09  | 21°14'   | 19°11'   | 0°42'22  | 18°57'   | 23°38'   | 1°54'   | 18°19'   | 27° 9'   | 22°48'   | 25°35'   | 27° 1'   | 13° 3'   | 22°48'   | T 26 |
| F 27 | 20 21 25 | 4°31'32  | 4°11'29  | 20°57'   | 1°36'    | 19°32'   | 23°45'   | 1°56'   | 18°23'   | 27° 9'   | 22°46'   | 25°R35   | 26°58'   | 13°10'   | 22°55'   | F 27 |
| S 28 | 20 25 22 | 5°28'54  | 18° 9'   | 22°42'   | 2°50'    | 20° 6'   | 23°51'   | 1°58'   | 18°26'   | 27°10'   | 22°45'   | 25°34'   | 26°55'   | 13°16'   | 23° 1'   | S 28 |
| S 29 | 20 29 18 | 6°26'18  | 2°17'14  | 24°25'   | 4° 4'    | 20°41'   | 23°58'   | 1°59'   | 18°30'   | 27°11'   | 22°44'   | 25°32'   | 26°51'   | 13°23'   | 23° 8'   | S 29 |
| M30  | 20 33 15 | 7°23'42  | 16°44'   | 26° 6'   | 5°18'    | 21°16'   | 24° 5'   | 2° 1'   | 18°34'   | 27°11'   | 22°43'   | 25°27'   | 26°48'   | 13°30'   | 23°15'   | M30  |
| T 31 | 20 37 11 | 8°21'06  | 1°33'35  | 27°11'45 | 6°11'32  | 21°45'51 | 24°41'12 | 2°3' 3  | 18°37'37 | 27°12'12 | 22°41'12 | 25°11'21 | 26°11'45 | 13°33'37 | 23°22'22 | T 31 |

| Day  | ☉     | ☽     | ♀    | ♂     | ♂    | ♂     | ♂    | ♂    | ♂    | ♂    | ♂    | ♂    | ♂    | ♂     | ♂    | ♂    |
|------|-------|-------|------|-------|------|-------|------|------|------|------|------|------|------|-------|------|------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl | lat  | decl | lat  | decl  | lat  | lat  |
| S 1  | 23n 6 | 14s33 | 4n 8 | 23n31 | 0n 4 | 23n29 | 0n 1 | 2s 9 | 0n 4 | 7s20 | 1n16 | 9n26 | 2s25 | 16n26 | 0n41 | 8s47 |
| M 2  | 23 2  | 16 58 | 4 43 | 23 43 | 0 15 | 23 31 | 0 3  | 2 22 | 0 2  | 7 21 | 1 16 | 9 27 | 2 25 | 16 25 | 0 41 | 8 47 |
| T 3  | 22 57 | 18 16 | 5 0  | 23 52 | 0 26 | 23 33 | 0 6  | 2 35 | 0 1  | 7 22 | 1 16 | 9 29 | 2 25 | 16 24 | 0 41 | 8 47 |
| W 4  | 22 52 | 18 17 | 4 56 | 23 59 | 0 36 | 23 33 | 0 8  | 2 48 | 0 0  | 7 23 | 1 16 | 9 30 | 2 25 | 16 23 | 0 41 | 8 47 |
| T 5  | 22 47 | 16 59 | 4 31 | 24 4  | 0 46 | 23 34 | 0 11 | 3 1  | 0s 1 | 7 25 | 1 15 | 9 31 | 2 26 | 16 22 | 0 40 | 8 47 |
| F 6  | 22 41 | 14 29 | 3 47 | 24 5  | 0 55 | 23 33 | 0 13 | 3 14 | 0 2  | 7 26 | 1 15 | 9 32 | 2 26 | 16 21 | 0 40 | 8 47 |
| S 7  | 22 34 | 11 5  | 2 48 | 24 4  | 1 3  | 23 32 | 0 15 | 3 28 | 0 3  | 7 27 | 1 15 | 9 33 | 2 26 | 16 20 | 0 40 | 8 47 |
| S 8  | 22 27 | 7 5   | 1 39 | 24 0  | 1 11 | 23 30 | 0 18 | 3 41 | 0 5  | 7 29 | 1 14 | 9 34 | 2 26 | 16 19 | 0 40 | 8 47 |
| M 9  | 22 20 | 2 50  | 0 27 | 23 54 | 1 18 | 23 27 | 0 20 | 3 54 | 0 6  | 7 31 | 1 14 | 9 35 | 2 27 | 16 18 | 0 40 | 8 47 |
| T 10 | 22 13 | 1n25  | 0s44 | 23 44 | 1 25 | 23 24 | 0 22 | 4 8  | 0 7  | 7 32 | 1 14 | 9 36 | 2 27 | 16 17 | 0 40 | 8 47 |
| W11  | 22 5  | 5 29  | 1 51 | 23 32 | 1 30 | 23 20 | 0 25 | 4 21 | 0 8  | 7 34 | 1 14 | 9 37 | 2 27 | 16 16 | 0 40 | 8 47 |
| T 12 | 21 57 | 9 10  | 2 51 | 23 18 | 1 35 | 23 16 | 0 27 | 4 34 | 0 9  | 7 36 | 1 13 | 9 38 | 2 27 | 16 15 | 0 40 | 8 47 |
| F 13 | 21 48 | 12 22 | 3 41 | 23 0  | 1 39 | 23 10 | 0 29 | 4 48 | 0 10 | 7 38 | 1 13 | 9 39 | 2 28 | 16 14 | 0 40 | 8 47 |
| S 14 | 21 39 | 14 58 | 4 20 | 22 41 | 1 42 | 23 4  | 0 31 | 5 2  | 0 11 | 7 39 | 1 13 | 9 40 | 2 28 | 16 13 | 0 40 | 8 48 |
| S 15 | 21 29 | 16 53 | 4 47 | 22 19 | 1 45 | 22 57 | 0 34 | 5 15 | 0 12 | 7 41 | 1 13 | 9 41 | 2 28 | 16 12 | 0 40 | 8 48 |
| M16  | 21 20 | 18 3  | 5 1  | 21 55 | 1 47 | 22 50 | 0 36 | 5 29 | 0 13 | 7 43 | 1 12 | 9 41 | 2 28 | 16 11 | 0 40 | 8 48 |
| T 17 | 21 9  | 18 25 | 5 2  | 21 29 | 1 48 | 22 42 | 0 38 | 5 43 | 0 15 | 7 45 | 1 12 | 9 42 | 2 29 | 16 10 | 0 40 | 8 48 |
| W18  | 20 59 | 17 59 | 4 50 | 21 1  | 1 48 | 22 33 | 0 40 | 5 56 | 0 16 | 7 48 | 1 12 | 9 43 | 2 29 | 16 8  | 0 40 | 8 48 |
| T 19 | 20 48 | 16 46 | 4 26 | 20 32 | 1 48 | 22 24 | 0 42 | 6 10 | 0 17 | 7 50 | 1 12 | 9 43 | 2 29 | 16 7  | 0 40 | 8 48 |
| F 20 | 20 37 | 14 50 | 3 49 | 20 1  | 1 47 | 22 14 | 0 44 | 6 24 | 0 18 | 7 52 | 1 11 | 9 44 | 2 29 | 16 6  | 0 40 | 8 49 |
| S 21 | 20 25 | 12 14 | 3 3  | 19 29 | 1 46 | 22 3  | 0 46 | 6 38 | 0 19 | 7 54 | 1 11 | 9 45 | 2 30 | 16 5  | 0 40 | 8 49 |
| S 22 | 20 13 | 9 7   | 2 7  | 18 55 | 1 44 | 21 52 | 0 48 | 6 52 | 0 20 | 7 56 | 1 11 | 9 45 | 2 30 | 16 4  | 0 40 | 8 49 |
| M23  | 20 1  | 5 34  | 1 5  | 18 20 | 1 41 | 21 40 | 0 50 | 7 6  | 0 21 | 7 59 | 1 11 | 9 46 | 2 30 | 16 3  | 0 40 | 8 49 |
| T 24 | 19 49 | 1 43  | 0n 1 | 17 45 | 1 38 | 21 27 | 0 52 | 7 20 | 0 22 | 8 1  | 1 10 | 9 46 | 2 30 | 16 2  | 0 40 | 8 49 |
| W25  | 19 36 | 2s15  | 1 8  | 17 8  | 1 34 | 21 14 | 0 54 | 7 33 | 0 22 | 8 4  | 1 10 | 9 47 | 2 31 | 16 1  | 0 40 | 8 50 |
| T 26 | 19 23 | 6 13  | 2 14 | 16 30 | 1 30 | 21 0  | 0 56 | 7 47 | 0 23 | 8 6  | 1 10 | 9 47 | 2 31 | 16 0  | 0 40 | 8 50 |
| F 27 | 19 9  | 9 59  | 3 14 | 15 52 | 1 25 | 20 45 | 0 57 | 8 1  | 0 24 | 8 9  | 1 10 | 9 48 | 2 31 | 15 58 | 0 40 | 8 50 |
| S 28 | 18 55 | 13 20 | 4 5  | 15 14 | 1 20 | 20 30 | 0 59 | 8 15 | 0 25 | 8 11 | 1 9  | 9 48 | 2 31 | 15 57 | 0 40 | 8 50 |
| S 29 | 18 41 | 16 0  | 4 43 | 14 34 | 1 15 | 20 15 | 1 1  | 8 29 | 0 26 | 8 14 | 1 9  | 9 48 | 2 32 | 15 56 | 0 40 | 8 51 |
| M30  | 18 26 | 17 45 | 5 4  | 13 55 | 1 9  | 19 58 | 1 2  | 8 43 | 0 27 | 8 17 | 1 9  | 9 49 | 2 32 | 15 55 | 0 40 | 8 51 |
| T 31 | 18n12 | 18s21 | 5n 6 | 13n15 | 1n 2 | 19n41 | 1n 4 | 8s57 | 0s28 | 8s20 | 1n 9 | 9n49 | 2s32 | 15n54 | 0n40 | 8s51 |

Julian Day Number = 2375756.5, Delta T = 21.13 sec  
 Ecliptic obliquity = 23°27'49", Nutation = - 0°00'00", out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 21°50'35", Lahiri = 20°57'36"Greg. Calendar





# ASTRODIENST EPHEMERIS for the year 1792

## geocentric

SEPTEMBER 1792

00:00 UT

| Day  | Sid.t    | ☉                     | ☽                   | ♂                   | ♀                  | ♂                   | ♂                   | ♂                  | ♂                   | ♂                   | ♂                   | ♂                   | ♂                   | ♂                   | ♂                   | Day  |
|------|----------|-----------------------|---------------------|---------------------|--------------------|---------------------|---------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------|
| S 1  | 22 43 21 | 9 <sup>h</sup> 9'33"  | 10 <sup>h</sup> 1'  | 3 <sup>h</sup> 8'   | 16 <sup>h</sup> 8' | 11 <sup>h</sup> 50' | 28 <sup>h</sup> 55' | 1 <sup>h</sup> 54' | 20 <sup>h</sup> 36' | 27 <sup>h</sup> 50' | 22 <sup>h</sup> 0'  | 24 <sup>h</sup> 19' | 25 <sup>h</sup> 3'  | 17 <sup>h</sup> 11' | 26 <sup>h</sup> 44' | S 1  |
| S 2  | 22 47 17 | 10° 7'43"             | 24°21'              | 3°23'               | 17°22'             | 12°29'              | 29° 6'              | 1 <sup>h</sup> 52' | 20°39'              | 27°52'              | 21°59'              | 24°D18              | 25° 0'              | 17°18'              | 26°49'              | S 2  |
| M 3  | 22 51 14 | 11° 5'54"             | 8 <sup>h</sup> 21'  | 3°31'               | 18°36'             | 13° 9'              | 29°16'              | 1°50'              | 20°43'              | 27°54'              | 21°57'              | 24 <sup>h</sup> 19' | 24°57'              | 17°25'              | 26°55'              | M 3  |
| T 4  | 22 55 11 | 12° 4'07"             | 21°56'              | 3°R34               | 19°51'             | 13°49'              | 29°27'              | 1°48'              | 20°46'              | 27°55'              | 21°56'              | 24°19'              | 24°54'              | 17°32'              | 27° 1'              | T 4  |
| W 5  | 22 59 7  | 13° 2'22"             | 5 <sup>h</sup> 8'   | 3°31'               | 21° 5'             | 14°28'              | 29°38'              | 1°46'              | 20°50'              | 27°57'              | 21°55'              | 24°20'              | 24°51'              | 17°38'              | 27° 6'              | W 5  |
| T 6  | 23 3 4   | 14° 0'39"             | 17°57'              | 3°22'               | 22°20'             | 15° 8'              | 29°48'              | 1°43'              | 20°54'              | 27°59'              | 21°54'              | 24°21'              | 24°48'              | 17°45'              | 27°12'              | T 6  |
| F 7  | 23 7 0   | 14°58'59"             | 0 <sup>h</sup> 26'  | 3° 6'               | 23°34'             | 15°48'              | 29°59'              | 1°41'              | 20°57'              | 28° 1'              | 21°53'              | 24°22'              | 24°44'              | 17°52'              | 27°17'              | F 7  |
| S 8  | 23 10 57 | 15°57'20"             | 12°39'              | 2°43'               | 24°49'             | 16°29'              | 0 <sup>h</sup> 10'  | 1°38'              | 21° 1'              | 28° 2'              | 21°51'              | 24°R22              | 24°41'              | 17°58'              | 27°23'              | S 8  |
| S 9  | 23 14 53 | 16°55'44"             | 24°41'              | 2°14'               | 26° 3'             | 17° 9'              | 0°21'               | 1°36'              | 21° 4'              | 28° 4'              | 21°50'              | 24°22'              | 24°38'              | 18° 5'              | 27°28'              | S 9  |
| M10  | 23 18 50 | 17°54'09"             | 6 <sup>h</sup> 35'  | 1°38'               | 27°18'             | 17°49'              | 0°33'               | 1°33'              | 21° 7'              | 28° 6'              | 21°49'              | 24°22'              | 24°35'              | 18°12'              | 27°33'              | M10  |
| T 11 | 23 22 46 | 18°52'37"             | 18°27'              | 0°56'               | 28°32'             | 18°30'              | 0°44'               | 1°30'              | 21°11'              | 28° 8'              | 21°48'              | 24°21'              | 24°32'              | 18°19'              | 27°38'              | T 11 |
| W12  | 23 26 43 | 19°51'07"             | 0 <sup>h</sup> 21'  | 0° 8'               | 29°47'             | 19°10'              | 0°55'               | 1°27'              | 21°14'              | 28°10'              | 21°47'              | 24°21'              | 24°28'              | 18°25'              | 27°44'              | W12  |
| T 13 | 23 30 40 | 20°49'39"             | 12°20'              | 29 <sup>h</sup> 14' | 1 <sup>h</sup> 1'  | 19°51'              | 1° 7'               | 1°24'              | 21°18'              | 28°11'              | 21°46'              | 24°20'              | 24°25'              | 18°32'              | 27°49'              | T 13 |
| F 14 | 23 34 36 | 21°48'13"             | 24°27'              | 28°17'              | 2°16'              | 20°32'              | 1°18'               | 1°21'              | 21°21'              | 28°13'              | 21°45'              | 24°20'              | 24°22'              | 18°39'              | 27°54'              | F 14 |
| S 15 | 23 38 33 | 22°46'49"             | 6 <sup>h</sup> 45'  | 27°15'              | 3°30'              | 21°13'              | 1°29'               | 1°18'              | 21°24'              | 28°15'              | 21°44'              | 24°20'              | 24°19'              | 18°45'              | 27°59'              | S 15 |
| S 16 | 23 42 29 | 23°45'27"             | 19°16'              | 26°12'              | 4°45'              | 21°54'              | 1°41'               | 1°15'              | 21°28'              | 28°17'              | 21°42'              | 24°20'              | 24°16'              | 18°52'              | 28° 4'              | S 16 |
| M17  | 23 46 26 | 24°44'07"             | 2 <sup>h</sup> 0'   | 25° 7'              | 5°59'              | 22°35'              | 1°53'               | 1°12'              | 21°31'              | 28°19'              | 21°41'              | 24°20'              | 24°13'              | 18°59'              | 28° 9'              | M17  |
| T 18 | 23 50 22 | 25°42'49"             | 14°59'              | 24° 4'              | 7°14'              | 23°16'              | 2° 4'               | 1° 8'              | 21°34'              | 28°21'              | 21°40'              | 24°20'              | 24° 9'              | 19° 6'              | 28°13'              | T 18 |
| W19  | 23 54 19 | 26°41'33"             | 28°12'              | 23° 2'              | 8°29'              | 23°57'              | 2°16'               | 1° 5'              | 21°37'              | 28°23'              | 21°39'              | 24°19'              | 24° 6'              | 19°12'              | 28°18'              | W19  |
| T 20 | 23 58 15 | 27°40'18"             | 11 <sup>h</sup> 38' | 22° 5'              | 9°43'              | 24°39'              | 2°28'               | 1° 1'              | 21°41'              | 28°25'              | 21°38'              | 24°19'              | 24° 3'              | 19°19'              | 28°23'              | T 20 |
| F 21 | 0 2 12   | 28°39'06"             | 25°17'              | 21°13'              | 10°58'             | 25°20'              | 2°40'               | 0°58'              | 21°44'              | 28°27'              | 21°37'              | 24°19'              | 24° 0'              | 19°26'              | 28°27'              | F 21 |
| S 22 | 0 6 8    | 29°37'55"             | 9 <sup>h</sup> 7'   | 20°28'              | 12°12'             | 26° 2'              | 2°52'               | 0°54'              | 21°47'              | 28°29'              | 21°36'              | 24°18'              | 23°57'              | 19°32'              | 28°32'              | S 22 |
| S 23 | 0 10 5   | 0 <sup>h</sup> 36'46" | 23° 8'              | 19°51'              | 13°27'             | 26°44'              | 3° 4'               | 0°50'              | 21°50'              | 28°31'              | 21°35'              | 24°18'              | 23°53'              | 19°39'              | 28°36'              | S 23 |
| M24  | 0 14 2   | 1°35'39"              | 7 <sup>h</sup> 17'  | 19°23'              | 14°41'             | 27°25'              | 3°16'               | 0°46'              | 21°53'              | 28°33'              | 21°34'              | 24°D18              | 23°50'              | 19°46'              | 28°41'              | M24  |
| T 25 | 0 17 58  | 2°34'34"              | 21°33'              | 19° 4'              | 15°56'             | 28° 7'              | 3°28'               | 0°42'              | 21°56'              | 28°35'              | 21°33'              | 24°18'              | 23°47'              | 19°52'              | 28°45'              | T 25 |
| W26  | 0 21 55  | 3°33'30"              | 5 <sup>h</sup> 53'  | 18°D56              | 17°10'             | 28°49'              | 3°40'               | 0°38'              | 21°59'              | 28°37'              | 21°32'              | 24°19'              | 23°44'              | 19°59'              | 28°49'              | W26  |
| T 27 | 0 25 51  | 4°32'28"              | 20°14'              | 18°58'              | 18°25'             | 29°31'              | 3°52'               | 0°34'              | 22° 2'              | 28°39'              | 21°32'              | 24°20'              | 23°41'              | 20° 6'              | 28°53'              | T 27 |
| F 28 | 0 29 48  | 5°31'28"              | 4 <sup>h</sup> 32'  | 19°10'              | 19°40'             | 0 <sup>h</sup> 14'  | 4° 5'               | 0°30'              | 22° 5'              | 28°41'              | 21°31'              | 24°20'              | 23°38'              | 20°13'              | 28°58'              | F 28 |
| S 29 | 0 33 44  | 6°30'29"              | 18°43'              | 19°33'              | 20°54'             | 0°56'               | 4°17'               | 0°26'              | 22° 8'              | 28°43'              | 21°30'              | 24°R21              | 23°34'              | 20°19'              | 29° 2'              | S 29 |
| S 30 | 0 37 41  | 7 <sup>h</sup> 29'33" | 2 <sup>h</sup> 43'  | 20 <sup>h</sup> 5'  | 22 <sup>h</sup> 9' | 1 <sup>h</sup> 38'  | 4 <sup>h</sup> 29'  | 0 <sup>h</sup> 22' | 22 <sup>h</sup> 11' | 28 <sup>h</sup> 45' | 21 <sup>h</sup> 29' | 24 <sup>h</sup> 21' | 23 <sup>h</sup> 31' | 20 <sup>h</sup> 26' | 29 <sup>h</sup> 5'  | S 30 |

| Day  | ☉    | ☽        | ♂        | ♀        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        |
|------|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|      | decl | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat |
| S 1  | 8n 9 | 6s37     | 1n18     | 4s39     | 3s43     | 6n46     | 1n24     | 16s14    | 0s52     | 10s 8    | 1n 2     | 9n38     | 2s40     | 15n17    | 0n40     | 9s 6     |
| S 2  | 7 47 | 2 15     | 0s 0     | 4 51     | 3 49     | 6 17     | 1 24     | 16 26    | 0 53     | 10 12    | 1 2      | 9 37     | 2 41     | 15 16    | 0 41     | 9 7      |
| M 3  | 7 25 | 2n 8     | 1 17     | 5 0      | 3 56     | 5 47     | 1 23     | 16 39    | 0 54     | 10 16    | 1 2      | 9 36     | 2 41     | 15 15    | 0 41     | 9 8      |
| T 4  | 7 2  | 6 17     | 2 27     | 5 6      | 4 1      | 5 17     | 1 23     | 16 52    | 0 54     | 10 19    | 1 2      | 9 35     | 2 41     | 15 13    | 0 41     | 9 8      |
| W 5  | 6 40 | 9 59     | 3 27     | 5 9      | 4 5      | 4 48     | 1 22     | 17 4     | 0 55     | 10 23    | 1 2      | 9 34     | 2 41     | 15 12    | 0 41     | 9 9      |
| T 6  | 6 18 | 13 7     | 4 15     | 5 8      | 4 9      | 4 18     | 1 21     | 17 16    | 0 55     | 10 27    | 1 1      | 9 33     | 2 42     | 15 11    | 0 41     | 9 10     |
| F 7  | 5 55 | 15 32    | 4 50     | 5 4      | 4 11     | 3 47     | 1 21     | 17 29    | 0 56     | 10 31    | 1 1      | 9 32     | 2 42     | 15 10    | 0 41     | 9 10     |
| S 8  | 5 33 | 17 12    | 5 10     | 4 56     | 4 12     | 3 17     | 1 20     | 17 41    | 0 56     | 10 35    | 1 1      | 9 31     | 2 42     | 15 9     | 0 41     | 9 11     |
| S 9  | 5 10 | 18 5     | 5 17     | 4 44     | 4 11     | 2 47     | 1 19     | 17 53    | 0 57     | 10 39    | 1 1      | 9 30     | 2 42     | 15 8     | 0 41     | 9 12     |
| M10  | 4 47 | 18 9     | 5 10     | 4 27     | 4 9      | 2 16     | 1 18     | 18 5     | 0 58     | 10 43    | 1 1      | 9 29     | 2 42     | 15 7     | 0 41     | 9 12     |
| T 11 | 4 24 | 17 25    | 4 49     | 4 7      | 4 5      | 1 46     | 1 17     | 18 17    | 0 58     | 10 47    | 1 1      | 9 28     | 2 43     | 15 6     | 0 41     | 9 13     |
| W12  | 4 1  | 15 55    | 4 17     | 3 43     | 4 0      | 1 15     | 1 16     | 18 28    | 0 59     | 10 52    | 1 1      | 9 27     | 2 43     | 15 5     | 0 41     | 9 14     |
| T 13 | 3 38 | 13 43    | 3 33     | 3 15     | 3 52     | 0 44     | 1 15     | 18 40    | 0 59     | 10 56    | 1 0      | 9 26     | 2 43     | 15 4     | 0 41     | 9 14     |
| F 14 | 3 15 | 10 54    | 2 38     | 2 43     | 3 43     | 0 14     | 1 14     | 18 52    | 1 0      | 11 0     | 1 0      | 9 24     | 2 43     | 15 3     | 0 41     | 9 15     |
| S 15 | 2 52 | 7 33     | 1 36     | 2 8      | 3 31     | 0s17     | 1 13     | 19 3     | 1 0      | 11 4     | 1 0      | 9 23     | 2 43     | 15 1     | 0 41     | 9 16     |
| S 16 | 2 29 | 3 49     | 0 28     | 1 31     | 3 18     | 0 48     | 1 11     | 19 14    | 1 1      | 11 8     | 1 0      | 9 22     | 2 44     | 15 0     | 0 41     | 9 16     |
| M17  | 2 6  | 0s 9     | 0n43     | 0 51     | 3 3      | 1 19     | 1 10     | 19 25    | 1 1      | 11 12    | 1 0      | 9 20     | 2 44     | 14 59    | 0 41     | 9 17     |
| T 18 | 1 42 | 4 11     | 1 52     | 0 11     | 2 46     | 1 49     | 1 9      | 19 36    | 1 2      | 11 16    | 1 0      | 9 19     | 2 44     | 14 58    | 0 41     | 9 18     |
| W19  | 1 19 | 8 5      | 2 57     | 0n30     | 2 28     | 2 20     | 1 7      | 19 47    | 1 2      | 11 20    | 1 0      | 9 18     | 2 44     | 14 57    | 0 41     | 9 19     |
| T 20 | 0 56 | 11 38    | 3 53     | 1 10     | 2 9      | 2 51     | 1 6      | 19 58    | 1 3      | 11 25    | 0 59     | 9 16     | 2 44     | 14 56    | 0 41     | 9 19     |
| F 21 | 0 32 | 14 37    | 4 37     | 1 48     | 1 50     | 3 22     | 1 4      | 20 8     | 1 3      | 11 29    | 0 59     | 9 15     | 2 44     | 14 55    | 0 41     | 9 20     |
| S 22 | 0 9  | 16 48    | 5 6      | 2 25     | 1 29     | 3 52     | 1 2      | 20 19    | 1 4      | 11 33    | 0 59     | 9 14     | 2 45     | 14 54    | 0 41     | 9 21     |
| S 23 | 0s15 | 18 1     | 5 17     | 2 58     | 1 9      | 4 23     | 1 1      | 20 29    | 1 4      | 11 37    | 0 59     | 9 12     | 2 45     | 14 53    | 0 41     | 9 21     |
| M24  | 0 38 | 18 7     | 5 9      | 3 27     | 0 49     | 4 53     | 0 59     | 20 39    | 1 4      | 11 41    | 0 59     | 9 11     | 2 45     | 14 52    | 0 41     | 9 22     |
| T 25 | 1 2  | 17 6     | 4 42     | 3 52     | 0 30     | 5 24     | 0 57     | 20 49    | 1 5      | 11 46    | 0 59     | 9 9      | 2 45     | 14 51    | 0 41     | 9 23     |
| W26  | 1 25 | 14 59    | 3 57     | 4 13     | 0 11     | 5 54     | 0 55     | 20 59    | 1 5      | 11 50    | 0 59     | 9 8      | 2 45     | 14 50    | 0 41     | 9 24     |
| T 27 | 1 48 | 11 56    | 2 58     | 4 28     | 0n 7     | 6 24     | 0 54     | 21 8     | 1 6      | 11 54    | 0 59     | 9 6      | 2 45     | 14 49    | 0 41     | 9 24     |
| F 28 | 2 12 | 8 11     | 1 48     | 4 39     | 0 23     | 6 54     | 0 52     | 21 18    | 1 6      | 11 58    | 0 58     | 9 5      | 2 45     | 14 49    | 0 41     | 9 25     |
| S 29 | 2 35 | 3 59     | 0 31     | 4 44     | 0 38     | 7 24     | 0 50     | 21 27    | 1 7      | 12 3     | 0 58     | 9 3      | 2 46     | 14 48    | 0 41     | 9 26     |
| S 30 | 2s59 | 0n22     | 0s46     | 4n44     | 0n52     | 7s54     | 0n48     | 21s36    | 1s 7     | 12s 7    | 0n58     | 9n 2     | 2s46     | 14n47    | 0n41     | 9s27     |

Julian Day Number = 2375818.5, Delta T = 21.09 sec  
 Ecliptic obliquity = 23°27'50", Nutation = - 0°00'01", out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 21°50'44", Lahiri = 20°57'44"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1792  
geocentric

OCTOBER 1792

00:00 UT

| Day  | Sid.t   | ☉        | ☽     | ♀     | ♂     | ♂     | ♂     | ♂     | ♂     | ♂     | ♂      | ♂      | ♂     | ♂     | ♂     | Day  |
|------|---------|----------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|------|
| M 1  | 0 41 37 | 8♂28'38  | 16♂27 | 20♂46 | 23♂23 | 2♂21  | 4♂42  | 0°R18 | 22♂14 | 28♂48 | 21°R28 | 24°R20 | 23♂28 | 20♂33 | 29♂9  | M 1  |
| T 2  | 0 45 34 | 9°27'46  | 29°54 | 21°35 | 24°38 | 3° 3  | 4°54  | 0♂13  | 22°17 | 28°50 | 21°27  | 24♂19  | 23°25 | 20°39 | 29°13 | T 2  |
| W 3  | 0 49 31 | 10°26'55 | 13♂1  | 22°33 | 25°52 | 3°46  | 5° 6  | 0° 9  | 22°20 | 28°52 | 21°27  | 24°16  | 23°22 | 20°46 | 29°17 | W 3  |
| T 4  | 0 53 27 | 11°26'08 | 25°50 | 23°37 | 27° 7 | 4°28  | 5°19  | 0° 5  | 22°22 | 28°54 | 21°26  | 24°14  | 23°19 | 20°53 | 29°20 | T 4  |
| F 5  | 0 57 24 | 12°25'22 | 8♂20  | 24°48 | 28°21 | 5°11  | 5°32  | 0° 0  | 22°25 | 28°56 | 21°25  | 24°11  | 23°15 | 21° 0 | 29°24 | F 5  |
| S 6  | 1 1 20  | 13°24'39 | 20°34 | 26° 5 | 29°36 | 5°54  | 5°44  | 29♂56 | 22°28 | 28°58 | 21°24  | 24° 9  | 23°12 | 21° 6 | 29°27 | S 6  |
| S 7  | 1 5 17  | 14°23'58 | 2♂37  | 27°26 | 0♂51  | 6°37  | 5°57  | 29°51 | 22°30 | 29° 0 | 21°24  | 24° 8  | 23° 9 | 21°13 | 29°31 | S 7  |
| M 8  | 1 9 13  | 15°23'19 | 14°32 | 28°52 | 2° 5  | 7°20  | 6°10  | 29°47 | 22°33 | 29° 3 | 21°23  | 24°D 7 | 23° 6 | 21°20 | 29°34 | M 8  |
| T 9  | 1 13 10 | 16°22'42 | 26°24 | 0♂21  | 3°20  | 8° 3  | 6°22  | 29°42 | 22°36 | 29° 5 | 21°22  | 24° 8  | 23° 3 | 21°26 | 29°37 | T 9  |
| W10  | 1 17 6  | 17°22'08 | 8♂17  | 1°53  | 4°34  | 8°46  | 6°35  | 29°38 | 22°38 | 29° 7 | 21°22  | 24° 9  | 22°59 | 21°33 | 29°41 | W10  |
| T 11 | 1 21 3  | 18°21'36 | 20°17 | 3°28  | 5°49  | 9°30  | 6°48  | 29°33 | 22°41 | 29° 9 | 21°21  | 24°11  | 22°56 | 21°40 | 29°44 | T 11 |
| F 12 | 1 25 0  | 19°21'07 | 2♂28  | 5° 5  | 7° 3  | 10°13 | 7° 1  | 29°28 | 22°43 | 29°11 | 21°21  | 24°12  | 22°53 | 21°46 | 29°47 | F 12 |
| S 13 | 1 28 56 | 20°20'39 | 14°54 | 6°43  | 8°18  | 10°57 | 7°13  | 29°23 | 22°46 | 29°14 | 21°20  | 24°13  | 22°50 | 21°53 | 29°49 | S 13 |
| S 14 | 1 32 53 | 21°20'14 | 27°37 | 8°22  | 9°32  | 11°40 | 7°26  | 29°19 | 22°48 | 29°16 | 21°19  | 24°R14 | 22°47 | 22° 0 | 29°52 | S 14 |
| M15  | 1 36 49 | 22°19'51 | 10♂39 | 10° 3 | 10°47 | 12°24 | 7°39  | 29°14 | 22°50 | 29°18 | 21°19  | 24°13  | 22°44 | 22° 7 | 29°55 | M15  |
| T 16 | 1 40 46 | 23°19'30 | 24° 0 | 11°44 | 12° 2 | 13° 7 | 7°52  | 29° 9 | 22°53 | 29°20 | 21°18  | 24°10  | 22°40 | 22°13 | 29°58 | T 16 |
| W17  | 1 44 42 | 24°19'11 | 7♂39  | 13°26 | 13°16 | 13°51 | 8° 5  | 29° 4 | 22°55 | 29°23 | 21°18  | 24° 6  | 22°37 | 22°20 | 0♂0   | W17  |
| T 18 | 1 48 39 | 25°18'54 | 21°33 | 15° 8 | 14°31 | 14°35 | 8°18  | 29° 0 | 22°57 | 29°25 | 21°18  | 24° 2  | 22°34 | 22°27 | 0° 2  | T 18 |
| F 19 | 1 52 35 | 26°18'39 | 5♂38  | 16°50 | 15°45 | 15°19 | 8°31  | 28°55 | 22°59 | 29°27 | 21°17  | 23°57  | 22°31 | 22°33 | 0° 5  | F 19 |
| S 20 | 1 56 32 | 27°18'26 | 19°51 | 18°32 | 17° 0 | 16° 3 | 8°44  | 28°50 | 23° 1 | 29°29 | 21°17  | 23°52  | 22°28 | 22°40 | 0° 7  | S 20 |
| S 21 | 2 0 28  | 28°18'15 | 4♂6   | 20°13 | 18°14 | 16°47 | 8°57  | 28°45 | 23° 3 | 29°32 | 21°16  | 23°48  | 22°24 | 22°47 | 0° 9  | S 21 |
| M22  | 2 4 25  | 29°18'05 | 18°20 | 21°55 | 19°29 | 17°31 | 9°10  | 28°40 | 23° 5 | 29°34 | 21°16  | 23°46  | 22°21 | 22°54 | 0°11  | M22  |
| T 23 | 2 8 22  | 0♂17'57  | 2♂31  | 23°36 | 20°43 | 18°15 | 9°23  | 28°36 | 23° 7 | 29°36 | 21°16  | 23°D46 | 22°18 | 23° 0 | 0°13  | T 23 |
| W24  | 2 12 18 | 1°17'51  | 16°37 | 25°18 | 21°58 | 19° 0 | 9°37  | 28°31 | 23° 9 | 29°38 | 21°15  | 23°47  | 22°15 | 23° 7 | 0°15  | W24  |
| T 25 | 2 16 15 | 2°17'46  | 0♂36  | 26°58 | 23°12 | 19°44 | 9°50  | 28°26 | 23°11 | 29°41 | 21°15  | 23°48  | 22°12 | 23°14 | 0°17  | T 25 |
| F 26 | 2 20 11 | 3°17'42  | 14°28 | 28°39 | 24°27 | 20°29 | 10° 3 | 28°21 | 23°13 | 29°43 | 21°15  | 23°49  | 22° 9 | 23°20 | 0°18  | F 26 |
| S 27 | 2 24 8  | 4°17'41  | 28°11 | 0♂18  | 25°41 | 21°13 | 10°16 | 28°16 | 23°15 | 29°45 | 21°15  | 23°R50 | 22° 5 | 23°27 | 0°20  | S 27 |
| S 28 | 2 28 4  | 5°17'41  | 11♂44 | 1°58  | 26°56 | 21°58 | 10°29 | 28°12 | 23°16 | 29°47 | 21°14  | 23°48  | 22° 2 | 23°34 | 0°22  | S 28 |
| M29  | 2 32 1  | 6°17'43  | 25° 6 | 3°37  | 28°10 | 22°42 | 10°42 | 28° 7 | 23°18 | 29°50 | 21°14  | 23°45  | 21°59 | 23°40 | 0°23  | M29  |
| T 30 | 2 35 57 | 7°17'47  | 8♂14  | 5°16  | 29°25 | 23°27 | 10°56 | 28° 2 | 23°20 | 29°52 | 21°14  | 23°39  | 21°56 | 23°47 | 0°24  | T 30 |
| W31  | 2 39 54 | 8♂17'52  | 21♂9  | 6♂54  | 0♂39  | 24♂12 | 11♂9  | 27♂57 | 23♂21 | 29♂54 | 21♂14  | 23♂32  | 21♂53 | 23♂54 | 0♂25  | W31  |

| Day  | ☉     | ☽        | ♀        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        | ♂        |
|------|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|      | decl  | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat | decl lat |
| M 1  | 3s22  | 4n38     | 1s59     | 4n40     | 1n 5     | 8s23     | 0n46     | 21s45    | 1s 7     | 12s11    | 0n58     | 9n 0     | 2s46     | 14n46    | 0n41     | 9s28     |
| T 2  | 3 45  | 8 34     | 3 4      | 4 30     | 1 16     | 8 53     | 0 44     | 21 54    | 1 8      | 12 15    | 0 58     | 8 58     | 2 46     | 14 45    | 0 41     | 9 28     |
| W 3  | 4 8   | 11 59    | 3 58     | 4 17     | 1 26     | 9 22     | 0 41     | 22 2     | 1 8      | 12 20    | 0 58     | 8 57     | 2 46     | 14 44    | 0 41     | 9 29     |
| T 4  | 4 32  | 14 44    | 4 38     | 3 59     | 1 34     | 9 51     | 0 39     | 22 11    | 1 9      | 12 24    | 0 58     | 8 55     | 2 46     | 14 43    | 0 41     | 9 30     |
| F 5  | 4 55  | 16 43    | 5 3      | 3 37     | 1 41     | 10 19    | 0 37     | 22 19    | 1 9      | 12 28    | 0 58     | 8 54     | 2 46     | 14 42    | 0 41     | 9 31     |
| S 6  | 5 18  | 17 54    | 5 15     | 3 12     | 1 47     | 10 48    | 0 35     | 22 27    | 1 9      | 12 32    | 0 58     | 8 52     | 2 46     | 14 41    | 0 41     | 9 31     |
| S 7  | 5 41  | 18 15    | 5 12     | 2 44     | 1 52     | 11 16    | 0 33     | 22 35    | 1 10     | 12 37    | 0 58     | 8 50     | 2 46     | 14 41    | 0 41     | 9 32     |
| M 8  | 6 4   | 17 46    | 4 56     | 2 13     | 1 55     | 11 44    | 0 30     | 22 42    | 1 10     | 12 41    | 0 57     | 8 49     | 2 46     | 14 40    | 0 41     | 9 33     |
| T 9  | 6 27  | 16 32    | 4 27     | 1 39     | 1 57     | 12 12    | 0 28     | 22 50    | 1 10     | 12 45    | 0 57     | 8 47     | 2 46     | 14 39    | 0 41     | 9 34     |
| W10  | 6 50  | 14 34    | 3 46     | 1 4      | 1 59     | 12 39    | 0 26     | 22 57    | 1 11     | 12 50    | 0 57     | 8 45     | 2 46     | 14 38    | 0 41     | 9 35     |
| T 11 | 7 12  | 11 57    | 2 56     | 0 27     | 1 59     | 13 7     | 0 23     | 23 4     | 1 11     | 12 54    | 0 57     | 8 44     | 2 47     | 14 37    | 0 42     | 9 35     |
| F 12 | 7 35  | 8 47     | 1 57     | 0s12     | 1 59     | 13 33    | 0 21     | 23 11    | 1 11     | 12 58    | 0 57     | 8 42     | 2 47     | 14 37    | 0 42     | 9 36     |
| S 13 | 7 57  | 5 10     | 0 51     | 0 52     | 1 58     | 14 0     | 0 18     | 23 17    | 1 11     | 13 2     | 0 57     | 8 40     | 2 47     | 14 36    | 0 42     | 9 37     |
| S 14 | 8 20  | 1 14     | 0n19     | 1 33     | 1 56     | 14 26    | 0 16     | 23 24    | 1 12     | 13 7     | 0 57     | 8 38     | 2 47     | 14 35    | 0 42     | 9 38     |
| M15  | 8 42  | 2s51     | 1 29     | 2 15     | 1 53     | 14 52    | 0 13     | 23 30    | 1 12     | 13 11    | 0 57     | 8 37     | 2 47     | 14 34    | 0 42     | 9 38     |
| T 16 | 9 4   | 6 54     | 2 36     | 2 57     | 1 50     | 15 17    | 0 11     | 23 36    | 1 12     | 13 15    | 0 57     | 8 35     | 2 47     | 14 34    | 0 42     | 9 39     |
| W17  | 9 26  | 10 41    | 3 35     | 3 40     | 1 47     | 15 42    | 0 8      | 23 41    | 1 13     | 13 19    | 0 57     | 8 33     | 2 47     | 14 33    | 0 42     | 9 40     |
| T 18 | 9 48  | 13 56    | 4 23     | 4 23     | 1 43     | 16 7     | 0 6      | 23 47    | 1 13     | 13 24    | 0 57     | 8 32     | 2 47     | 14 32    | 0 42     | 9 41     |
| F 19 | 10 10 | 16 25    | 4 56     | 5 6      | 1 39     | 16 31    | 0 3      | 23 52    | 1 13     | 13 28    | 0 56     | 8 30     | 2 47     | 14 32    | 0 42     | 9 42     |
| S 20 | 10 31 | 17 55    | 5 11     | 5 49     | 1 34     | 16 55    | 0 1      | 23 57    | 1 13     | 13 32    | 0 56     | 8 28     | 2 47     | 14 31    | 0 42     | 9 42     |
| S 21 | 10 53 | 18 18    | 5 7      | 6 32     | 1 29     | 17 19    | 0s 2     | 24 2     | 1 14     | 13 36    | 0 56     | 8 27     | 2 47     | 14 30    | 0 42     | 9 43     |
| M22  | 11 14 | 17 31    | 4 44     | 7 15     | 1 23     | 17 42    | 0 5      | 24 6     | 1 14     | 13 41    | 0 56     | 8 25     | 2 47     | 14 30    | 0 42     | 9 44     |
| T 23 | 11 35 | 15 40    | 4 3      | 7 58     | 1 18     | 18 4     | 0 7      | 24 10    | 1 14     | 13 45    | 0 56     | 8 23     | 2 47     | 14 29    | 0 42     | 9 45     |
| W24  | 11 56 | 12 52    | 3 9      | 8 41     | 1 12     | 18 26    | 0 10     | 24 14    | 1 14     | 13 49    | 0 56     | 8 22     | 2 47     | 14 29    | 0 42     | 9 46     |
| T 25 | 12 17 | 9 21     | 2 3      | 9 23     | 1 6      | 18 48    | 0 13     | 24 18    | 1 14     | 13 53    | 0 56     | 8 20     | 2 47     | 14 28    | 0 42     | 9 46     |
| F 26 | 12 38 | 5 21     | 0 51     | 10 4     | 1 0      | 19 9     | 0 15     | 24 22    | 1 15     | 13 58    | 0 56     | 8 18     | 2 47     | 14 27    | 0 42     | 9 47     |
| S 27 | 12 58 | 1 5      | 0s24     | 10 45    | 0 53     | 19 29    | 0 18     | 24 25    | 1 15     | 14 2     | 0 56     | 8 17     | 2 46     | 14 27    | 0 42     | 9 48     |
| S 28 | 13 18 | 3n11     | 1 36     | 11 26    | 0 47     | 19 49    | 0 20     | 24 28    | 1 15     | 14 6     | 0 56     | 8 15     | 2 46     | 14 26    | 0 42     | 9 49     |
| M29  | 13 38 | 7 13     | 2 41     | 12 6     | 0 41     | 20 9     | 0 23     | 24 31    | 1 15     | 14 10    | 0 56     | 8 13     | 2 46     | 14 26    | 0 42     | 9 49     |
| T 30 | 13 58 | 10 51    | 3 37     | 12 45    | 0 34     | 20 28    | 0 26     | 24 33    | 1 15     | 14 14    | 0 56     | 8 12     | 2 46     | 14 25    | 0 42     | 9 50     |
| W31  | 14s17 | 13n53    | 4s20     | 13s24    | 0n27     | 20s46    | 0s28     | 24s36    | 1s15     | 14s18    | 0n56     | 8n10     | 2s46     | 14n25    | 0n42     | 9s51     |

Julian Day Number = 2375848.5, Delta T = 21.07 sec  
Ecliptic obliquity = 23°27'50, Nutation = - 0°00'03, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 21°50'48, Lahiri = 20°57'48Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1792

## geocentric

NOVEMBER 1792

00:00 UT

| Day  | Sid.t   | ☉        | ☽     | ♂     | ♀     | ♂     | ♂     | ♂      | ♂      | ♂     | ♂      | ♂      | ♂     | ♂     | ♂     | Day  |
|------|---------|----------|-------|-------|-------|-------|-------|--------|--------|-------|--------|--------|-------|-------|-------|------|
| T 1  | 2 43 51 | 9♐18'00  | 3♐49  | 8♐32  | 1♐54  | 24♐57 | 11♐22 | 27°R53 | 23♐23  | 29♐56 | 21°R14 | 23°R23 | 21♐50 | 24♐1  | 0♐26  | T 1  |
| F 2  | 2 47 47 | 10°18'09 | 16°15 | 10° 9 | 3° 8  | 25°42 | 11°35 | 27°Y48 | 23°24  | 29°58 | 21°14  | 23°14  | 21°46 | 24° 7 | 0°27  | F 2  |
| S 3  | 2 51 44 | 11°18'21 | 28°28 | 11°46 | 4°23  | 26°27 | 11°48 | 27°43  | 23°26  | 0♐ 1  | 21°14  | 23° 6  | 21°43 | 24°14 | 0°28  | S 3  |
| S 4  | 2 55 40 | 12°18'34 | 10♐29 | 13°22 | 5°37  | 27°12 | 12° 2 | 27°39  | 23°27  | 0° 3  | 21°D14 | 23° 0  | 21°40 | 24°21 | 0°29  | S 4  |
| M 5  | 2 59 37 | 13°18'50 | 22°23 | 14°59 | 6°52  | 27°57 | 12°15 | 27°34  | 23°28  | 0° 5  | 21°14  | 22°55  | 21°37 | 24°27 | 0°30  | M 5  |
| T 6  | 3 3 33  | 14°19'07 | 4♐13  | 16°34 | 8° 6  | 28°42 | 12°28 | 27°30  | 23°30  | 0° 7  | 21°14  | 22°52  | 21°34 | 24°34 | 0°30  | T 6  |
| W 7  | 3 7 30  | 15°19'27 | 16° 5 | 18°10 | 9°21  | 29°27 | 12°41 | 27°25  | 23°31  | 0° 9  | 21°14  | 22°D52 | 21°30 | 24°41 | 0°31  | W 7  |
| T 8  | 3 11 26 | 16°19'48 | 28° 3 | 19°45 | 10°35 | 0♐12  | 12°54 | 27°21  | 23°32  | 0°12  | 21°14  | 22°52  | 21°27 | 24°47 | 0°31  | T 8  |
| F 9  | 3 15 23 | 17°20'12 | 10♐13 | 21°20 | 11°49 | 0°58  | 13° 8 | 27°16  | 23°33  | 0°14  | 21°14  | 22°53  | 21°24 | 24°54 | 0°32  | F 9  |
| S 10 | 3 19 20 | 18°20'37 | 22°40 | 22°54 | 13° 4 | 1°43  | 13°21 | 27°12  | 23°34  | 0°16  | 21°14  | 22°R54 | 21°21 | 25° 1 | 0°32  | S 10 |
| S 11 | 3 23 16 | 19°21'04 | 5♐28  | 24°28 | 14°18 | 2°29  | 13°34 | 27° 8  | 23°35  | 0°18  | 21°15  | 22°53  | 21°18 | 25° 8 | 0°R32 | S 11 |
| M12  | 3 27 13 | 20°21'33 | 18°40 | 26° 2 | 15°33 | 3°14  | 13°47 | 27° 4  | 23°36  | 0°20  | 21°15  | 22°50  | 21°15 | 25°14 | 0°32  | M12  |
| T 13 | 3 31 9  | 21°22'04 | 2♐17  | 27°36 | 16°47 | 4° 0  | 14° 0 | 26°59  | 23°37  | 0°22  | 21°15  | 22°45  | 21°11 | 25°21 | 0°32  | T 13 |
| W14  | 3 35 6  | 22°22'36 | 16°17 | 29° 9 | 18° 2 | 4°45  | 14°14 | 26°55  | 23°38  | 0°24  | 21°15  | 22°37  | 21° 8 | 25°28 | 0°31  | W14  |
| T 15 | 3 39 2  | 23°23'10 | 0♐38  | 0♐43  | 19°16 | 5°31  | 14°27 | 26°51  | 23°39  | 0°27  | 21°16  | 22°27  | 21° 5 | 25°34 | 0°31  | T 15 |
| F 16 | 3 42 59 | 24°23'46 | 15°13 | 2°16  | 20°30 | 6°17  | 14°40 | 26°47  | 23°39  | 0°29  | 21°16  | 22°17  | 21° 2 | 25°41 | 0°31  | F 16 |
| S 17 | 3 46 55 | 25°24'23 | 29°54 | 3°49  | 21°45 | 7° 3  | 14°53 | 26°43  | 23°40  | 0°31  | 21°16  | 22° 7  | 20°59 | 25°48 | 0°30  | S 17 |
| S 18 | 3 50 52 | 26°25'01 | 14♐33 | 5°21  | 22°59 | 7°49  | 15° 6 | 26°39  | 23°41  | 0°33  | 21°17  | 21°59  | 20°56 | 25°54 | 0°30  | S 18 |
| M19  | 3 54 49 | 27°25'41 | 29° 5 | 6°54  | 24°13 | 8°34  | 15°19 | 26°36  | 23°41  | 0°35  | 21°17  | 21°54  | 20°52 | 26° 1 | 0°29  | M19  |
| T 20 | 3 58 45 | 28°26'21 | 13♐25 | 8°26  | 25°28 | 9°20  | 15°32 | 26°32  | 23°42  | 0°37  | 21°17  | 21°50  | 20°49 | 26° 8 | 0°28  | T 20 |
| W21  | 4 2 42  | 29°27'03 | 27°30 | 9°58  | 26°42 | 10° 6 | 15°45 | 26°28  | 23°42  | 0°39  | 21°18  | 21°D50 | 20°46 | 26°15 | 0°27  | W21  |
| T 22 | 4 6 38  | 0♐27'46  | 11♐19 | 11°30 | 27°56 | 10°52 | 15°58 | 26°25  | 23°43  | 0°41  | 21°18  | 21°50  | 20°43 | 26°21 | 0°26  | T 22 |
| F 23 | 4 10 35 | 1°28'30  | 24°54 | 13° 1 | 29°11 | 11°39 | 16°11 | 26°21  | 23°43  | 0°43  | 21°19  | 21°R50 | 20°40 | 26°28 | 0°25  | F 23 |
| S 24 | 4 14 31 | 2°29'14  | 8°Y16 | 14°33 | 0♐25  | 12°25 | 16°24 | 26°18  | 23°43  | 0°45  | 21°19  | 21°49  | 20°36 | 26°35 | 0°24  | S 24 |
| S 25 | 4 18 28 | 3°30'00  | 21°26 | 16° 4 | 1°39  | 13°11 | 16°37 | 26°15  | 23°43  | 0°47  | 21°20  | 21°45  | 20°33 | 26°41 | 0°22  | S 25 |
| M26  | 4 22 24 | 4°30'47  | 4♐24  | 17°35 | 2°54  | 13°57 | 16°50 | 26°11  | 23°44  | 0°49  | 21°21  | 21°39  | 20°30 | 26°48 | 0°21  | M26  |
| T 27 | 4 26 21 | 5°31'35  | 17°12 | 19° 6 | 4° 8  | 14°43 | 17° 3 | 26° 8  | 23°44  | 0°51  | 21°21  | 21°30  | 20°27 | 26°55 | 0°19  | T 27 |
| W28  | 4 30 18 | 6°32'24  | 29°49 | 20°36 | 5°22  | 15°30 | 17°16 | 26° 5  | 23°R44 | 0°53  | 21°22  | 21°18  | 20°24 | 27° 1 | 0°18  | W28  |
| T 29 | 4 34 14 | 7°33'14  | 12♐16 | 22° 6 | 6°36  | 16°16 | 17°29 | 26° 2  | 23°44  | 0°55  | 21°22  | 21° 4  | 20°21 | 27° 8 | 0°16  | T 29 |
| F 30 | 4 38 11 | 8♐34'06  | 24♐32 | 23♐36 | 7♐50  | 17♐ 3 | 17♐42 | 25°Y59 | 23♐44  | 0♐57  | 21°23  | 20♐50  | 20♐17 | 27♐15 | 0♐14  | F 30 |

| Day  | ☉     | ☾     | ♂    |       | ♀    |       | ♂    |       | ♂    |       | ♏    | ♏    |      | ♏     |      | ♏     |      | ♏     | ♏     | ♏    | ♏    |       |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|-------|-------|------|------|-------|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl  | decl  | decl | decl | lat   |
| T 1  | 14s36 | 16n11 | 4s50 | 14s 2 | 0n21 | 21s 4 | 0s31 | 24s38 | 1s16 | 14s22 | 0n56 | 8n 9 | 2s46 | 14n24 | 0n42 | 9s52  | 1n42 | 24s 0 | 10s 8 | 2n38 | 3n15 | 17n 2 |
| F 2  | 14 55 | 17 42 | 5 5  | 14 39 | 0 14 | 21 21 | 0 34 | 24 39 | 1 16 | 14 27 | 0 56 | 8 7  | 2 46 | 14 24 | 0 42 | 9 53  | 1 42 | 24 0  | 10 8  | 2 41 | 3 16 | 17 1  |
| S 3  | 15 14 | 18 21 | 5 6  | 15 16 | 0 7  | 21 38 | 0 36 | 24 41 | 1 16 | 14 31 | 0 56 | 8 5  | 2 46 | 14 23 | 0 42 | 9 53  | 1 42 | 24 0  | 10 8  | 2 44 | 3 17 | 17 1  |
| S 4  | 15 33 | 18 11 | 4 53 | 15 52 | 0 0  | 21 54 | 0 39 | 24 42 | 1 16 | 14 35 | 0 56 | 8 4  | 2 46 | 14 23 | 0 42 | 9 54  | 1 42 | 24 0  | 10 8  | 2 47 | 3 18 | 17 0  |
| M 5  | 15 51 | 17 12 | 4 28 | 16 27 | 0s 6 | 22 9  | 0 41 | 24 43 | 1 16 | 14 39 | 0 55 | 8 2  | 2 46 | 14 23 | 0 42 | 9 55  | 1 42 | 24 0  | 10 7  | 2 49 | 3 20 | 16 59 |
| T 6  | 16 9  | 15 28 | 3 51 | 17 1  | 0 13 | 22 24 | 0 44 | 24 44 | 1 16 | 14 43 | 0 55 | 8 1  | 2 46 | 14 22 | 0 43 | 9 56  | 1 43 | 24 0  | 10 7  | 2 50 | 3 21 | 16 59 |
| W 7  | 16 27 | 13 6  | 3 5  | 17 34 | 0 20 | 22 38 | 0 46 | 24 44 | 1 16 | 14 47 | 0 55 | 7 59 | 2 46 | 14 22 | 0 43 | 9 56  | 1 43 | 23 59 | 10 7  | 2 50 | 3 22 | 16 58 |
| T 8  | 16 44 | 10 8  | 2 9  | 18 7  | 0 26 | 22 52 | 0 49 | 24 44 | 1 16 | 14 51 | 0 55 | 7 58 | 2 45 | 14 22 | 0 43 | 9 57  | 1 43 | 23 59 | 10 7  | 2 50 | 3 24 | 16 57 |
| F 9  | 17 2  | 6 42  | 1 8  | 18 38 | 0 33 | 23 5  | 0 51 | 24 44 | 1 16 | 14 55 | 0 55 | 7 56 | 2 45 | 14 21 | 0 43 | 9 58  | 1 43 | 23 59 | 10 7  | 2 50 | 3 25 | 16 57 |
| S 10 | 17 18 | 2 54  | 0 1  | 19 9  | 0 39 | 23 17 | 0 54 | 24 44 | 1 16 | 14 59 | 0 55 | 7 55 | 2 45 | 14 21 | 0 43 | 9 59  | 1 43 | 23 59 | 10 6  | 2 49 | 3 26 | 16 56 |
| S 11 | 17 35 | 1s 9  | 1n 7 | 19 39 | 0 46 | 23 28 | 0 56 | 24 43 | 1 17 | 15 3  | 0 55 | 7 54 | 2 45 | 14 21 | 0 43 | 9 59  | 1 43 | 23 58 | 10 6  | 2 50 | 3 27 | 16 55 |
| M12  | 17 51 | 5 16  | 2 13 | 20 7  | 0 52 | 23 39 | 0 59 | 24 42 | 1 17 | 15 7  | 0 55 | 7 52 | 2 45 | 14 20 | 0 43 | 10 0  | 1 43 | 23 58 | 10 6  | 2 51 | 3 29 | 16 55 |
| T 13 | 18 7  | 9 14  | 3 14 | 20 35 | 0 58 | 23 49 | 1 1  | 24 41 | 1 17 | 15 11 | 0 55 | 7 51 | 2 45 | 14 20 | 0 43 | 10 1  | 1 43 | 23 58 | 10 6  | 2 53 | 3 30 | 16 54 |
| W14  | 18 23 | 12 48 | 4 5  | 21 2  | 1 4  | 23 59 | 1 3  | 24 39 | 1 17 | 15 15 | 0 55 | 7 50 | 2 45 | 14 20 | 0 43 | 10 1  | 1 43 | 23 57 | 10 5  | 2 56 | 3 31 | 16 53 |
| T 15 | 18 38 | 15 42 | 4 42 | 21 28 | 1 10 | 24 7  | 1 6  | 24 38 | 1 17 | 15 19 | 0 55 | 7 48 | 2 44 | 14 20 | 0 43 | 10 2  | 1 43 | 23 57 | 10 5  | 3 0  | 3 32 | 16 52 |
| F 16 | 18 53 | 17 39 | 5 1  | 21 52 | 1 16 | 24 15 | 1 8  | 24 35 | 1 17 | 15 23 | 0 55 | 7 47 | 2 44 | 14 19 | 0 43 | 10 3  | 1 43 | 23 57 | 10 5  | 3 4  | 3 34 | 16 52 |
| S 17 | 19 8  | 18 27 | 5 1  | 22 16 | 1 21 | 24 22 | 1 10 | 24 33 | 1 17 | 15 26 | 0 55 | 7 46 | 2 44 | 14 19 | 0 43 | 10 4  | 1 43 | 23 57 | 10 5  | 3 8  | 3 35 | 16 51 |
| S 18 | 19 22 | 18 1  | 4 40 | 22 38 | 1 27 | 24 29 | 1 12 | 24 31 | 1 17 | 15 30 | 0 55 | 7 45 | 2 44 | 14 19 | 0 43 | 10 4  | 1 43 | 23 56 | 10 5  | 3 11 | 3 36 | 16 50 |
| M19  | 19 36 | 16 24 | 4 2  | 23 0  | 1 32 | 24 35 | 1 15 | 24 28 | 1 17 | 15 34 | 0 55 | 7 43 | 2 44 | 14 19 | 0 43 | 10 5  | 1 43 | 23 56 | 10 4  | 3 13 | 3 37 | 16 50 |
| T 20 | 19 50 | 13 47 | 3 9  | 23 20 | 1 37 | 24 40 | 1 17 | 24 25 | 1 17 | 15 38 | 0 55 | 7 42 | 2 44 | 14 19 | 0 43 | 10 6  | 1 43 | 23 56 | 10 4  | 3 14 | 3 39 | 16 49 |
| W21  | 20 3  | 10 23 | 2 6  | 23 39 | 1 42 | 24 44 | 1 19 | 24 21 | 1 17 | 15 42 | 0 55 | 7 41 | 2 43 | 14 19 | 0 43 | 10 6  | 1 43 | 23 55 | 10 4  | 3 15 | 3 40 | 16 48 |
| T 22 | 20 16 | 6 28  | 0 56 | 23 57 | 1 47 | 24 48 | 1 21 | 24 17 | 1 17 | 15 46 | 0 55 | 7 40 | 2 43 | 14 19 | 0 43 | 10 7  | 1 43 | 23 55 | 10 4  | 3 15 | 3 41 | 16 47 |
| F 23 | 20 29 | 2 17  | 0s16 | 24 13 | 1 51 | 24 50 | 1 23 | 24 14 | 1 17 | 15 49 | 0 55 | 7 39 | 2 43 | 14 19 | 0 43 | 10 8  | 1 43 | 23 55 | 10 4  | 3 15 | 3 42 | 16 47 |
| S 24 | 20 41 | 1n58  | 1 26 | 24 29 | 1 55 | 24 53 | 1 25 | 24 9  | 1 17 | 15 53 | 0 55 | 7 38 | 2 43 | 14 19 | 0 43 | 10 8  | 1 43 | 23 54 | 10 3  | 3 15 | 3 44 | 16 46 |
| S 25 | 20 53 | 6 3   | 2 30 | 24 43 | 1 59 | 24 54 | 1 27 | 24 5  | 1 17 | 15 57 | 0 55 | 7 37 | 2 43 | 14 19 | 0 43 | 10 9  | 1 43 | 23 54 | 10 3  | 3 16 | 3 45 | 16 45 |
| M26  | 21 4  | 9 47  | 3 25 | 24 55 | 2 3  | 24 54 | 1 28 | 24 0  | 1 17 | 16 0  | 0 55 | 7 36 | 2 42 | 14 19 | 0 43 | 10 10 | 1 43 | 23 53 | 10 3  | 3 19 | 3 46 | 16 45 |
| T 27 | 21 15 | 13 0  | 4 9  | 25 7  | 2 6  | 24 54 | 1 30 | 23 55 | 1 16 | 16 4  | 0 55 | 7 35 | 2 42 | 14 19 | 0 43 | 10 10 | 1 43 | 23 53 | 10 3  | 3 23 | 3 47 | 16 44 |
| W28  | 21 25 | 15 34 | 4 40 | 25 17 | 2 9  | 24 53 | 1 32 | 23 50 | 1 16 | 16 8  | 0 55 | 7 34 | 2 42 | 14 19 | 0 44 | 10 11 | 1 43 | 23 53 | 10 3  | 3 27 | 3 49 | 16 43 |
| T 29 | 21 36 | 17 23 | 4 57 | 25 26 | 2 12 | 24 51 | 1 34 | 23 44 | 1 16 | 16 11 | 0 55 | 7 33 | 2 42 | 14 19 | 0 44 | 10 11 | 1 43 | 23 52 | 10 2  | 3 33 | 3 50 | 16 42 |
| F 30 | 21s45 | 18n22 | 5s 0 | 25s33 | 2s15 | 24s49 | 1s35 | 23s38 | 1s16 | 16s15 | 0n55 | 7n32 | 2s41 | 14n19 | 0n44 | 10s12 | 1n43 | 23s52 | 10s 2 | 3n38 | 3n51 | 16n42 |

ASTRODIENST EPHEMERIS for the year 1792  
geocentric

DECEMBER 1792

00:00 UT

| Day  | Sid.t   | ☉        | ☽     | ♂      | ♀     | ♂     | ♂     | ♂      | ♂      | ♂    | ♂     | ♂      | ♂     | ♂     | ♂     | Day  |
|------|---------|----------|-------|--------|-------|-------|-------|--------|--------|------|-------|--------|-------|-------|-------|------|
| S 1  | 4 42 7  | 9♂34'58  | 6♂39  | 25♂ 6  | 9♂ 5  | 17♂49 | 17♂54 | 25°R56 | 23°R44 | 0♂58 | 21♂24 | 20°R37 | 20♂14 | 27♂22 | 0°R12 | S 1  |
| S 2  | 4 46 4  | 10°35'52 | 18°37 | 26°35  | 10°19 | 18°35 | 18° 7 | 25°Y54 | 23°Q43 | 1° 0 | 21°25 | 20♂25  | 20°11 | 27°28 | 0♂10  | S 2  |
| M 3  | 4 50 0  | 11°36'47 | 0♂28  | 28° 3  | 11°33 | 19°22 | 18°20 | 25°51  | 23°43  | 1° 2 | 21°25 | 20°16  | 20° 8 | 27°35 | 0° 8  | M 3  |
| T 4  | 4 53 57 | 12°37'43 | 12°17 | 29°31  | 12°47 | 20° 9 | 18°33 | 25°48  | 23°43  | 1° 4 | 21°26 | 20°10  | 20° 5 | 27°42 | 0° 6  | T 4  |
| W 5  | 4 57 53 | 13°38'40 | 24° 6 | 0♂58   | 14° 1 | 20°55 | 18°45 | 25°46  | 23°42  | 1° 6 | 21°27 | 20° 6  | 20° 2 | 27°48 | 0° 4  | W 5  |
| T 6  | 5 1 50  | 14°39'39 | 6♂1   | 2°24   | 15°15 | 21°42 | 18°58 | 25°44  | 23°42  | 1° 7 | 21°28 | 20° 5  | 19°58 | 27°55 | 0° 2  | T 6  |
| F 7  | 5 5 47  | 15°40'38 | 18° 8 | 3°49   | 16°29 | 22°28 | 19°10 | 25°41  | 23°42  | 1° 9 | 21°29 | 20° 5  | 19°55 | 28° 2 | 29♂59 | F 7  |
| S 8  | 5 9 43  | 16°41'39 | 0♂30  | 5°12   | 17°43 | 23°15 | 19°23 | 25°39  | 23°41  | 1°11 | 21°30 | 20° 4  | 19°52 | 28° 8 | 29°57 | S 8  |
| S 9  | 5 13 40 | 17°42'41 | 13°15 | 6°35   | 18°57 | 24° 2 | 19°35 | 25°37  | 23°41  | 1°13 | 21°30 | 20° 3  | 19°49 | 28°15 | 29°54 | S 9  |
| M10  | 5 17 36 | 18°43'44 | 26°26 | 7°55   | 20°11 | 24°49 | 19°48 | 25°35  | 23°40  | 1°14 | 21°31 | 19°59  | 19°46 | 28°22 | 29°51 | M10  |
| T 11 | 5 21 33 | 19°44'48 | 10♂6  | 9°14   | 21°25 | 25°35 | 20° 0 | 25°34  | 23°39  | 1°16 | 21°32 | 19°53  | 19°42 | 28°28 | 29°49 | T 11 |
| W12  | 5 25 29 | 20°45'53 | 24°15 | 10°30  | 22°39 | 26°22 | 20°12 | 25°32  | 23°39  | 1°17 | 21°33 | 19°44  | 19°39 | 28°35 | 29°46 | W12  |
| T 13 | 5 29 26 | 21°46'58 | 8♂51  | 11°43  | 23°53 | 27° 9 | 20°25 | 25°30  | 23°38  | 1°19 | 21°34 | 19°33  | 19°36 | 28°42 | 29°43 | T 13 |
| F 14 | 5 33 22 | 22°48'05 | 23°45 | 12°53  | 25° 7 | 27°56 | 20°37 | 25°29  | 23°37  | 1°21 | 21°35 | 19°20  | 19°33 | 28°49 | 29°40 | F 14 |
| S 15 | 5 37 19 | 23°49'12 | 8♂51  | 13°59  | 26°21 | 28°43 | 20°49 | 25°27  | 23°36  | 1°22 | 21°36 | 19° 9  | 19°30 | 28°55 | 29°37 | S 15 |
| S 16 | 5 41 16 | 24°50'20 | 23°56 | 15° 1  | 27°35 | 29°30 | 21° 1 | 25°26  | 23°35  | 1°24 | 21°37 | 18°59  | 19°27 | 29° 2 | 29°34 | S 16 |
| M17  | 5 45 12 | 25°51'28 | 8♂51  | 15°58  | 28°49 | 0♂17  | 21°13 | 25°25  | 23°34  | 1°25 | 21°38 | 18°51  | 19°23 | 29° 9 | 29°30 | M17  |
| T 18 | 5 49 9  | 26°52'36 | 23°30 | 16°49  | 0♂ 2  | 1° 4  | 21°25 | 25°24  | 23°33  | 1°27 | 21°40 | 18°47  | 19°20 | 29°15 | 29°27 | T 18 |
| W19  | 5 53 5  | 27°53'44 | 7♂47  | 17°33  | 1°16  | 1°51  | 21°37 | 25°23  | 23°32  | 1°28 | 21°41 | 18°45  | 19°17 | 29°22 | 29°24 | W19  |
| T 20 | 5 57 2  | 28°54'53 | 21°42 | 18°10  | 2°30  | 2°38  | 21°49 | 25°22  | 23°31  | 1°30 | 21°42 | 18°45  | 19°14 | 29°29 | 29°20 | T 20 |
| F 21 | 6 0 58  | 29°56'01 | 5♂15  | 18°39  | 3°44  | 3°25  | 22° 1 | 25°21  | 23°30  | 1°31 | 21°43 | 18°45  | 19°11 | 29°35 | 29°17 | F 21 |
| S 22 | 6 4 55  | 0♂57'10  | 18°28 | 18°59  | 4°57  | 4°12  | 22°12 | 25°20  | 23°28  | 1°32 | 21°44 | 18°44  | 19° 8 | 29°42 | 29°13 | S 22 |
| S 23 | 6 8 51  | 1°58'18  | 1♂24  | 19°R 8 | 6°11  | 4°59  | 22°24 | 25°20  | 23°27  | 1°34 | 21°45 | 18°41  | 19° 4 | 29°49 | 29°10 | S 23 |
| M24  | 6 12 48 | 2°59'27  | 14° 6 | 19° 6  | 7°24  | 5°46  | 22°36 | 25°19  | 23°26  | 1°35 | 21°47 | 18°34  | 19° 1 | 29°55 | 29° 6 | M24  |
| T 25 | 6 16 45 | 4° 0'36  | 26°37 | 18°53  | 8°38  | 6°33  | 22°47 | 25°19  | 23°24  | 1°36 | 21°48 | 18°25  | 18°58 | 0♂ 2  | 29° 2 | T 25 |
| W26  | 6 20 41 | 5° 1'44  | 8♂58  | 18°29  | 9°51  | 7°21  | 22°58 | 25°19  | 23°23  | 1°37 | 21°49 | 18°14  | 18°55 | 0° 9  | 28°58 | W26  |
| T 27 | 6 24 38 | 6° 2'53  | 21°10 | 17°52  | 11° 5 | 8° 8  | 23°10 | 25°D19 | 23°21  | 1°39 | 21°50 | 18° 0  | 18°52 | 0°16  | 28°55 | T 27 |
| F 28 | 6 28 34 | 7° 4'02  | 3♂16  | 17° 4  | 12°18 | 8°55  | 23°21 | 25°19  | 23°20  | 1°40 | 21°52 | 17°46  | 18°48 | 0°22  | 28°51 | F 28 |
| S 29 | 6 32 31 | 8° 5'11  | 15°14 | 16° 5  | 13°31 | 9°42  | 23°32 | 25°19  | 23°18  | 1°41 | 21°53 | 17°33  | 18°45 | 0°29  | 28°47 | S 29 |
| S 30 | 6 36 27 | 9° 6'20  | 27° 8 | 14°58  | 14°45 | 10°29 | 23°44 | 25°19  | 23°17  | 1°42 | 21°54 | 17°22  | 18°42 | 0°36  | 28°43 | S 30 |
| M31  | 6 40 24 | 10♂ 7'29 | 8♂58  | 13♂44  | 15♂58 | 11♂17 | 23♂55 | 25°Y20 | 23♂15  | 1♂43 | 21♂56 | 17♂12  | 18♂39 | 0♂42  | 28♂39 | M31  |

| Day  | ☉     | ☾     |      | ♂     |      | ♀     |      | ♂     |      | ♂     |      | ♂    |      | ♂     |      | ♂     |      | ♂     |       | ♂    |      | ♂     |       | ♂    |     | ♂    |     |
|------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|-------|------|-------|------|-------|-------|------|------|-------|-------|------|-----|------|-----|
|      | decl  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl  | lat  | decl | lat  | decl  | lat  | decl  | lat  | decl  | lat   | decl | lat  | decl  | lat   | decl | lat | decl | lat |
| S 1  | 21s55 | 18n29 | 4s49 | 25s39 | 2s17 | 24s46 | 1s37 | 23s32 | 1s16 | 16s18 | 0n55 | 7n32 | 2s41 | 14n19 | 0n44 | 10s13 | 1n43 | 23s51 | 10s 2 | 3n44 | 3n52 | 16n41 | 12n49 | 7s29 |     |      |     |
| S 2  | 22 4  | 17 47 | 4 25 | 25 43 | 2 18 | 24 42 | 1 38 | 23 26 | 1 16 | 16 22 | 0 55 | 7 31 | 2 41 | 14 19 | 0 44 | 10 13 | 1 43 | 23 51 | 10 2  | 3 48 | 3 54 | 16 40 | 12 48 | 7 30 |     |      |     |
| M 3  | 22 12 | 16 19 | 3 50 | 25 46 | 2 19 | 24 37 | 1 40 | 23 19 | 1 16 | 16 25 | 0 55 | 7 30 | 2 41 | 14 19 | 0 44 | 10 14 | 1 43 | 23 50 | 10 2  | 3 52 | 3 55 | 16 39 | 12 48 | 7 30 |     |      |     |
| T 4  | 22 20 | 14 10 | 3 6  | 25 48 | 2 20 | 24 32 | 1 41 | 23 12 | 1 16 | 16 29 | 0 55 | 7 29 | 2 40 | 14 19 | 0 44 | 10 14 | 1 43 | 23 50 | 10 1  | 3 54 | 3 56 | 16 39 | 12 48 | 7 31 |     |      |     |
| W 5  | 22 28 | 11 25 | 2 13 | 25 48 | 2 20 | 24 25 | 1 42 | 23 5  | 1 16 | 16 32 | 0 55 | 7 29 | 2 40 | 14 19 | 0 44 | 10 15 | 1 43 | 23 50 | 10 1  | 3 55 | 3 57 | 16 38 | 12 48 | 7 31 |     |      |     |
| T 6  | 22 35 | 8 10  | 1 14 | 25 46 | 2 20 | 24 18 | 1 44 | 22 57 | 1 16 | 16 36 | 0 55 | 7 28 | 2 40 | 14 19 | 0 44 | 10 16 | 1 43 | 23 49 | 10 1  | 3 56 | 3 59 | 16 37 | 12 48 | 7 32 |     |      |     |
| F 7  | 22 42 | 4 32  | 0 10 | 25 44 | 2 19 | 24 11 | 1 45 | 22 50 | 1 15 | 16 39 | 0 55 | 7 28 | 2 40 | 14 20 | 0 44 | 10 16 | 1 43 | 23 49 | 10 1  | 3 56 | 4 0  | 16 36 | 12 48 | 7 33 |     |      |     |
| S 8  | 22 48 | 0 38  | 0n55 | 25 39 | 2 18 | 24 2  | 1 46 | 22 42 | 1 15 | 16 43 | 0 55 | 7 27 | 2 39 | 14 20 | 0 44 | 10 17 | 1 43 | 23 48 | 10 1  | 3 56 | 4 1  | 16 35 | 12 48 | 7 33 |     |      |     |
| S 9  | 22 54 | 3s24  | 1 59 | 25 33 | 2 16 | 23 53 | 1 47 | 22 33 | 1 15 | 16 46 | 0 55 | 7 27 | 2 39 | 14 20 | 0 44 | 10 17 | 1 44 | 23 48 | 10 1  | 3 57 | 4 2  | 16 35 | 12 48 | 7 34 |     |      |     |
| M10  | 22 59 | 7 25  | 3 0  | 25 26 | 2 13 | 23 43 | 1 48 | 22 25 | 1 15 | 16 49 | 0 55 | 7 26 | 2 39 | 14 20 | 0 44 | 10 18 | 1 44 | 23 47 | 10 0  | 3 58 | 4 4  | 16 34 | 12 48 | 7 34 |     |      |     |
| T 11 | 23 4  | 11 12 | 3 52 | 25 17 | 2 9  | 23 33 | 1 49 | 22 16 | 1 15 | 16 53 | 0 55 | 7 26 | 2 39 | 14 21 | 0 44 | 10 18 | 1 44 | 23 47 | 10 0  | 4 1  | 4 5  | 16 33 | 12 48 | 7 35 |     |      |     |
| W12  | 23 8  | 14 28 | 4 32 | 25 7  | 2 5  | 23 21 | 1 49 | 22 7  | 1 15 | 16 56 | 0 55 | 7 25 | 2 38 | 14 21 | 0 44 | 10 19 | 1 44 | 23 46 | 10 0  | 4 4  | 4 6  | 16 32 | 12 48 | 7 35 |     |      |     |
| T 13 | 23 12 | 16 56 | 4 55 | 24 56 | 2 0  | 23 10 | 1 50 | 21 58 | 1 14 | 16 59 | 0 55 | 7 25 | 2 38 | 14 21 | 0 44 | 10 19 | 1 44 | 23 46 | 10 0  | 4 9  | 4 7  | 16 32 | 12 48 | 7 36 |     |      |     |
| F 14 | 23 16 | 18 20 | 4 59 | 24 44 | 1 54 | 22 57 | 1 51 | 21 48 | 1 14 | 17 2  | 0 55 | 7 25 | 2 38 | 14 21 | 0 44 | 10 20 | 1 44 | 23 45 | 10 0  | 4 13 | 4 9  | 16 31 | 12 48 | 7 36 |     |      |     |
| S 15 | 23 19 | 18 28 | 4 43 | 24 30 | 1 47 | 22 44 | 1 51 | 21 39 | 1 14 | 17 6  | 0 55 | 7 24 | 2 38 | 14 22 | 0 44 | 10 20 | 1 44 | 23 45 | 9 59  | 4 18 | 4 10 | 16 30 | 12 48 | 7 37 |     |      |     |
| S 16 | 23 22 | 17 17 | 4 7  | 24 15 | 1 39 | 22 30 | 1 52 | 21 29 | 1 14 | 17 9  | 0 55 | 7 24 | 2 37 | 14 22 | 0 44 | 10 21 | 1 44 | 23 44 | 9 59  | 4 22 | 4 11 | 16 29 | 12 48 | 7 37 |     |      |     |
| M17  | 23 24 | 14 56 | 3 14 | 23 59 | 1 30 | 22 15 | 1 52 | 21 18 | 1 14 | 17 12 | 0 55 | 7 24 | 2 37 | 14 22 | 0 44 | 10 21 | 1 44 | 23 44 | 9 59  | 4 25 | 4 12 | 16 28 | 12 48 | 7 38 |     |      |     |
| T 18 | 23 26 | 11 40 | 2 9  | 23 43 | 1 19 | 22 0  | 1 53 | 21 8  | 1 13 | 17 15 | 0 55 | 7 24 | 2 37 | 14 23 | 0 44 | 10 22 | 1 44 | 23 43 | 9 59  | 4 27 | 4 14 | 16 28 | 12 49 | 7 38 |     |      |     |
| W19  | 23 27 | 7 46  | 0 58 | 23 26 | 1 8  | 21 44 | 1 53 | 20 57 | 1 13 | 17 18 | 0 55 | 7 24 | 2 36 | 14 23 | 0 44 | 10 22 | 1 44 | 23 43 | 9 59  | 4 27 | 4 15 | 16 27 | 12 49 | 7 39 |     |      |     |
| T 20 | 23 28 | 3 32  | 0s16 | 23 9  | 0 55 | 21 27 | 1 53 | 20 46 | 1 13 | 17 21 | 0 55 | 7 24 | 2 36 | 14 24 | 0 44 | 10 23 | 1 44 | 23 42 | 9 59  | 4 27 | 4 16 | 16 26 | 12 49 | 7 39 |     |      |     |
| F 21 | 23 28 | 0n46  | 1 26 | 22 51 | 0 41 | 21 10 | 1 53 | 20 35 | 1 13 | 17 24 | 0 55 | 7 24 | 2 36 | 14 24 | 0 44 | 10 23 | 1 44 | 23 42 | 9 59  | 4 27 | 4 17 | 16 25 | 12 49 | 7 40 |     |      |     |
| S 22 | 23 28 | 4 56  | 2 30 | 22 33 | 0 26 | 20 53 | 1 53 | 20 24 | 1 12 | 17 27 | 0 55 | 7 24 | 2 36 | 14 25 | 0 45 | 10 24 | 1 44 | 23 41 | 9 58  | 4 28 | 4 18 | 16 24 | 12 50 | 7 40 |     |      |     |
| S 23 | 23 27 | 8 46  | 3 25 | 22 16 | 0 10 | 20 34 | 1 53 | 20 12 | 1 12 | 17 30 | 0 55 | 7 24 | 2 35 | 14 25 | 0 45 | 10 24 | 1 44 | 23 41 | 9 58  | 4 29 | 4 20 | 16 24 | 12 50 | 7 40 |     |      |     |
| M24  | 23 26 | 12 7  | 4 9  | 21 59 | 0n 7 | 20 15 | 1 53 | 20 0  | 1 12 | 17 33 | 0 55 | 7 24 | 2 35 | 14 25 | 0 45 | 10 24 | 1 44 | 23 40 | 9 58  | 4 31 | 4 21 | 16 23 | 12 50 | 7 41 |     |      |     |
| T 25 | 23 24 | 14 53 | 4 40 | 21 43 | 0 26 | 19 56 | 1 53 | 19 48 | 1 12 | 17 36 | 0 55 | 7 24 | 2 35 | 14 26 | 0 45 | 10 25 | 1 44 | 23 39 | 9 58  | 4 35 | 4 22 | 16 22 | 12 51 | 7 41 |     |      |     |
| W26  | 23 22 | 16 55 | 4 57 | 21 27 | 0 45 | 19 36 | 1 52 | 19 36 | 1 11 | 17 39 | 0 55 | 7 24 | 2 34 | 14 26 | 0 45 | 10 25 | 1 44 | 23 39 | 9 58  | 4 40 | 4 23 | 16 21 | 12 51 | 7 42 |     |      |     |
| T 27 | 23 20 | 18 10 | 5 1  | 21 13 | 1 4  | 19 16 | 1 52 | 19 24 | 1 11 | 17 41 | 0 55 | 7 25 | 2 34 | 14 27 | 0 45 | 10 25 | 1 44 | 23 38 | 9 58  | 4 45 | 4 25 | 16 20 | 12 51 | 7 42 |     |      |     |
| F 28 | 23 16 | 18 35 | 4 50 | 20 59 | 1 24 | 18 54 | 1 51 | 19 11 | 1 11 | 17 44 | 0 55 | 7 25 | 2 34 | 14 28 | 0 45 | 10 26 | 1 44 | 23 38 | 9 58  | 4 50 | 4 26 | 16 20 | 12 52 | 7 42 |     |      |     |
| S 29 | 23 13 | 18 10 | 4 27 | 20 47 | 1 43 | 18 33 | 1 51 | 18 58 | 1 10 | 17 47 | 0 56 | 7 25 | 2 34 | 14 28 | 0 45 | 10 26 | 1 45 | 23 37 | 9 57  | 4 55 | 4 27 | 16 19 | 12 52 | 7 43 |     |      |     |
| S 30 | 23 9  | 16 57 | 3 53 | 20 37 | 2 2  | 18 11 | 1 50 | 18 45 | 1 10 | 17 50 | 0 56 | 7 26 | 2 33 | 14 29 | 0 45 | 10 27 | 1 45 | 23 37 | 9 57  | 5 0  | 4 28 | 16 18 | 12 53 | 7 43 |     |      |     |
| M31  | 23s 5 | 15n 1 | 3s 8 | 20s27 | 2n19 | 17s48 | 1s49 | 18s32 | 1s10 | 17s52 | 0n56 | 7n26 | 2s33 | 14n29 | 0n45 | 10s27 | 1n45 | 23s36 | 9s57  | 5n 4 | 4n30 | 16n17 | 12n53 | 7s43 |     |      |     |