## Spring Phenomena, 25 BCE to 38 CE

The first table below gives the Julian calendar dates and Greenwich times of the astronomical vernal equinox for the years 25 BCE to 38 CE inclusive. The second table gives, for these years, the Julian calendar dates and Greenwich times of the astronomical Full Moons which occurred on or after the date of the equinox, and the dates and times of the astronomical New Moons on or preceding, and after, the date of the equinox. The days of the week are given for the equinoxes and the Full Moons, from which the days of the week may readily be found for the New Moons.
The times given in the tables are accurate to within two or three hours for 25 to 5 BCE, and one or two hours for 4 BCE to 38 CE .

## VERNAL EQUINOX

| Julian |  | Greenwich |  | Julian |  | Greenwich |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cal. | Date | Time | Day of Week | Cal | Date | Time | Day of Week |
| BCE | March |  |  | CE | March |  |  |
| 25 | 22 | 8 p.m. | Saturday | 7 | 23 | 8 a.m. | Wednesday |
| 24 | 23 | 2 a.m. | Monday | 8 | 22 | 2 p.m. | Thursday |
| 23 | 23 | 8 a.m. | Tuesday | 9 | 22 | 8 p.m. | Friday |
| 22 | 23 | 1 p.m. | Wednesday | 10 | 23 | 1 a.m. | Sunday |
| 21 | 22 | 7 p.m. | Thursday | 11 | 23 | 7 a.m. | Monday |
| 20 | 23 | 1 a.m. | Saturday | 12 | 22 | 1 p.m. | Tuesday |
| 19 | 23 | 7 a.m. | Sunday | 13 | 22 | 7 p.m. | Wednesday |
| 18 | 23 | $1 \mathrm{p.m}$. | Monday | 14 | 23 | 1 a.m. | Friday |
| 17 | 22 | 6 p.m. | Tuesday | 15 | 23 | 7 a.m. | Saturday |
| 16 | 23 | 0* | Thursday | 16 | 22 | Noon | Sunday |
| 15 | 23 | 6 a.m. | Friday | 17 | 22 | 6 p.m. | Monday |
| 14 | 23 | Noon | Saturday | 18 | 23 | 0* | Wednesday |
| 13 | 22 | 6 p.m. | Sunday | 19 | 23 | 6 a.m. | Thursday |
| 12 | 22 | $11 \mathrm{p.m}$. | Monday | 20 | 22 | Noon | Friday |
| 11 | 23 | $5 \mathrm{a} . \mathrm{m}$. | Wednesday | 21 | 22 | 6 p.m. | Saturday |
| 10 | 23 | 11 a.m. | Thursday | 22 | 22 | 11 p.m. | Sunday |
| 9 | 22 | 5 p.m. | Friday | 23 | 23 | 5 a.m. | Tuesday |
| 8 | 22 | $11 \mathrm{p.m}$. | Saturday | 24 | 22 | $11 \mathrm{a} . \mathrm{m}$. | Wednesday |
| 7 | 23 | 5 a.m. | Monday | 25 | 22 | 5 p.m. | Thursday |
| 6 | 23 | $10 \mathrm{a} . \mathrm{m}$. | Tuesday | 26 | 22 | 10 p.m. | Friday |
| 5 | 22 | 4 p.m. | Wednesday | 27 | 23 | 4 a.m. | Sunday |
| 4 | 22 | $10 \mathrm{p} . \mathrm{m}$. | Thursday | 28 | 22 | $10 \mathrm{a} . \mathrm{m}$. | Monday |
| 3 | 23 | 4 a.m. | Saturday | 29 | 22 | 4 p.m. | Tuesday |
| 2 | 23 | 10 a.m. | Sunday | 30 | 22 | $10 \mathrm{p} . \mathrm{m}$. | Wednesday |
| 1 | 22 | 3 p.m. | Monday | 31 | 23 | $3 \mathrm{a} . \mathrm{m}$. | Friday |
| CE |  |  |  | 32 | 22 | 9 a.m. | Saturday |
| 1 | 22 | $9 \mathrm{p} . \mathrm{m}$. | Tuesday | 33 | 22 | 3 p.m. | Sunday |
| 2 | 23 | 3 a.m. | Thursday | 34 | 22 | 9 p.m. | Monday |
| 3 | 23 | 9 a.m. | Friday | 35 | 23 | 3 a.m. | Wednesday |
| 4 | 22 | 3 pm . | Saturday | 36 | 22 | 9 a.m. | Thursday |
| 5 | 22 | 8 p.m. | Sunday | 37 | 22 | 2 p.m. | Friday |
| 6 | 23 | 2 a.m. | Tuesday | 38 | 22 | 8 p.m. | Saturday |

* Midnight at the beginning of March 23.

BCE = Before Christian Era
CE = Christian Era

On or next after date of equinox

| Julian | Greenwi |  |
| :---: | :---: | :---: |
| Cal. Date | Time | Week Day |
| BCE |  |  |
| 25 April 3 | 4 a.m. | Thu. |
| 24 March 23 | $9 \mathrm{p.m}$. | Mon. |
| 23 April 11 | $9 \mathrm{p.m}$. | Sun. |
| 22 April 1 | $6 \mathrm{a} . \mathrm{m}$. | Fri. |
| 21 April 19 | $1 \mathrm{a} . \mathrm{m}$. | Thu. |
| 20 April 8 | $3 \mathrm{a} . \mathrm{m}$. | Mon. |
| 19 March 28 | 5 a.m. | Fri. |
| 18 April 16 | 0* | Thu. |
| 17 April 4 | Noon | Mon. |
| 16 March 25 | 4 a.m. | Sat. |
| 15 April 13 | 5 a.m. | Fri. |
| 14 April 2 | 7 p.m. | Tue. |
| 13 April 20 | 5 p.m. | Mon. |
| 12 April 9 | $9 \mathrm{p.m}$. | Fri. |
| 11 March 29 | $10 \mathrm{p.m}$. | Tue. |
| 10 April 17 | 4 p.m. | Mon. |
| 9 April 5 | $10 \mathrm{p.m}$. | Fri. |
| 8 March 26 | 11 a.m. | Wed. |
| 7 April 14 | Noon | Tue. |
| 6 April 4 | 5 a.m. | Sun. |
| 5 March 23 | 6 p.m. | Thu. |
| 4 April 11 | 3 p.m. | Wed. |
| 3 March 31 | 6 p.m. | Sun. |
| 2 April 19 | 10 a.m. | Sat. |
| 1 April 7 | Noon | Wed. |
| CE |  |  |
| 1 March 27 | $9 \mathrm{p.m}$. | Sun. |
| 2 April 15 | $7 \mathrm{p.m}$. | Sat. |
| 3 April 5 | Noon | Thu. |
| 4 March 25 | 5 a.m. | Tue. |
| 5 April 13 | $3 \mathrm{a} . \mathrm{m}$. | Mon. |
| 6 April 2 | 11 a.m. | Fri. |
| 7 April 21 | 5 a.m. | Thu. (1) |
| 8 April 9 | 6 a.m. | Mon. |
| 9 March 29 | $9 \mathrm{a} . \mathrm{m}$. | Fri. |
| 10 April 17 | 6 a.m. | Thu. |
| 11 April 6 | 7 p.m. | Mon. |
| 12 March 26 | Noon | Sat. |
| 13 April 14 | Noon | Fri. |
| 14 April 4 | 2 a.m. | Wed. |
| 15 March 24 | 7 a.m. | Sun. |
| 16 April 11 | 0* | Sat. |
| 17 March 31 | $1 \mathrm{a} . \mathrm{m}$. | Wed. |
| 18 April 18 | $7 \mathrm{p.m}$. | Mon. |
| 19 April 8 | 4 a.m. | Sat. |
| 20 March 27 | 7 p.m. | Wed. |
| 21 April 15 | 8 p.m. | Tue. |
| 22 April 5 | Noon | Sun. |
| 23 March 25 | 11 p.m. | Thu. |
| 24 April 12 | 6 p.m. | Wed. |

On or preceding
date of equinox
Following equinox

| Julian |  | Greenwich | Julian | Greenwich |
| :---: | :---: | :---: | :---: | :---: |
| Cal. | Date | Time | Cal. Date | Time |
| March | 19 | Noon | April 18 | 4 a.m. |
| March | 8 | 2 p.m. | April 7 | 5 a.m. |
| Feb. | 25 | 8 p.m. | March 27 | 9 a.m. |
| March | 16 | 7 p.m. | April 15 | 6 a.m. |
| March | 5 | $11 \mathrm{a} . \mathrm{m}$. | April 3 | 7 p.m. |
| Feb. | 23 | 4 a.m. | March 24 | 1 p.m. |
| March | 14 | 4 a.m. | April 12 | 1 p.m. |
| March | 3 | Noon | April 2 | 2 a.m. |
| March | 21 | 8 a.m. | April 19 | 9 p.m. |
| March | 10 | 8 a.m. | April 9 | 0 * |
| Feb. | 27 | 10 a.m. | March 29 | 1 a.m. |
| March | 18 | 6 a.m. | April 16 | 7 p.m. |
| March | 6 | 6 p.m. | April 5 | 4 a.m. |
| Feb. | 24 | 11 a.m. | March 25 | 7 p.m. |
| March | 15 | Noon | April 13 | 8 p.m. |
| March | 5 | $2 \mathrm{a} . \mathrm{m}$. | April 3 | Noon |
| March | 22 | 11 p.m. | April 21 | 11 a.m. |
| March | 12 | $3 \mathrm{a} . \mathrm{m}$. | April 10 | 6 p.m. |
| March | 1 | $3 \mathrm{a} . \mathrm{m}$. | March 30 | 7 p.m. |
| March | 19 | $9 \mathrm{p.m}$. | April 18 | Noon |
| March | 8 | 5 a.m. | April 6 | 5 p.m. |
| Feb. | 25 | 6 p.m. | March 27 | 4 a.m. |
| March | 16 | 7 p.m. | April 15 | 4 a.m. |
| March | 6 | Noon | April 4 | 9 p.m. |
| Feb. | 24 | 0 * | March 24 | Noon |
| March | 13 | 8 p.m. | April 12 | 9 a.m. |
| March | 2 | 10 p.m. | April 1 | 2 p.m. |
| March | 21 | $3 \mathrm{p} . \mathrm{m}$. | April 20 | 7 a.m. |
| March | 9 | 6 p.m. | April 8 | 9 a.m. |
| Feb. | 27 | $3 \mathrm{a} . \mathrm{m}$. | March 28 | 2 p.m. |
| March | 18 | 3 arm . | April 16 | Noon |
| March | 7 | 8 p.m. | April 6 | 4 a.m. |
| Feb. | 25 | Noon | March 25 | 9 p.m. |
| March | 15 | $10 \mathrm{a} . \mathrm{m}$. | April 13 | 9 p.m. |
| March | 4 | 4 p.m. | April 3 | 6 a.m. |
| March | 23 | 10 a.m. | April 22 | 1 a.m. |
| March | 11 | 11 a.m. | April 10 | 3 a.m. |
| Feb. | 28 | $3 \mathrm{p} . \mathrm{m}$. | March 30 | 5 a.m. |
| March | 19 | Noon | April 18 | $0^{*}$ |
| March | 9 | 2 a.m. | April 7 | 11 a.m. |
| Feb. | 26 | 8 p.m. | March 27 | 4 a.m. |
| March | 16 | 8 p.m. | April 15 | 4 a.m. |
| March | 6 | 7 a.m. | April 4 | 7 p.m. |
| Feb. | 23 | Noon | March 25 | 3 a.m. |
| March | 13 | 5 a.m. | April 11 | $9 \mathrm{p} . \mathrm{m}$. |
| March | 2 | 6 a.m. | March 31 | 10 p.m. |
| March | 21 | $1 \mathrm{a} . \mathrm{m}$. | April 19 | 3 p.m. |
| March | 10 | $11 \mathrm{a} . \mathrm{m}$. | April 8 | 10 p.m. |
| Feb. | 28 | $2 \mathrm{a} . \mathrm{m}$. | March 28 | 11 a.m. |


| 25 | April 1 | 7 p.m. | Sun. | March 18 | 4 a.m. | April 16 | Noon |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 26 | April 20 | Noon | Sat. (2) | March 7 | 7 p.m. | April 6 | 5 a.m. |
| 27 | April 9 | 4 p.m. | Wed. | Feb. 25 | 4 a.m. | March 26 | 5 p.m. |
| 28 | March 29 | 3 arm . | Mon. | March 15 | 0 * | April 13 | 2 p.m. |
| 29 | April 17 | 3 a.m. | Sun. | March 4 | 0 * | April 2 | 5 p.m. |
| 30 | April 6 | 8 p.m. | Thu. | March 22 | 6 p.m. | April 21 | 9 a.m. |
| 31 | March 27 | $11 \mathrm{a} . \mathrm{m}$. | Tue. | March 11 | 11 p.m. | April 10 | Noon |
| 32 | April 14 | $9 \mathrm{a} . \mathrm{m}$. | Mon. | Feb. 29 | $10 \mathrm{a} . \mathrm{m}$. | March 29 | 8 p.m. |
| 33 | April 3 | 3 p.m. | Fri. | March 19 | $10 \mathrm{a} . \mathrm{m}$. | April 17 | 7 p.m. |
| 34 | March 23 | $3 \mathrm{p.m}$. | Tue. | March 9 | 4 a.m. | April 7 | Noon |
| 35 | April 11 | 8 a.m. | Mon. | Feb. 26 | 6 p.m. | March 28 | 4 a.m. |
| 36 | March 30 | 2 p.m. | Fri. | March 16 | 3 p.m. | April 15 | 3 arm . |
| 37 | April 18 | Noon | Thu. | March 5 | 7 p.m. | April 4 | $10 \mathrm{a} . \mathrm{m}$. |
| 38 | April 8 | $3 \mathrm{a} . \mathrm{m}$. | Tue. | Feb. 22 | 7 p.m. | March 24 | Noon |

(1) Preceding Full Moon, March 22, 1 p.m.
(2) Preceding Full Moon, March 21, 9 p.m.

* Midnight at the beginning of the given date.

