

## The Starry Sky — Spring 2006



### How to Use this Map

The above map represents the night sky as it appears at the indicated times, and remains usable several hours before and after.

Hold the map up to the sky in front of you and turn it so the direction you are facing appears at the bottom. Lines identify the constellations. The light-coloured area outlines the Milky Way.

### This Star Map is Accurate on...

(Eastern Daylight Time, except where mentioned otherwise)

- March 21 at midnight EST
- April 6 at midnight
- April 21 at 11 p.m.
- May 6 at 10 p.m.
- May 21 at 9 p.m.

# The Sky This Spring

*Saturn, Jupiter and Mars are all featured attractions this spring, but the indisputable show stealer will no doubt be the lunar occultation of the Pleiades.*

## Opposition of Jupiter

At the beginning of April, brilliant **Jupiter** rises in the east-southeast around 21:00. By early May the giant planet rises at sunset: It is in opposition on May 4 and transits the meridian around midnight.

This year Jupiter is in Libra, a region of sky that remains close to the horizon—scarcely 30 degrees for mid-northern viewers—which compromises the quality of telescopic observations. But don't let that stop you from having a look: Jupiter's cloud bands and large moons always offer a fascinating show.

The Moon is close to Jupiter on several occasions this spring: on the nights of April 14 to 15 and May 11 to 12, and again during the nights of June 7 to 8 and June 8 to 9. On May 11, Jupiter rises at twilight just to the left of the full Moon.

## Last chance for Saturn

The mild evenings of March and April offer a final opportunity to observe **Saturn** through a telescope. May finds the ringed planet much closer to the western horizon at twilight, and viewing

### Seasonal Milestones

The **spring equinox** takes place on March 20, 2006 at 13:26 EST. The **summer solstice** will arrive on June 21 at 08:26 EDT. Spring 2006 will last exactly 92d 18h.

The switch to **Daylight Saving Time** takes place on the night of April 1 to 2 at 02:00. At that point, clocks move ahead one hour.

### Phases of the Moon

(Eastern Daylight Time, except \* = Standard Time)

Last quarter	New moon
March 6 at 15:16*	March 14 at 18:35*
April 5 at 8:01	April 13 at 12:40
May 5 at 1:13	May 13 at 2:51
June 3 at 19:06	June 11 at 14:03
First quarter	Full moon
March 22 at 14:10*	March 29 at 5:15*
April 20 at 23:28	April 27 at 15:44
May 20 at 5:20	May 27 at 1:26
June 18 at 10:08	June 25 at 12:05

conditions deteriorate rapidly.

Saturn remains in Cancer: During the last week of May and first week of June, the planet moves once again past M44 (the Beehive star cluster) just as it did this past winter. This is a sight to observe in binoculars as the sky darkens.

The Moon appears near Saturn on the evening of April 6 to 7; on the evenings of May 3 to 4 and May 4 to 5; and again on May 31.

## Mars closes in on Saturn

The red planet is now too far to offer any details through a small telescope, but it is interesting to follow its rapid movement through the constellations. In just a few weeks **Mars** leaves Taurus, crosses Gemini, and winds up in Cancer right next to Saturn. **On the evening of June 15**, Mars crosses M44 (the Beehive Cluster). Finally, **on June 17 at twilight**, Mars and Saturn are just 1/2 degree apart, situated low on the west-northwest horizon one hour after sunset. Saturn is the brighter of the two.

Meanwhile, the lunar crescent appears next to Mars on April 3, and May 1 & 2. On May 30, the crescent Moon is between Mars and the "twin stars," Pollux and Castor, in Gemini.

## Venus skirts the eastern horizon

Since mid-January, **Venus** has appeared at dawn as the brilliant morning star. Unfortunately, circumstances for this apparition have not been favourable: The planet is just ten degrees above the horizon half-an-hour before sunrise. From day to day, as spring progresses, Venus slowly skirts the horizon moving eastward from the southeast. The lunar crescent appears near Venus on the mornings of **April 24** and **May 24**: a beautiful sight, none-the-less, with binoculars or the naked eye.

*Happy observing!*

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## The Moon crosses the Pleiades

The most spectacular event this spring occurs **on the evening of April 1**, when a thin crescent Moon occults the Pleiades. In less than two hours, the Moon will eclipse five of the brightest stars in the cluster, and many fainter ones. It is quite remarkable to watch as the stars disappear, one by one, behind the dark lunar limb and then re-emerge on the bright side less than an hour later. Earthshine will subtly illuminate the dark face of the four-day-old Moon, adding a touch of magic to the scene.

Though the occultation can be viewed through binoculars mounted on a solid tripod, it is best observed through a small telescope for optimum detail. In just seconds, at high magnification, the Moon's movement can be discerned as it covers each star.

The above illustration shows the Moon's position at 19:10, and the arrow indicates its movement over the following two hours. In Montreal, the sun will set at 18:20 and the sky will still be light when the first star, Electra, is eclipsed at 18:43 (local time). Pleione will be the last bright star to disappear at 20:33.

Image of moon simulated with Starry Night Pro / Imaginova