The Pocket Planetarium ★

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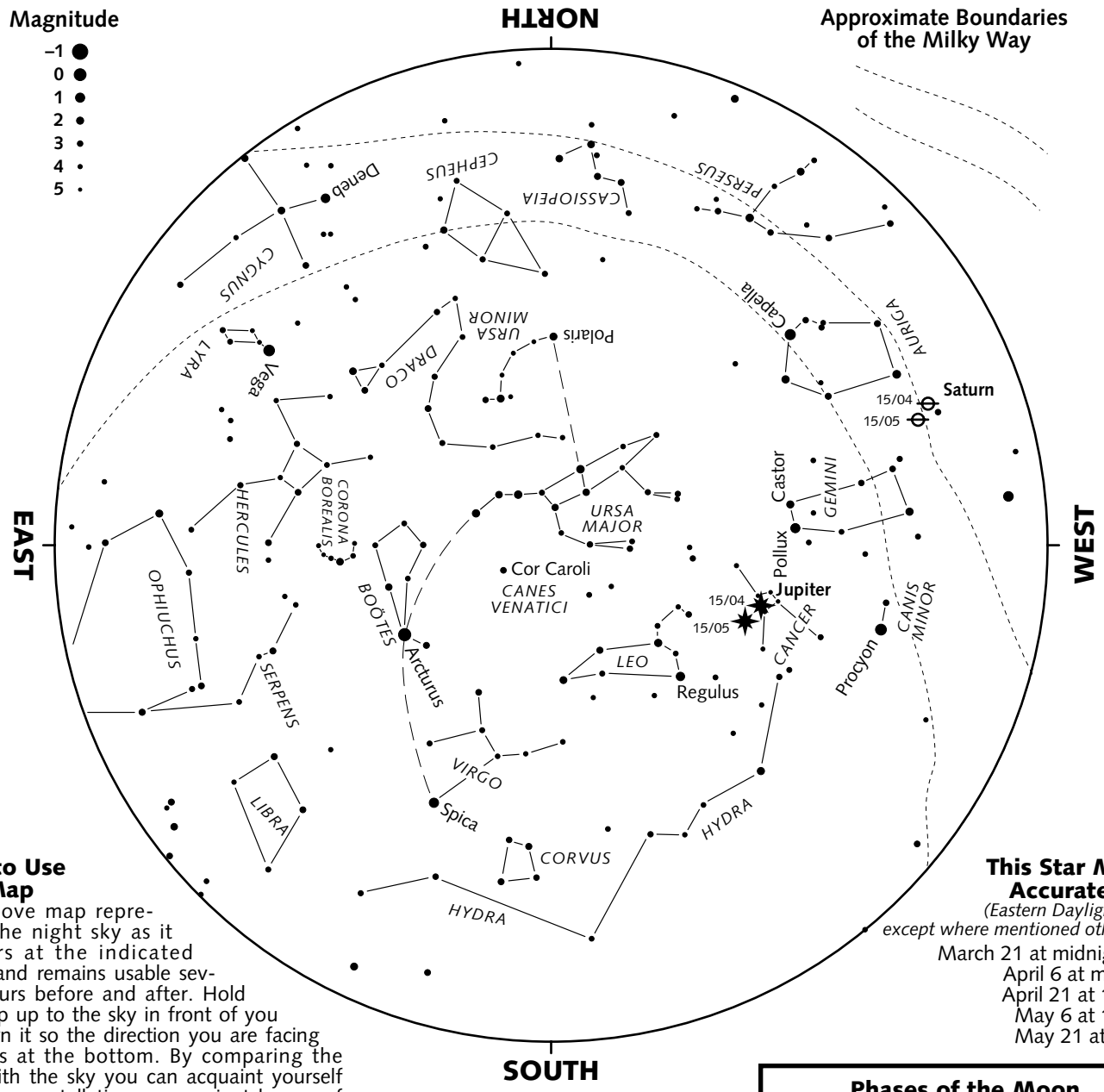
Astronomical Information Newsletter of the Planétarium de Montréal

The Starry Sky — Spring 2003



Marc Jobin / Planétarium de Montréal

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. By comparing the map with the sky you can acquaint yourself with the constellations, an ancient legacy of Greek mythology.

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.

Seasonal Milestones

The **spring equinox** occurs on March 20, 2003 at 20:00 EST. The **summer solstice** will take place on June 21 at 15:10 EDT. Spring 2003 will last 92d 18h 10min.

On the night of April 5 to 6, at 02:00, timekeeping changes from eastern standard (EST) to **daylight saving** (EDT), and clocks move ahead one hour…

Phases of the Moon

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

New moon	First quarter
March 2 at 21:35*	March 11 at 2:15*
April 1 at 14:19*	April 9 at 19:40
May 1 at 8:15	May 9 at 7:53
May 31 at 0:20	June 7 at 16:28
Full moon	**Last quarter**
March 18 at 5:34*	March 24 at 20:51*
April 16 at 15:36	April 23 at 8:18
May 15 at 23:36	May 22 at 20:31
June 14 at 7:16	June 21 at 10:45

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The Sky This Spring

There's a lot happening planet-wise this spring: Saturn and Jupiter gradually disappear from the nighttime sky as they slip westward into the sunset. Venus also does a disappearing act and leaves the morning sky behind. Meanwhile, Mars waits in the wings in preparation for its grand appearance this summer. Tiny Mercury even gets into the act by putting on a brilliant evening display in April. And to top things off, we'll also be treated to a total eclipse of the Moon.

Saturn departs the nighttime sky

Majestic **Saturn** can still be found near the tip of Taurus' southernmost horn, but April is the last favorable month for observing the ringed planet. In May, Saturn gradually gets lower, and by nightfall, it is progressively engulfed by the twilight. To help you find your bearings, a crescent Moon appears near the ringed world on April 7 and May 4: Early evening is the best time to observe this celestial marvel.

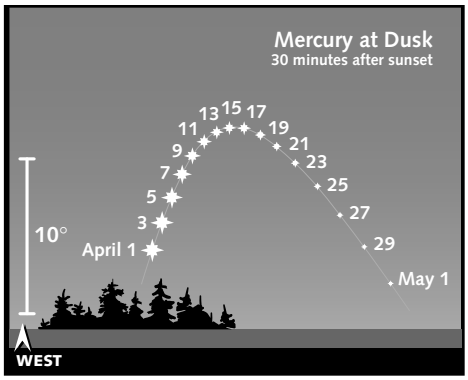
Starring... the planet Jupiter

Jupiter is somewhat east of Saturn and enjoys the spotlight for a few more weeks as it continues to star in the springtime sky, along with its cloud formations and its retinue of moons. The giant planet is high enough to remain easily visible until May, after which it slowly descends into the glare of twilight. Throughout this period it's best to observe Jupiter as soon as possible after nightfall. The planet is brilliant and easy to spot among the much fainter stars of Cancer. A first quarter Moon appears nearby on April 10, May 7 and 8, and June 4.

At the beginning of spring, Jupiter is near the Beehive star cluster (Messier 44) at the heart of Cancer. Both objects appear within the field of view of a pair of binoculars, or in a small telescope at low power. Starting in mid-April, Jupiter regains its usual eastward movement (left) among the stars, and slowly distances itself from the Beehive cluster.

A lightning visit from... Mercury

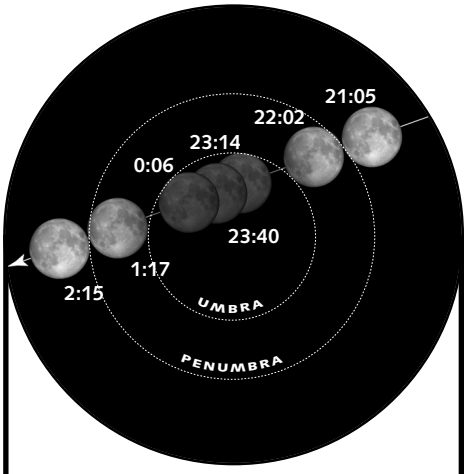
Of the five planets visible to the naked eye, **Mercury** is the hardest to observe: It's never far from the Sun and often remains lost in the Sun's glare. However, a favorable window of opportunity opens during the first few evenings of April, when Mercury seems to leap above the western horizon. Here's an occasion worth noting! Look for the tiny planet between 20 and 30 minutes after sunset. Mercury will be a bit higher each evening, and by mid-April it will attain its greatest separation from the Sun. At that point Mercury will set almost two hours after sunset. The planet is brightest at the beginning the month, and gradually loses its gleam thereafter. Mercury plunges into the Sun's glare after the third week of April.



In the morning sky...

Venus rises a scant hour before the Sun this spring. The brilliant morning star gets progressively harder to see in the eastern glare of dawn. Later this summer the planet will disappear completely when it slips behind the Sun.

On the other hand, conditions for observing **Mars** continue to improve. Without a doubt, the red planet will be *the* feature attraction this summer! This spring, Mars rises after midnight in the southeast, but only manages to gain height late in the second half of the night. After mid-April, as the distance between the Earth and Mars gradually decreases, the red planet rivals, and then surpasses, even the brightest stars. At that point, Mars will be easy to spot. Its orange tint makes it easy to distinguish, but to vanquish any doubt, the Moon is near the red planet on the mornings of March 25 and 26, April 23, May 21 and 22, and June 19.



M. Jobin / Planétarium de Montréal, from data by F. Espenak, NASA/GSFC

A total lunar eclipse...

On the evening of May 15, starting at 22:02 and ending at 01:17, observers will thrill to the sight of the Moon slipping slowly through the Earth's shadow. From 23:13 to 00:06, the Moon will be completely engulfed: During those 53 minutes, the lunar surface will be illuminated by sunlight that is reddened by its passage through the Earth's atmosphere. This faint light gives the Moon a coppery-orange color of varying brightness. Lunar eclipses are always impressive — and safe to observe! This is the first such eclipse easily visible from Québec since January 2000. There will be another on November 8, 2003 but it will only last 24 minutes.

Happy observing!

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