≧Pocket Planetarium ★

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Astronomical Information Newsletter of the Planétarium de Montréal

The Starry Sky — Spring 2007



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.

Visit our Website: www.planetarium.montreal.qc.ca

This Star Map is Accurate on...

(Eastern Daylight Time)
March 21 at 1 a.m.
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

This season, Mercury, Venus, Jupiter and Saturn dominate the evening sky, while Mars follows at dawn. Throughout this period, Venus provides a series of breathtaking conjunctions.

Venus, star of the show

Venus continues to climb ever higher into the western evening sky. By mid-May, the dazzling planet reaches a peak altitude of 35 degrees and sets at midnight — a full 3½ hours after the Sun! As it tracks eastward among the constellations, Venus sweeps past a series of star clusters.

From April 10 to the 13th, Venus passes the Pleiades cluster in Taurus. Look for this beautiful pairing above the western horizon starting an hour after sunset: Breathtaking with binoculars. The planet's course carries it upward past the "V"-shaped Hyades cluster, also in Taurus. On the evening of April 19, Venus and a thin crescent Moon appear together, above and between the Hyades and Pleiades.

The planet's next encounter occurs on the evenings of May 8 to the 10th, when it skirts M35, an open star cluster in Gemini. (Binoculars and a dark sky are necessary for this event, but well worth the effort.) Finally, from June 11 to the 14th, Venus brushes past M44, the famous Beehive cluster in Cancer. Wait for the sky to darken, and use binoculars. The view will be spectacular!

Seasonal Milestones

The spring equinox takes place on March 20, at 20:07 Eastern Daylight Time, and the **summer solstice** will occur on June 21 at 14:06 EDT. Spring 2007 will last exactly 92d 17h 59m.

Phases of the Moon

(Eastern Daylight Time)

Last quarter March 11 at 23:54 March 18 at 22:43 April 10 at 14:04 May 10 at 0:27 June 8 at 7:43

First quarter March 25 at 14:16 April 24 at 2:36 May 23 at 17:03 June 22 at 9:15

New moon April 17 at 7:36 May 16 at 15:27 June 14 at 23:13 Full moon

April 2 at 13:15 May 2 at 6:09 May 31 at 21:04 June 30 at 9:49

A thin crescent Moon appears near Venus on the evenings of March 20 & 21, and April 19 & 20. On the evening of May 19, a thin lunar crescent appears just one degree to the right of Venus. A conjunction not to be missed! And finally, at dusk, on the evening of May 21, Venus takes part in a spectacular alignment with Saturn, the Moon and Mercury (see Saturn for details).

Saturn shows its rings

As spring begins, Saturn continues its trek through Leo and appears well above the southeast horizon at dusk: The planet remains visible all night and sets at dawn. But by season's end, Saturn appears at twilight above the western horizon, and sets just before midnight. For the past four months, the ringed planet has been in retrograde motion, moving westward in Leo. On April 20 it becomes stationary, stops at the border of Cancer, and then resumes its direct eastward motion.

Saturn's rings are always dramatic in a small telescope, but the best time to see them will be in May, when the planet is at quadrature — 90 degrees from the Sun. The planet's shadow will then be most prominent on it rings. On the evening of May 21, Saturn is at the top of a celestial alignment that includes the Moon, Venus and Mercury (in descending order). Look for all four objects above the western horizon starting at 21:00.

A waxing gibbous Moon appears right next to Saturn on the evenings of March 28 and again on April 24 & 25. The waxing lunar crescent and the ringed planet are reunited once more on May 22. Finally, on the evening of June 18. a thin crescent Moon is nestled in between Venus and Saturn. A beautiful sight to see!

Jupiter reappears in the evening On April 4, Jupiter begins its retro-

grade loop through the constellation of Ophiuchus and will move westward among the stars for the next five months. By the end of April, the giant planet enters the evening sky, rising before midnight. As spring progresses, Jupiter rises earlier and earlier. The planet is in opposition on June 5 and remains visible all night. Planets are best observed around opposition when they are closest and appear largest. Using a telescope, look for Jupiter's cloud bands and four biggest moons.

A waning gibbous Moon appears below Jupiter during the night of April 8 and May 5, and again on the night of May 31 and June 1.

Mercury, better than ever

From the end of March to the end of April, Mercury is poorly placed in the eastern sky at dawn, and remains lost in the Sun's glare. After mid-May, that changes rapidly as the tiny planet moves into the western sky at twilight. By May 28, Mercury sets in the northwest two hours after the Sun, making this the best apparition of the year! If you have never seen Mercury before, now is the time. The window of opportunity lasts from May 17 to June 7. But after the first week of June, it will disappear rapidly in the glow of twilight.

Mars travels the dawn sky

Mars remains inconspicuous at dawn throughout the spring season. From the end of March to the end of June, the tiny Red Planet visits several constellations. It starts out in Capricornus and travels into Aquarius, Pisces, Cetus, and finally back into Pisces as springtime ends. Mars rises about an hour-and-ahalf before the Sun and appears like an orange star in the east-southeast before daybreak.

A waning crescent Moon appears near Mars on the morning of April 13, May 12 & 13, and again at dawn on June 10.

Happy observing!

Research and text: Louie Bernstein