

Centre of the Universe Newsletter – November 2012

What's happening in November?

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School Programs

School is in full swing and we are here to help assist with your Astronomy lesson plans. Book your class in to [learn with us](#) with us today!

For more information please contact us at (250) 363-8262 or visit our [website](#).

Please note: the Centre of the Universe is closed to public visits until spring 2013.

The Sky This Month

November 6 – Last Quarter, 16:36
November 13 – New Moon, 14:08
November 16/17 – Leonid Meteor Shower
November 20 – First Quarter, 06:31
November 28 – Full Moon, 06:46

The Leonid Meteor Shower

This year's Leonids meteor shower will begin in the late hours of November 16, and continue until dawn November 17. The peak of the meteor shower will be reached just after midnight on November 17, 2012. Expect to see around 15-20 meteors shooting across the sky per hour from 12:30 to 2:30a.m. (PST).

Radiating from the constellation Leo the Lion, located near the lower eastern horizon, the Leonid meteor shower is famous for its meteor storms in the past. In 1966 many thousands of meteors streaked across the skies per hour, like an unnatural storm of horizontal rain. Leonid meteor storms sometimes recur in cycles of 33 to 34 years, but have died down to a mere trickle compared to its performances in the past. In most of the recent years, the Leonids have produced a maximum rate of 15-20 meteors per hour. As with most meteor showers, the Leonids will increase in number as the hours roll past midnight, displaying the greatest number of meteors just before dawn.

Last year, several major meteor showers coincided with a full or near full moon. The light of a full moon is capable of outshining the brightest of meteors, washing out these impressive and rare light displays. Luckily for us, the waxing crescent moon this year will set around midnight leaving a dark night for the Leonid meteor shower. If weather permits, please take advantage of the optimum peak viewing times this month.

November Constellations

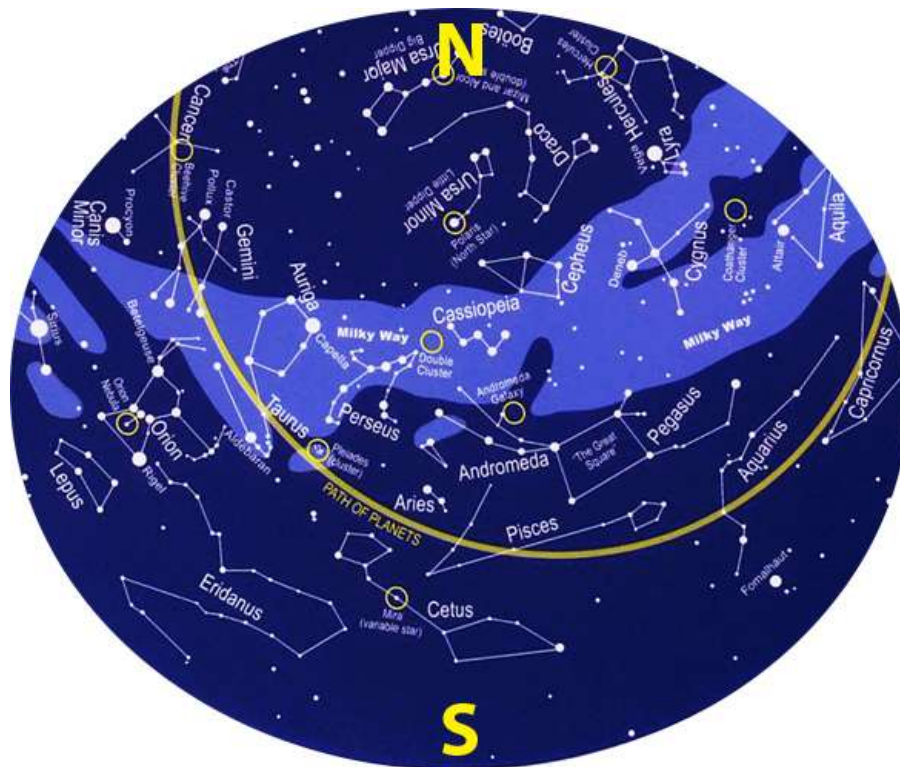
November is the best time to see Cassiopeia, Andromeda, Pegasus, and Pisces.

To locate these constellations in the night sky, it would be best to first find Cassiopeia. Cassiopeia is a giant “W” made of five bright stars. Located right underneath is the constellation Andromeda, which looks like a banana or a canoe in the sky. One can locate Andromeda easily without Cassiopeia by first finding Pegasus.

Pegasus is easily recognized by the “Great Square”, the four bright stars that make up Pegasus’ body. Constellation Andromeda is attached to the far left-hand star of the square. If looking just above Andromeda, you may be able to find a large hazy patch in the sky marking the location of the Andromeda galaxy. It’s very noticeable in a dark sky, far from city lights, on a moonless night.

Right underneath Pegasus is the constellation Pisces. Pisces may be hard to locate in the night sky because of its large size, but it is just a much larger “V” shape constellation as compared to Cassiopeia.

As we trudge on through the fall, the winter constellations are rising earlier and earlier each night, so don’t forget to look for Orion the Hunter in the east after 10pm!



The Planets

In the early morning of November 26, look towards the southeast horizon around sunrise. At this time, you will be able to observe Venus and Saturn at close proximity with each other near the horizon. Venus passes 0.75 degrees below Saturn, with Mercury a little ways below the pair. Mercury always appears in close proximity to the sun, meaning, this month, it is only visible in the twilight sky towards the horizon.

Catching a glimpse of Mercury will mean getting up early before the sun rises!

In the mid-evenings, Jupiter can be seen rising from the northeast horizon, and will be rising earlier each night. On December 2, Jupiter will be in opposition, meaning it will rise from dusk till dawn, shining brightly throughout the entire night.

The Moon

This month's full moon is called the Hunter's Moon. It is the time of year that the Native American people traditionally hunted deer and fox to cure and store for the long winter nights ahead. The Saanich people have two moons for November; the first being *Weselánew*, the moon of the shaker leaves, the second being *Sjelcasen*, the moon of putting your paddle away in the bush.