# SPACE NEWS

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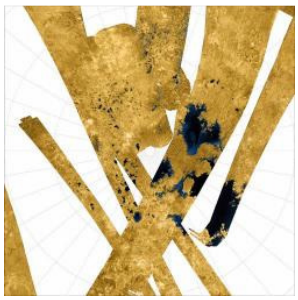
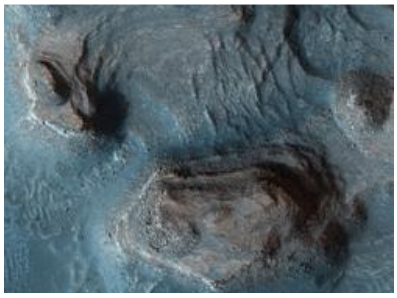
## Last week in space



The Cassini spacecraft has now mapped out about 60% of Titan's North Pole region, and at least 14% of the region is revealed by Cassini to be covered in what looks like liquid hydrocarbon lakes. Take a look at the photo associated with this story, see the dark black regions? Those are lakes. But not lakes like we see them here on Earth. The new images were mapped out by Cassini's radar instruments, which can detect the smoothness of the surface of Titan. Extremely smooth sections are thought to be a liquid, while the bumpier regions are solid ground. The largest sea discovered so far has a surface area of 100,000 square kilometres (40,000 square miles), bigger than Lake Superior here on Earth. Planetary scientists think the seas are filled with liquid ethane, methane and dissolved nitrogen. So far, more than 400 separate bodies of liquid have been discovered.



The High Resolution Imaging Science Experiment, or HiRISE, on NASA's Mars Reconnaissance Orbiter has added a new dimension to its views of Mars. The dimension is colour. The University of Arizona-based HiRISE team today released 143 colour images valuable to researchers studying possible landing sites for NASA's Mars Science Laboratory, a mission to deploy a long-distance rover carrying a deck of sophisticated science instruments on Mars in 2010. The colour images are online at the HiRISE Website, http://hirise.lpl.arizona.edu

The voyage of NASA's Pluto-bound New Horizons spacecraft through the Jupiter system earlier this year provided a bird's-eye view of a dynamic planet that has changed since the last close-up looks by NASA spacecraft. New Horizons passed Jupiter on Feb. 28, riding the planet's gravity to boost its speed and shave three years off its trip to Pluto. New Horizons was the eighth spacecraft to visit Jupiter – but a combination of trajectory, timing and technology allowed it to explore details no probe had seen before, such as lightning near the planet's poles, the life cycle of fresh ammonia clouds, the structure inside volcanic eruptions on its moon Io, and the path of charged particles traversing the previously unexplored length of the planet's long magnetic tail. To read more, click here: http://www.eurekalert.org/pub_releases/2007-10/jhu-as100907.php

## Not to be missed next week

This is a good week to follow the evolution of the moons terminator, the line that separates the light and dark halves of the moon. On the 15th the moon will be 5 days old and you should be able to see Theophilus, Cyrillus and Catharina in the middle of the terminator with the Seas of Tranquillity and fertility to the north. On the 17th you should be able to see the Apennine Mountain Range, one of the largest mountain ranges on the Moon. On the 20th you should be able to see the Bay of Rainbows (also known as Sinus Iridum), the Jura Mountains and the crater Tycho.

If you are up early on the morning of Friday 19th, don't forget to look up as this is an excellent opportunity to see some shooting stars of the Orionids meteor shower. You will also see Venus glowing like a beacon with a fainter Saturn almost directly above.