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LRO/LCROSS Mission discovers 'significant' amounts of water on the moon



November 13, 6:46 PM Tampa Space Program News Examiner Jason Rhian

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Comical...but accurate. Image courtesy of Joel Ott

NASA announced Friday that the \$79 million Lunar Reconnaissance Orbiter and Lunar Crater Observation and Sensing Satellite, (LRO/LCROSS) mission had achieved its primary objective of seeking out and discovering water on the surface of the moon.

On Oct. 9 the missions Centaur rocket upper stage and then the LCROSS conducted a one-two plunge into the lunar surface. The plume caused by the Centaur upper stage was scanned by the LCROSS and then it too slammed into the lunar surface. Then the LRO scanned the plumes from both of the impacts which took place on the lunar south pole in the moon's Cabeus crater. One of the first things that NASA scientists noticed in these readings was a spike in sodium readings.

Discovery of large amounts of water on the moon present a possible turning point for manned space exploration as it means that astronauts will have access to water for drinking hygiene and rocket fuel, (Hydrogen and Oxygen are components in rocket fuel).

The LRO/LCROSS mission utilized spectrometers to scan the debris plumes for signs of water. This device can identify what a material is made of by the light that it either emits or absorbs. Although the water could have been deposited in the crater by solar winds, molecular clouds or some as-yet unknown catalyst but more than likely was left as comets impacted the lunar surface billions of years ago.

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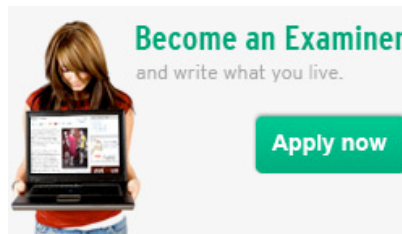
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