

MOON DAILY

the discovery, exploration and application of luna

Get Our Free Newsletters Via Email

Search All Our Sites - Powered By Bing

your email address

yes

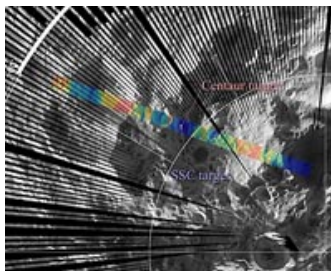


MOON DAILY

NASA Spacecraft Impacts Lunar Crater In Search For Water Ice

by Staff Writers
Moffett Field CA (SPX) Oct 12, 2009

NASA's Lunar Crater Observation and Sensing Satellite, or LCROSS, created twin impacts on the moon's surface early Friday in a search for water ice. Scientists will analyze data from the spacecraft's instruments to assess whether water ice is present.



This image shows the locations of the Diviner LCROSS impact swaths overlain on a grayscale daytime thermal map of the Moon's south polar region. Diviner data were used to help select the final LCROSS impact site inside Cabeus Crater, which sampled an extremely cold region in permanent shadow that can serve as an effective cold trap for water ice and other frozen volatiles. Credit NASA/GSFC/UCLA

The satellite traveled 5.6 million miles during an historic 113-day mission that ended in the Cabeus crater, a permanently shadowed region near the moon's south pole. The spacecraft was launched June 18 as a companion mission to the Lunar Reconnaissance Orbiter from NASA's Kennedy Space Center in Florida.

"The LCROSS science instruments worked exceedingly well and returned a wealth of data that will greatly improve our understanding of our closest celestial neighbor," said Anthony Colaprete, LCROSS principal investigator and project scientist at NASA's Ames Research Center in Moffett Field, Calif. "The team is excited to dive into data."

In preparation for impact, LCROSS and its spent Centaur upper stage rocket separated about 54,000 miles above the surface of the moon on Thursday at approximately 6:50 p.m. PDT.

Moving at a speed of more than 1.5 miles per second, the Centaur hit the lunar surface shortly after 4:31 a.m. Oct. 9, creating an impact that instruments aboard LCROSS observed for approximately four minutes. LCROSS then impacted the surface at approximately 4:36 a.m.

"This is a great day for science and exploration," said Doug Cooke, associate administrator for the Exploration Systems Mission Directorate at NASA Headquarters in Washington.

"The LCROSS data should prove to be an impressive addition to the tremendous leaps in knowledge about the moon that have been

How to make electricity

\$198 homeowner's kit that power Co execs tried to outlaw in 17 states
www.Power4Home.com

Buy on NASA SEWP IV

SEWP IV contractor covers almost every IT product. Online quotes.
www.securehq.com

Die On The Moon?

Find Die On The Moon Here For Sure Low Prices, Fast Shipping Till Gone
www.OhMyCrafts.com

Coffee Fool exposed

Over 200 reasons you too may want to become a Coffee Fool!
www.coffeefool.com

Featured **Jobs** [Click to see more](#)
powered by **monster**

- ▶ [Corporate Ticket Sales Associ...](#)
the sports industry's #1 Job Board a...
Atlanta, GA
- ▶ [Lease Administrator / Propert...](#)
Join P.F. Changs Inc. as our new Lease...
Scottsdale, AZ
- ▶ [Associate Director of Encount...](#)
UnitedHealth Group is an innovative le...
Phoenix, AZ
- ▶ [Broadcast Operations Tech III](#)
EchoStar aggressively recruits energ...
Gilbert, AZ

How To Make Electricity :

Don't ever pay for electricity, you can make it



achieved in recent weeks. I want to congratulate the LCROSS team for their tremendous achievement in development of this low cost spacecraft and for their perseverance through a number of difficult technical and operational challenges."?

Other observatories reported capturing both impacts. The data will be shared with the LCROSS science team for analysis. The LCROSS team expects it to take several weeks of analysis before it can make a definitive assessment of the presence or absence of water ice.

"I am very proud of the success of this LCROSS mission team," said Daniel Andrews, LCROSS project manager at Ames. "Whenever this team would hit a roadblock, it conceived a clever work-around allowing us to push forward with a successful mission."

The images and video collected by the amateur astronomer community and the public also will be used to enhance our knowledge about the moon.

"One of the early goals of the mission was to get as many people to look at the LCROSS impacts in as many ways possible, and we succeeded," said Jennifer Heldmann, Ames' coordinator of the LCROSS observation campaign.

"The amount of corroborated information that can be pulled out of this one event is fascinating."

"It has been an incredible journey since LCROSS was selected in April 2006," said Andrews. "The LCROSS Project faced a very ambitious schedule and an uncommonly small budget for a mission of this size. LCROSS could be a model for how small robotic missions are executed. This is truly big science on a small budget."

Share This Article With Planet Earth

- del.icio.us
- Digg
- Reddit
- YahooMyWeb
- Google
- Facebook

Related Links

- [LCROSS](#)
- [Mars News and Information at MarsDaily.com](#)
- [Lunar Dreams and more](#)

Ads by Google

- [The Moon NASA](#)
- [Space Station](#)
- [NASA Images](#)
- [NASA Earth](#)
- [NASA Mars](#)

Search All Our Sites - Powered By Google

MOON DAILY

UBC Engineering Students Unveil Moon Dust-Shoveling Robot

Vancouver, Canada (SPX) Oct 12, 2009
A robot designed by UBC students will be shoveling moon dust at an international robotics competition next week, vying for a \$500,000 prize and the opportunity to



simple & cheap at home.



How To Make Electricity :

Don't ever pay for electricity, you can make it simple & cheap at home.



contribute to NASA's future space exploration projects.

The UBC team has created a robotic machine that can excavate simulated lunar soil (regolith). Excavating regolith will be an important part of any construction project or ... read more



[Memory Foam
Mattress Review](#)

[SPACE MEDIA NETWORK PROMOTIONS](#)

[Solar Energy Solutions](#) ::

[Shop for telescopes online](#) :: [Tempur-Pedic Mattress Comparison](#)
[Myspace Layouts Editor](#)

**Newsletters :: SpaceDaily Express :: SpaceWar Express :: TerraDaily Express :: Energy Daily
XML Feeds :: Space News :: Earth News :: War News :: Solar News**

The content herein, unless otherwise known to be public domain, are Copyright 1995-2009 - SpaceDaily. AFP and UPI Wire Stories are copyright Agence France-Presse and United Press International. ESA Portal Reports are copyright European Space Agency. All NASA sourced material is public domain. Additional copyrights may apply in whole or part to other bona fide parties. Advertising does not imply endorsement, agreement or approval of any opinions, statements or information provided by SpaceDaily on any Web page published or hosted by SpaceDaily. [Privacy Statement](#)