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Rocket Launches New U.S. Moon Probes
By [Tariq Malik](#)
Senior Editor
posted: 18 June 2009 05:41 pm ET

This story was updated at 6:35 p.m. EDT.

NASA's first moon mission in more than a decade blasted off Thursday, launching two unmanned probes to hunt for water ice and map the lunar surface.

The two new probes - a [powerful lunar orbiter](#) and a smaller craft destined to crash into the moon's south pole - atop an Atlas 5 rocket that lifted off from the Cape Canaveral Air Force Station in Florida. Their launch comes nearly 40 years after the Apollo astronauts first set foot on the moon in July 1969.

"We look forward to bringing the country the first chapter of our new journey of exploration Todd May, manager for NASA's Lunar Precursor Robotic Program.

Stormy weather threatened to keep the two moon probes on Earth at least one more day, and prevented two initial opportunities to launch the mission. But the skies cleared in time for [today's liftoff](#) at 5:32 p.m. EDT (2132 GMT), the mission's third and last chance of the day.

Leading the charge on the \$538 million mission is the Lunar Reconnaissance Orbiter (LRO), a satellite the size of a Mini Cooper car laden that is packed with seven instruments to [map the moon](#) and study its environment to aid future manned missions. The solar-powered spacecraft should take four days to reach the moon, and then enter a 2-hour orbit around the lunar poles.

Not since 1998's Lunar Prospector mission has NASA sent a probe to the moon, though probes from China, Japan and India have visited Earth's nearest neighbor in recent years. The LRO mission, and its partner the Lunar Crater Observation and Sensing Satellite (LCROSS) impactor, are NASA's robotic vanguard in its renewed push to send humans beyond low-Earth orbit.

LRO separated from the Atlas 5 rocket from its partner craft about 45 minutes after liftoff. LCROSS and its attached Centaur stage are slated to reach their intended orbit four hours after launch, mission managers have said.

"All appears well with LRO and we wish them luck," NASA launch director Chuck Dovale said after launch.

NASA had delayed the moon mission several times, first from a October 2008 target and most recently from a planned Wednesday liftoff. The agency pushed today's liftoff back one day to allow the shuttle Endeavour a second launch attempt that was thwarted by a gas leak.

The moon up close

When NASA's Apollo landing missions sent 12 astronauts to the lunar surface, they only touched down in six spots around the moon's equator. Each site was explored for a few days at a time, and only in daylight. NASA hopes to return astronauts to the moon by 2020 to explore regions that have never been seen by the human eye

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NASA's LRO and LCROSS moon probes blast off atop an Atlas 5 rocket in this June 18, 2009 image to begin NASA's lunar return. This image was taken as the ULA rocket launched from the Cape Canaveral Air Force Station in Florida. Credit:

I watched the replay from the Centaur, and when the Atlas separated it looked like it split into 3 pieces as it tumbled away. Is this correct?

Onwards.....and outwards!

Congrats on the launch!

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NASA/GSFC

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HelloBozos wrote: posted 18 June 2009, 6:50 pm ET

They weren't messing around...8 minutes after the thunder storm...Launch!! please keep-up on the updates where on the moon the impactor will hit an time..thanks

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MasterComposter wrote: posted 18 June 2009, 7:33 pm ET

One of these days, LCROSS... Pow! Right to the MOON!

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fghhgf wrote: posted 18 June 2009, 8:51 pm ET

Nice to see them getting back to the moon !

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fghhgf wrote: posted 18 June 2009, 8:51 pm ET

Nice to see them getting back to the moon !

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Rickstar wrote: posted 18 June 2009, 9:12 pm ET

Can hardly wait to see what LRO finds in those Craters,at the Lunar Poles...

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lowrieder wrote: posted 18 June 2009, 9:46 pm ET

Great mission, I hope it goes well.

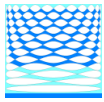
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High_Evolutionary wrote: posted 18 June 2009, 10:00 pm ET

There is a certain nostalgia about returning to moon. Sure we've been there, but now we are really going to go there and beyond. I wonder if the surviving apollo astronaut(s) are wondering if they'll be in shape for another go at it. just thinking.

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alphachapmtl wrote: posted 19 June 2009, 1:02 am ET

Wow! This will be the first systematic mapping of the Moon since the 1966-67 Lunar Orbiters, 43 years ago. I can't wait for my new Moon map.

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