# NASA's LRO featured in Journal of Geophysical Research Planets special edition

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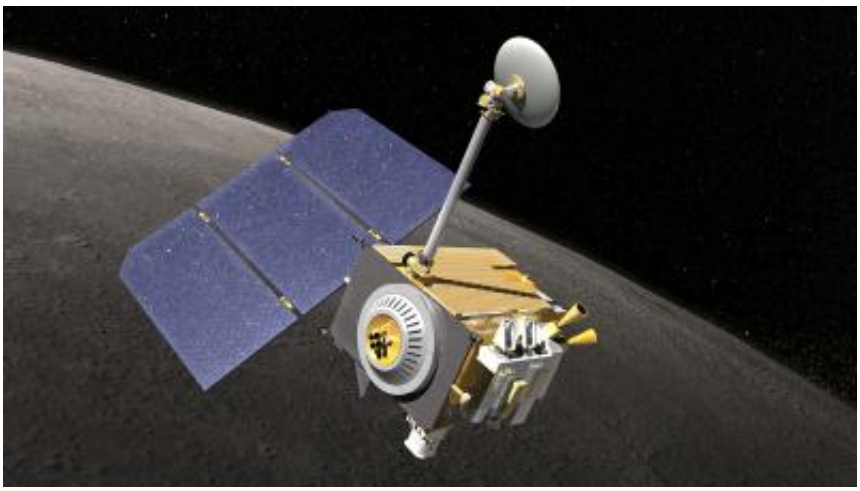

NASA's Lunar Reconnaissance Orbiter has been studying the moon since June 2009. Credit: NASA

Scientific observations made by NASA's Lunar Reconnaissance Orbiter (LRO) mission are the subject of the latest special edition volume of *Journal of Geophysical Research Planets*, a scientific peer-reviewed journal.

The 35 LRO papers highlighted in the special issue address a variety of science topics, with results such as: improved the understanding of the ancient impact populations that affected all the planets in the inner solar system; discovered the global population of small-scale, relatively young structures that show the moon is in a general state of relatively recent

contraction; determined the global distribution of regolith surface temperature and rock abundance; discovered significant subsurface hydrogen deposits in sunlit areas as well as in some permanently shadowed regions; and measured galactic cosmic ray interactions with the moon during a period with the largest cosmic ray intensities measured since the beginning of the space age.

"The analyses of the rich data sets collected during the first three years of LRO operations are being used to overturn previous beliefs and to deepen our appreciation of the complex nature of our nearest neighbor," said Richard Vondrak, LRO deputy project scientist at NASA's Goddard Space Flight Center in Greenbelt, Md. "These scientific papers demonstrate the abundant scientific yield from LRO observations."

LRO launched aboard an Atlas V rocket from Cape Canaveral, Fla., on June 18, 2009. LRO carries seven instruments that make comprehensive remote sensing observations of the moon and measurements of the lunar radiation environment. LRO is managed by NASA Goddard for the Science Mission Directorate at NASA Headquarters in Washington.

Provided by NASA's Goddard Space Flight Center

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