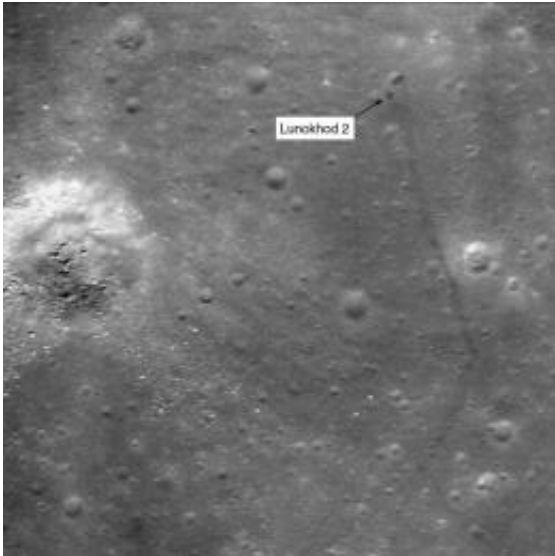


# Researcher solves 37-year old space mystery

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A researcher from The University of Western Ontario has helped solve a 37-year old space mystery using lunar images released yesterday by NASA and maps from his own atlas of the moon.

Phil Stooke, a professor cross appointed to Western's Departments of Physics & Astronomy and Geography, published a major reference book on lunar exploration in 2007 entitled, "The International Atlas of Lunar Exploration."

Yesterday, images and data from Nasa's Lunar Reconnaissance Orbiter (LRO) [were posted](#). The LRO, scheduled for a one year exploration

mission about 31 miles above the lunar surface, will produce a comprehensive map, search for resources and potential safe landing sites and measure lunar temperatures and radiation levels.

Using his atlas and the [NASA](#) images, Stooke pinpointed the exact location of the Russian rover Lunokhod 2, discovering tracks left by the lunar sampler 37 years ago after it made a 35-kilometre trek. The journey was the longest any robotic rover has ever been driven on another celestial body.

As soon as the NASA photos were released, scientists around the world, including Stooke, began work to locate the rover. Stooke set up a searchable image database and located the photograph he needed, among thousands of others.

"The tracks were visible at once," says Stooke. "Knowing the history of the mission, it's possible to trace the rover's activities in fine detail. We can see where it measured the magnetic field, driving back and forth over the same route to improve the data. And we can also see where it drove into a small crater, and accidentally covered its heat radiator with soil as it struggled to get out again. That ultimately caused it to overheat and stop working. And the rover itself shows up as a dark spot right where it stopped."

The find, he adds will mean that older maps published by Russia will now need to be revised.

Stooke says that NASA scientists have used his atlas in both preparation and data recovery.

His next project is a similar volume on Mars exploration which will include the best maps of the moons of Mars.

Provided by University of Western Ontario

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