

**Landing Site Selection and Surface Traverse Planning using the Lunar Mapping & Modeling Portal** E. Law<sup>1</sup>, G. Chang<sup>1</sup>, B. Bui<sup>1</sup>, R. kim<sup>1</sup>, K. Dodge<sup>1</sup>, S. Sadaqathullah<sup>1</sup>, and S. Malhotra<sup>1</sup>, <sup>1</sup>Jet Propulsion Laboratory, California Institute of Technology.

**Introduction:** The Lunar Mapping and Modeling Portal (**LMMP**)[1], is a web-based Portal and a suite of interactive visualization and analysis tools for users to access mapped lunar data products (including image mosaics, digital elevation models, etc.) from past and current lunar missions (e.g., Lunar Reconnaissance Orbiter, Apollo, etc.), and to perform in-depth analyses to support lunar surface mission planning and system design for future lunar exploration and science missions. It has been widely used by many scientists mission planners, as well as educators and public outreach (e.g., Google Lunar XPRICE teams, RESOLVE project, museums etc.)

This year, LMMP was used by the Lunar and Planetary Institute (LPI)'s Lunar Exploration internship program to perform lighting analysis and local hazard assessments, such as, slope, surface roughness and crater/boulder distribution to research landing sites and surface pathfinding and traversal. Our talk will include an overview of LMMP, a demonstration of the tools as well as a summary of the LPI Lunar Exploration summer interns' experience in using those tools.

**References:**

[1] <http://www.lmmp.nasa.gov>