



# Arcadia Planitia

*Safe Rover Traversal Map*

## DESCRIPTION

The map presents regions of high risk for autonomous martian rovers. **Areas highlighted in yellow pose heightened risk of damage** because of sharp slopes, rough terrain, or low temperatures.

Slopes have been determined by using elevation map from MOLA instrument. Thermal conditions have been approximated by using thermal inertia values from THEMIS with the assumption that regions with higher thermal inertia will radiate heat for longer during nights, sustaining optimal temperature. Regions with missing data have been marked as risky by default.

## SOURCES

- Viking Orbiter Imagery (RGB image),
- MARS Odyssey THEMIS (thermal inertia mosaic),
- Mars Global Surveyor MOLA (elevation).

