

Peer Review

Review of: "Lunar Rover Grand Prix Sequence in Apollo XVI Footage: Behavior of Lunar Dust and Known Dimensions of Involved Objects"

Amrit Šorli¹

1. Bijective Physics Institute, Slovenia

This article is excellent. Calculations are exact and convincing. This sentence gets my attention: "Upon exiting the depression, the Rover takes its wheels off the ground for about **1 second** with the only interference due to the impact of the rear wheel on the ascending wall of the depression, an impact which was largely absorbed by the shock absorber – suspension system. This circumstance is interesting for determining some fundamental elements of the sequence".

On the Moon, gravitational acceleration is mG/r^2 , where m is the mass of the Moon, G is the gravitational constant, and r is the radius. On the Moon's surface, things are falling with lower speed than on the Earth's surface. I would suggest that authors calculate the force F_g on the Rover on the Moon's surface and see if **1 second** fits in the calculation. By chance, they will find out that this 1 second fits $a=9.8\text{ms}^2$, then the Rover was driving on the Earth's surface.

Declarations

Potential competing interests: No potential competing interests to declare.