

## Dust Remover Questions

Have obstacles besides weather and natural events ever been reported on Mars or on the Moon if so what are they so we can find a way to build around it.

Not that I am aware of at the moment.

On Mars there are problems with sand storms and dust devils that can leave dust on solar panels and prevent light from charging up batteries over long periods of time.

On the moon, static electricity can kick up dust and get it all over vehicles or people. I expect the lower gravity to also be a problem but I'm not sure how yet

What is the most amount of weight we can bring up to space?

I would reference the launch capabilities of the new SLS vehicle as our maximum launch capability. Be sure to look into what it can deliver to the moon. There are other launch vehicles that may be cheaper to get things to the moon also.

What is the specific model and dimensions of the solar panels on your rover?

No size or style of solar panels have been determined yet

Does the magnetic field increase or decrease on Mars or the Moon?

Neither the moon nor Mars have a significant magnetic field. There may be small magnetic fields in specific locations on the moon or Mars just from the local rocks and minerals

How efficient is a motor on Mars or the Moon

I would expect electric motors to have similar efficiencies on earth but at lower temperatures. In general the temperatures on Mars are much colder. On the moon the temperatures swing much more from hot to cold because of the lack of atmosphere

Does NASA use any sort of self cleaning or dust removing devices

This is definitely a project that NASA is interested in. Some of the rovers on Mars have had their solar panels obscured by dust but I don't think that they had a good solution for cleaning them off. This is some thing they are still struggling with