

Aeolian transport of viable microbial life across the Atacama Desert, Chile: Implications for Mars

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Here we inspect whether microbial life may disperse using dust transported by wind in the Atacama Desert in northern Chile, a well-known Mars analog model. By setting a simple experiment across the hyperarid core of the Atacama we found that a number of viable bacteria and fungi are in fact able to traverse the driest and most UV irradiated desert on Earth unscathed using wind-transported dust, particularly in the later afternoon hours. This finding suggests that microbial life on Mars, extant or past, may have similarly benefited from aeolian transport to move across the planet and find suitable habitats to thrive and evolve. © 2019, The Author(s).