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Sand and dust transport on Mars

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As on earth the transport of dust and sand has clearly played a powerful roll in shaping the Martian landscape. In the present thin atmosphere on the planet sand transport appears to have ceased while red dust continues to be a dynamic factor. Much has still to be learned about the processes by which this dust is carried and under what conditions sand dunes formed on Mars. Using a unique re-circulating wind tunnel (1), in which the Martian environment can be reproduced, dust and sand can be transported under varying conditions of wind, geometry and fluid properties. The aim has been to set boundaries under which sand can be transported and thereby investigate the Martian climatic history. Similarly studies of dust electrification (2), aggregation and entrainment have been performed to find out how and why dust is transported in such abundance.

References:

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