



# Migrating and Static Sand Ripples on Mars

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HIGH RESOLUTION IMAGING  
SCIENCE EXPERIMENT  
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Having operated at Mars for more than seven years, MRO and the HiRISE camera continue to make new discoveries. One of these is that many sand dunes and ripples are moving, some at rates of several meters per year. In this observation, a dune field in a Southern hemisphere crater was observed approximately one Mars year apart, first on 2 September 2011 and then again on 11 July 2013 (a year on Mars is 687 Earth days). By taking images at the same time of year, solar illumination angles are the same, so that subtle apparent changes can be linked to true displacement on the surface and not artifacts.