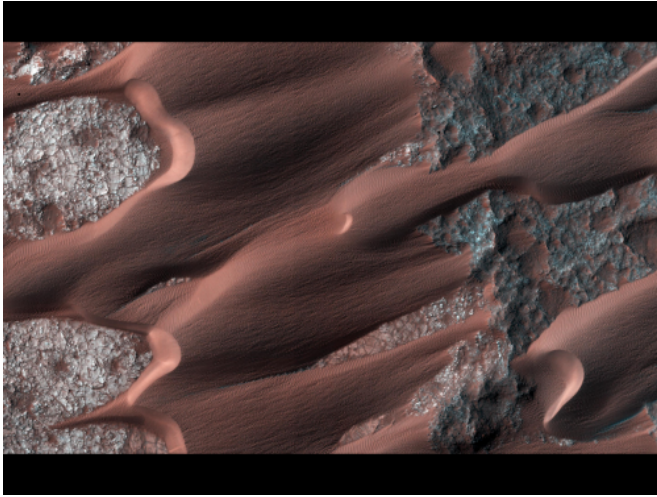


NASA image: Active dune field on Mars

5 May 2014



camera, which was built by Ball Aerospace & Technologies Corp., Boulder, Colo. NASA's Jet Propulsion Laboratory, a division of the California Institute of Technology in Pasadena, manages the Mars Reconnaissance Orbiter Project for the NASA Science Mission Directorate, Washington.

Provided by NASA

Credit: NASA/JPL-Caltech/Univ. of Arizona

Nili Patera is one of the most active dune fields on Mars. As such, it is continuously monitored with the HiRISE (High Resolution Imaging Science Experiment) camera, a science instrument aboard NASA's Mars Reconnaissance Orbiter, with a new image acquired about every six weeks.

By monitoring the sand dune changes, we can determine how winds vary seasonally and year-to-year. This observation is one of the more recent Nili images, acquired on March 1, 2014. Compared to an image acquired on Nov. 22, 2012, changes are obvious. The ripples on the dunes have moved, as well some of the dune boundaries, such as the one at upper left. New landslides on the central dune's lee face are apparent.

Such changes, in just 16 months (and finer scale changes have been seen in just a couple of weeks), demonstrate the effectiveness of wind in modifying the Martian landscape.

HiRISE is one of six instruments on NASA's Mars Reconnaissance Orbiter. The University of Arizona, Tucson, operates the orbiter's HiRISE

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