

A dark and dusty avalanche on Mars

November 6 2013, by Jason Major



Fallen soil and dust stains an icy cliffside on Mars. Credit: NASA/JPL/University of Arizona

Mars may be geologically inactive but that doesn't mean there's nothing happening there—seasonal changes on the Red Planet can have some very dramatic effects on the landscape, as this recent image from the HiRISE camera shows!

When increasing light from the springtime Sun warms up the sides of

sheer cliffs made from countless layers of water and carbon dioxide ice near Mars' north pole, some of that CO₂ ice sublimates, sending cascades of loose soil and dust down to the terraced base below. This uncovered material stains the frost-covered polar surface dark, outlining the paths of avalanches for HiRISE to easily spot from orbit. (See the original HiRISE image [here](#).)

Circling Mars since March 2006, the HiRISE camera aboard NASA's Mars Reconnaissance Orbiter has even captured some of these polar landslides in action.

The rust-colored avalanche shown above has fallen hundreds of meters from the middle of a layered ice deposit, spreading nearly a kilometer across the frozen ridges at the base of the cliff. The view was acquired on Sept. 13, 2013.

Check out a video explaining this view and the processes that created it below, narrated by Phil Plait (aka the [Bad Astronomer](#)).



The full extent of the 1000-meter-long dusty landslide. Credit: NASA/JPL/University of Arizona

Source: [Universe Today](#)

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