

Erosion of Steep Scarp of the South Polar Layered Deposits ESP_031078_1080



This image shows spectacular erosion of a steep scarp in the icy layered deposits on the South Pole of Mars. There are small and large alcoves, one of which (on the right) leads to a bright deposit. This must be a recent avalanche deposit, because the ice should sublimate rapidly after being exposed from beneath the protective cover of dust that develops on the surface. The alcoves may form by a combination of sublimation and collapse. HiRISE is monitoring this site and adjacent areas for changes, to better understand the active processes.