



An Icy Crater on Mars

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Mars has ground ice at high latitudes, and when new craters form there, they dig up the ice. Until this image, this had only been seen on the Northern plains, because the Southern highlands have less dusty surfaces and it is hard to find new craters there. This crater is on an outlier of the South Polar layered deposits, a thick stack of layers near the south pole made of ice and dust. It is not a surprise to find that these layered deposits are icy! However, the ice must be clean (without much dust) to stay bright long enough for HiRISE to see it, which gives us another piece of evidence that the layers are mostly ice. The layered deposits around here are covered with a layer of dust, but this crater tells us that the cover isn't very thick.