

Dust Covered Channels on Tharsis Tholus

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THE UNIVERSITY . OF ARIZONA. Tharsis Tholus is one of the smaller shield volcanoes on Mars' massive "Tharsis Rise." The main shield is covered by a very thick blanket (or "mantle") of loose material. This is likely to be the same dust that is found across all of Mars. It accumulates on the tall volcanoes because the thin atmosphere at these elevations has a very hard time moving the dust after it is dropped out from the global dust storms. But another reason for the great thickness of the mantle here could be volcanic ash derived from the volcanos themselves. The flanks of Tharsis Tholus are cut by large channels, similar to those visible on other Martian shield volcanos like Arsia Mons and Elysium Mons.