Crater-Related Pitted Materials on Mars

- Previously recognized, but thought to be rare.
- HiRISE determined that they are wide-spread in over 200 fresh and well-preserved craters ranging from ~1 to 150 km in size.
- Pits are likely to form through the interaction of hot deposits generated by the impact and preexisting water-ice contained in the Martian subsurface.
- See Tornabene L. L., & 5 others (2012), Widespread crater-related pitted materials on Mars: further evidence for the role of target volatiles during the impact process, Icarus, doi:10.1016/j.icarus. 2012.05.022.







