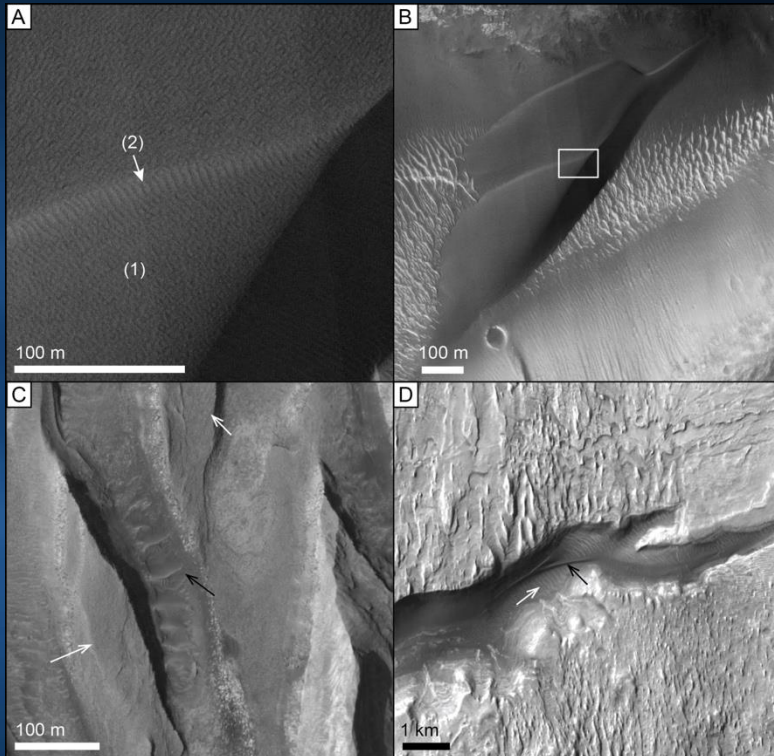


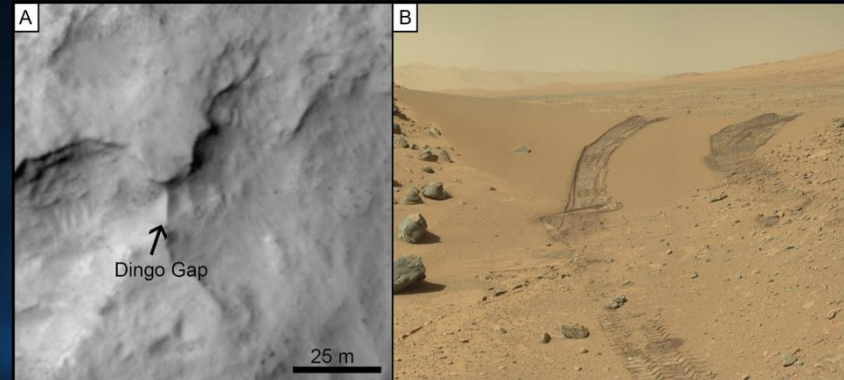
Understanding Aeolian Activity In Gale Crater

Wind has modified the landscapes on Mars for billions of years, and continues to do so today, despite the low-density atmosphere. By combining data from the Curiosity Rover and the High Resolution Imaging Science Experiment (HiRISE) on the Mars Reconnaissance Orbiter, we can form a more complete understanding of the effect of wind in Gale Crater.



(Above) Wind-sculpted features helped reconstruct wind circulation in Gale crater. A) Fluid drag ripples form on the windward (1) and reworked leeward (2) faces of a dune. B) The same dune from A (white box) migrating over a field of transverse aeolian ridges (TARs). C) TARs (black arrow) between yardangs (white arrow). D) TARs (white arrow) with a dune (black arrow) in a canyon cut through a yardang field.

Wind is actively changing the landscape of Mars today.



(Above) The Dingo Gap dune as seen by HiRISE (A) and Curiosity (B).

(Right) Major wind circulation patterns in Gale crater reconstructed from wind-sculpted features (left) at the surface show how regional and slope winds eroded the central mound.

