

Colorful Dunes

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This field of dunes lies on the floor of an old crater in Noachis Terra, one of the oldest places on Mars. When there are perfect conditions for producing sand dunes--steady wind in one direction and just enough sand--barchan sand dunes form. The word "barchan" is a Russian term because this type of dune was first described in the desert regions of Turkistan. Barchans have a gentle slope on the upwind side and a much steeper slope on the lee side where horns or a notch often forms. The wind in this case came from the southwest. Observing dunes on Mars can tell us how strong the winds are, as well as their direction. If pictures are taken at regular intervals, one may see changes in the dunes and in ripples on the dunes' surface.