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Sand dunes near Stovepipe Wells, Death Valley, CA. Winds of 10 mph or more shape the dunes at Stovepipe Wells in Death Valley National Park, CA. Quarts and feldspar grains derived from the nearby Cottonwood Mountains are the probable source. Seen in this image is the slip-face surface of an active dune. Slip-face surfaces are created when wind-driven sand particles accumulate at the top of an active dune, overload the friction force present in angle of repose slip-face surface and create an overloaded condition at the crest of the dune. With sufficient overloading, the slip-face slope fails and collapses on the leeward slope. Repeated slope failures and new wind-driven sand accumulations cause the dune to migrate in the most persistent wind direction. Photo by Michael Balen, CPG-08207.

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