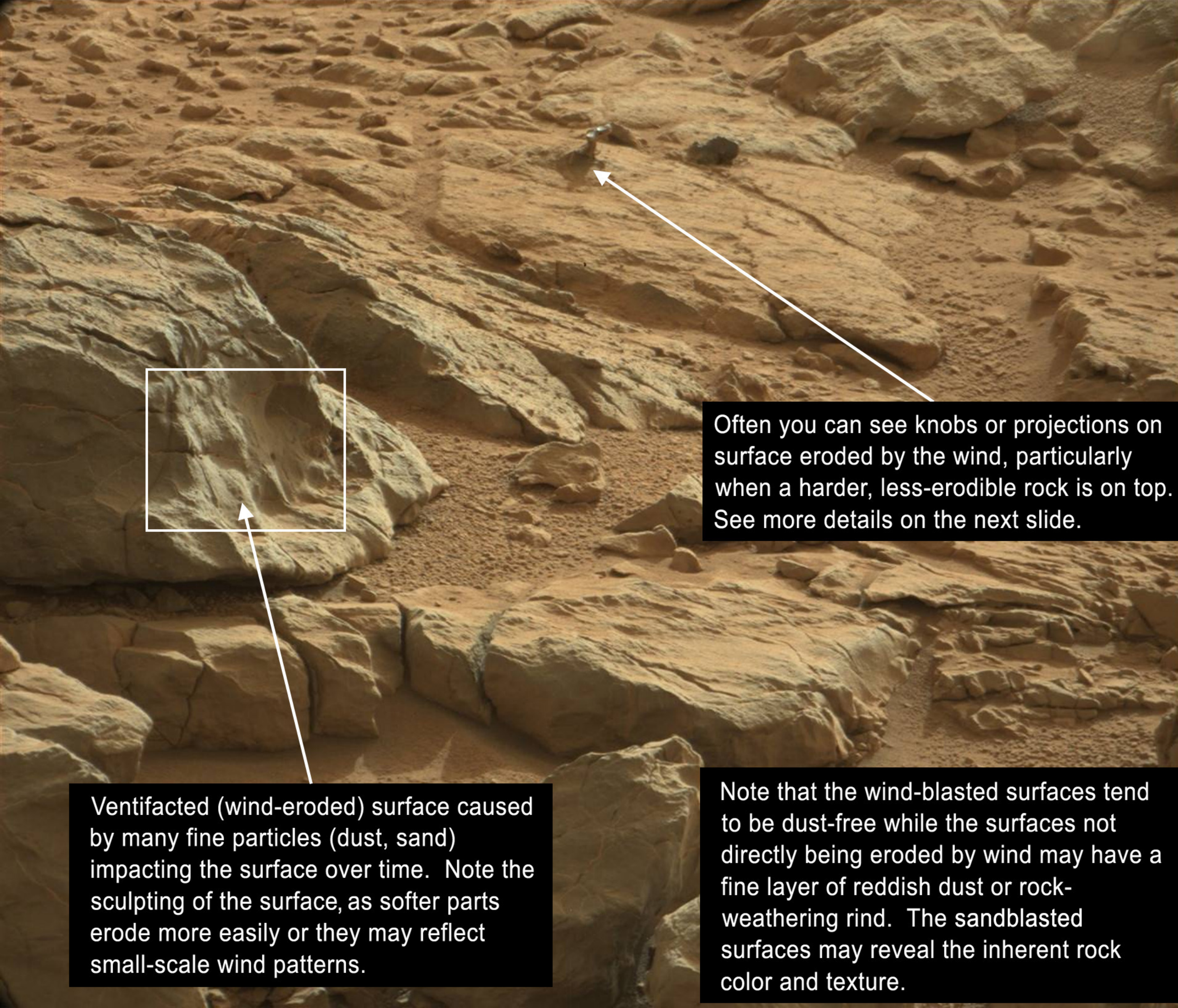
Often you can see knobs or projections on surface eroded by the wind, particularly when a harder, less-erodible rock is on top. See more details on the next slide.
Ventifacted (wind-eroded) surface caused by many fine particles (dust, sand) impacting the surface over time. Note the sculpting of the surface, as softer parts erode more easily or they may reflect small-scale wind patterns.
Note that the wind-blasted surfaces tend to be dust-free while the surfaces not directly being eroded by wind may have a fine layer of reddish dust or rock-weathering rind. The sandblasted surfaces may reveal the inherent rock color and texture.

This knob has a different type of rock on the end of the projection. This rock may vary in composition or the rock grain size may be smaller. The rock on top of the projection is likely more resistant to wind erosion and protects the underlying rock from being eroded. The shiny surface suggests that this rock has a fine grain and is relatively hard. Hard, fine-grained rocks can be polished by the wind to form very smooth surfaces. See next pages for examples of ventifacts from Antarctica.

Ventifacts formed from dolerite rock in Taylor Valley, Antarctica. This group of rocks likely started as a single rock that over time has broken apart. The wind has eroded the surfaces that appear gray, while the reddish part of the rock is simply the weathered surface or rock patina. The inset picture shows another example of a rock breaking apart in place and being eroded by the wind.

Rock pavements on the surface of soils and sediments can also be sculpted by wind erosion. The image on the left is a desert pavement from Arena Valley, Antarctica. This is an old surface that has likely been forming for millions of years. Over time the rocks will form a beautifully-interlocked surface that protects the soils/sediments below from being eroded away.

The example to the right is from a modern beach in north Norway. The area where these form is windy, and sand is often blowing. This reveals that these features can form rapidly, depending on the wind frequency/velocity and the amount of fine particles entrained by the wind to sandblast the surfaces.

Here we see a wind-eroded rock that has originated along a contact zone between granite and dolerite. The dark-colored dolerite is resistant to erosion and is polished smooth by the wind. The granite is also shaped by the wind; however, since it is coarser-grained, it is not polished as smoothly as the fine-grained dolerite.