Painting with Frost

Subtle variations in color look like brush strokes as the lightly frosted terrain reflects light. These variations provide a backdrop to some exotic features referred to colloquially as spiders. The radial channels branching out from a central depression are formed when the seasonal layer of dry ice turns to gas in the spring and erodes the surface, which is a uniquely Martian landform.

uahirise.org/ESP_047074_1030

Cracks in a Crater's Ice

Surface cracks that form polygonal shapes cover the material inside a crater. They are easy to see in this spring-time image because seasonal frost hides inside the cracks, outlining them in bright white. These cracks form because ice within the ground expands and contracts a lot as it warms and cools.

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The Coolest Landscape on Mars (or Earth)

Many Martian landscapes contain features that are familiar to ones we find on Earth. However, Mars has an exotic side too, with landscapes that are alien to Earthlings. This image shows one of these exotic locales at the South Pole. The polar cap is made from carbon dioxide (dry ice), which does not occur naturally on the Earth. The circular pits are holes in this dry ice layer that expand by a few meters each Martian year.

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Colorful Bedrock Exposed in a Landslide Scarp

The steep walls of Valles Marineris sometimes fail, creating giant landslides. This provides a clean exposure of the bedrock. This image of the north wall of Ganges Chasm reveals bedrock with diverse colors and textures, representing different geologic units.

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