

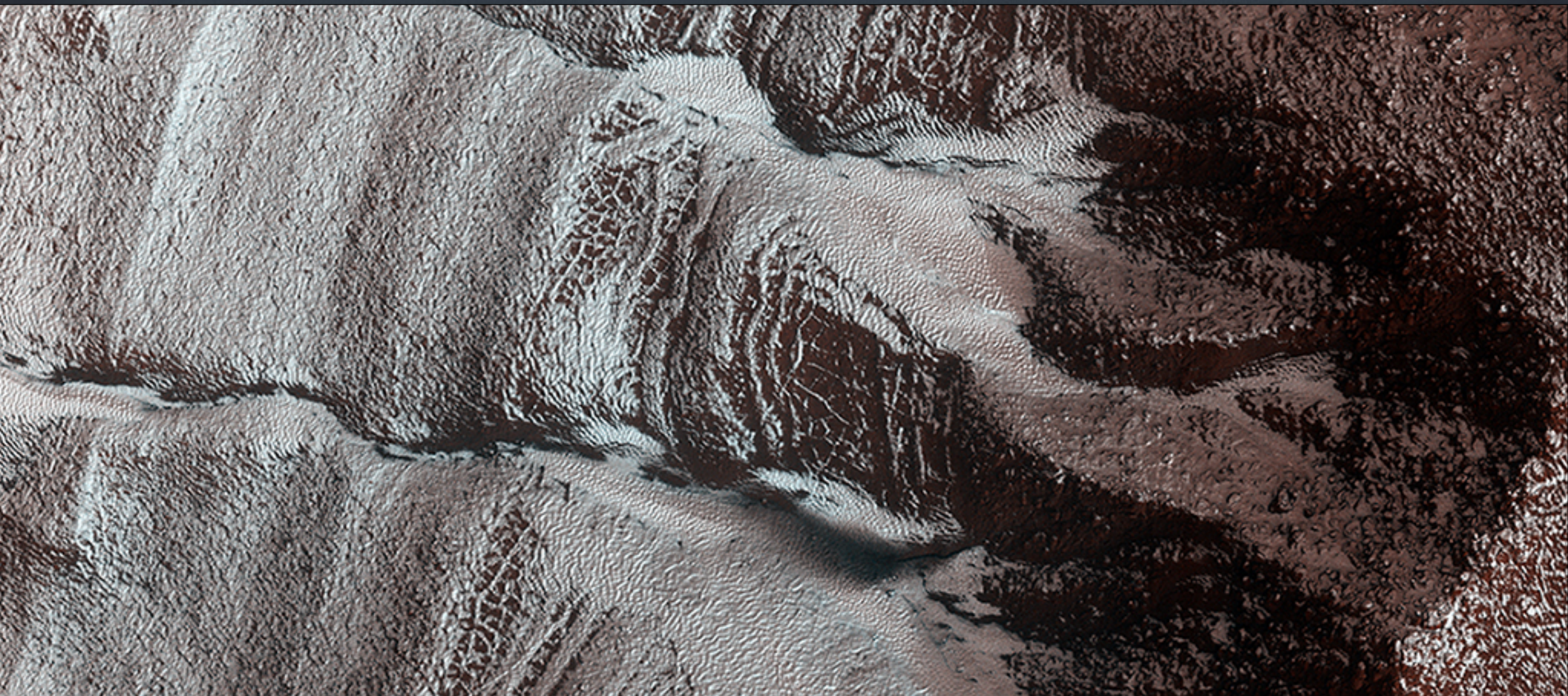
Recurring Slope Lineae in Juventae Chasma

Juventae Chasma is a giant box canyon, yet a relatively small segment of the enormous Valles Marineris system. It is breached to the north, leading to the Maja Vallis outflow channel. The box canyon may have been nearly filled with water long ago (a couple billion years), but was released catastrophically when the region north of the box canyon collapsed.



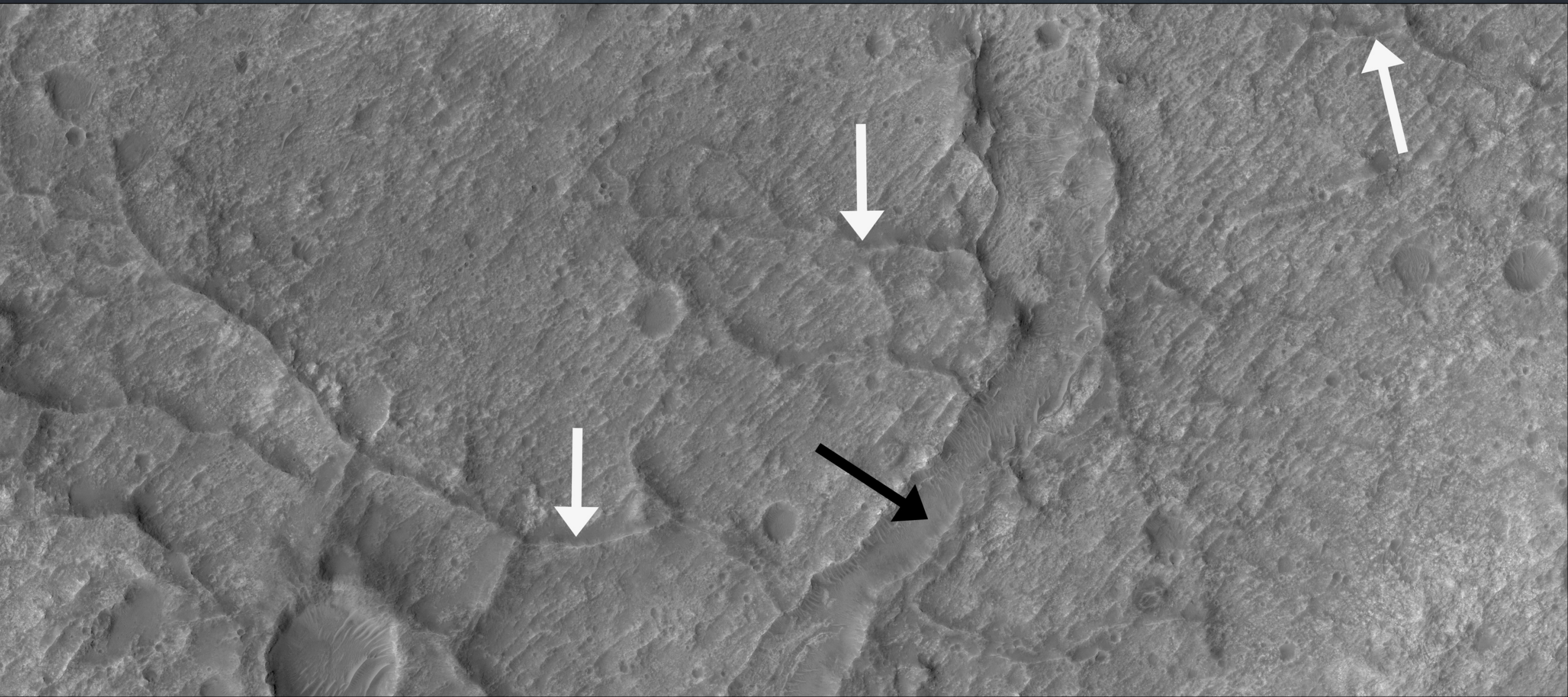
Seeing Beneath the Surface in Morava Valles

The crater exposes several layers along its upper walls including a distinct bouldery layer just below the mantle of windblown sediments. These boulders may have originated from the eruption site and were transported and emplaced on the channel floor by high energy floods. Alternatively, these bouldery layers may be lava that subsequently flowed across the flood scarred channel floors.



Frosted Gullies in a Central Pit

Carbon dioxide frost covers much of the region and helps to reveal subtle textures in the landscape. The layered sediment visible in the walls of the pit and in which these gullies formed likely originally filled much of the impact crater.



Inverted Ridges in the Eridania Basin

The ridges (white arrows) display a dendritic, or branched, pattern and may have once been connected to a larger channel (black arrows). One possible way these ridges formed is when smaller valleys filled in with sediments. These sediments became cemented and lithified which made them stronger than their surroundings.