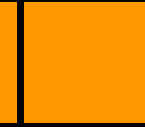
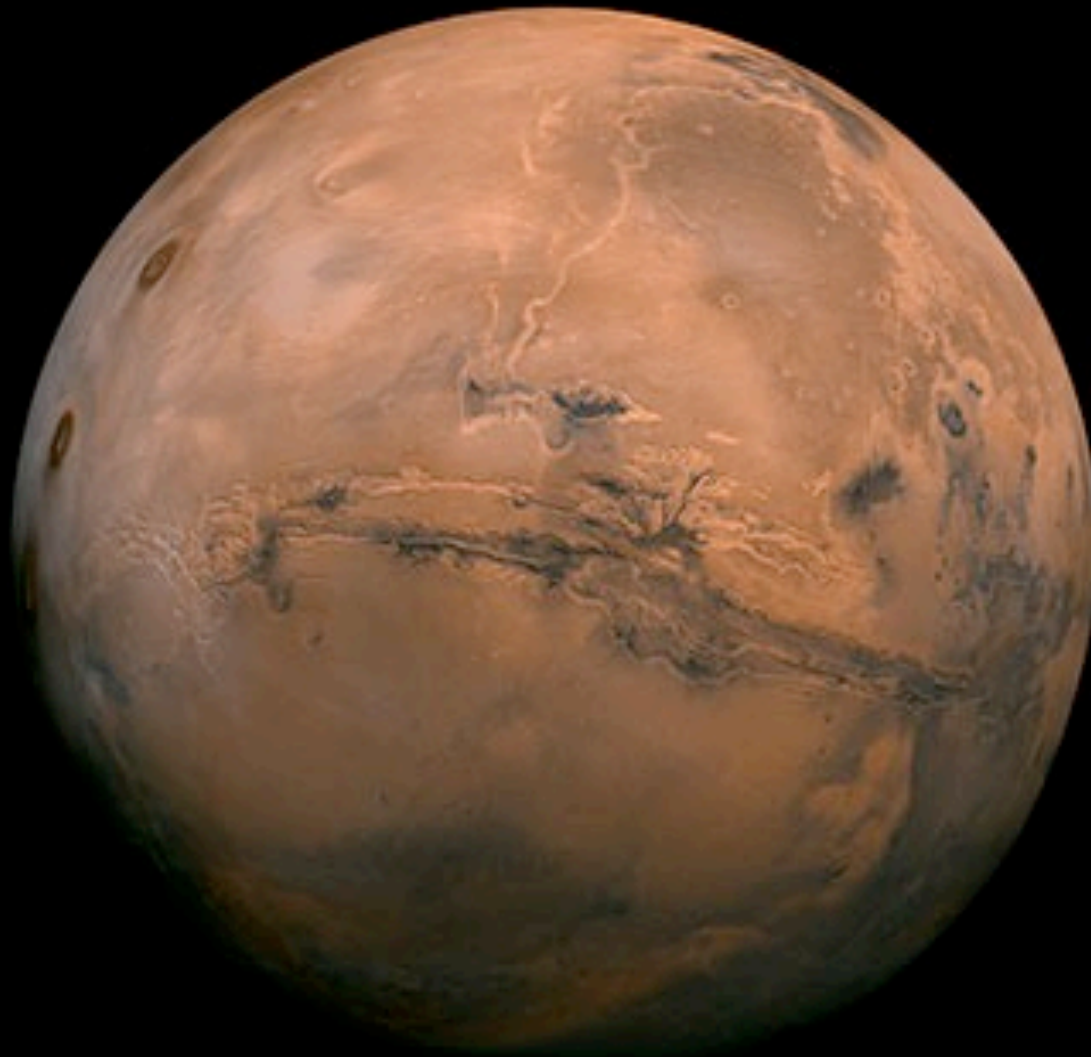


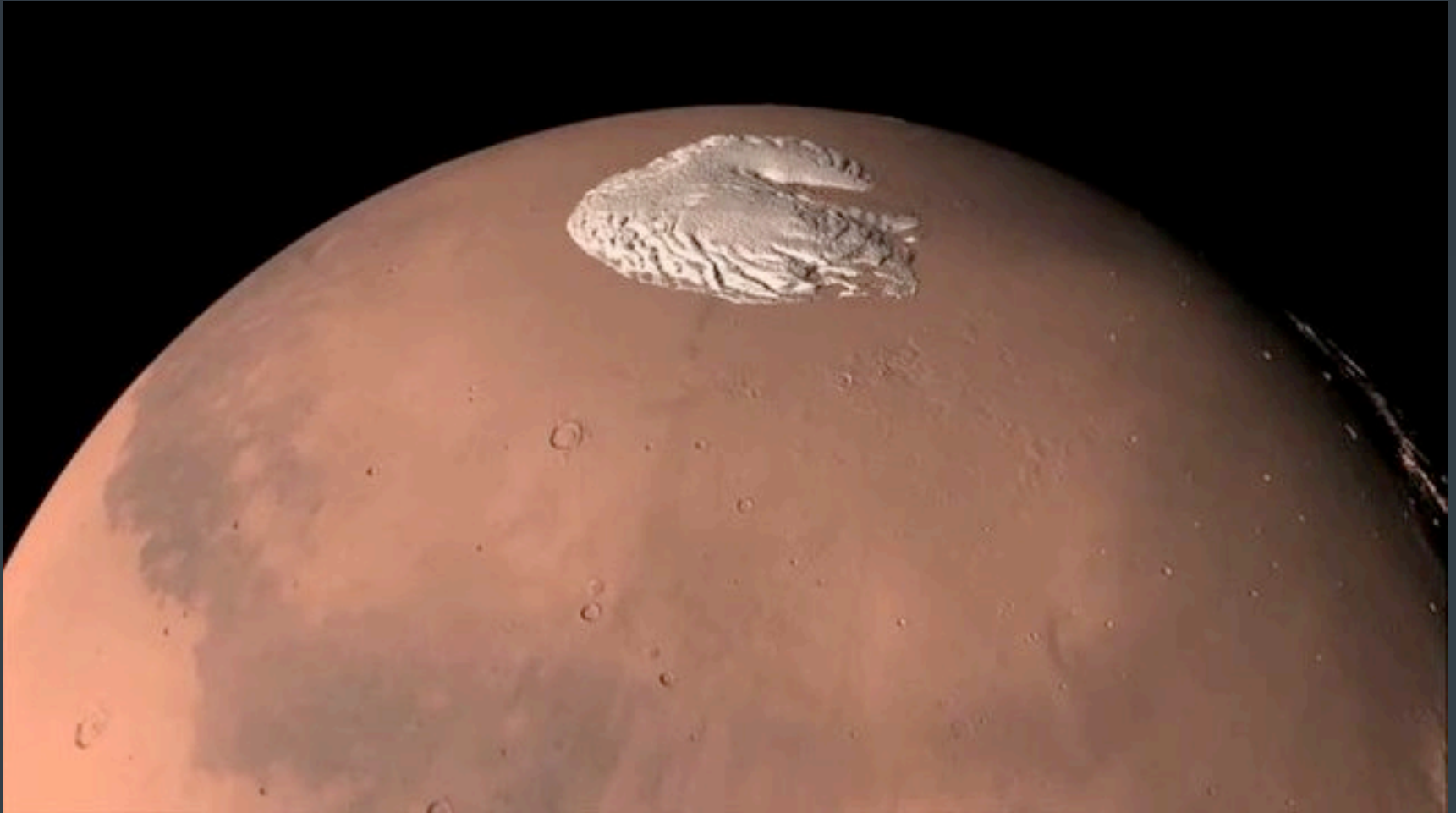
ASTR 1010

Lab 8: Surface of Mars



Virtual Fieldtrip to Mars

We're going to explore the Martian surface via Google Mars and judge the relative ages and causes of various features.



Age of Terrain

Terrain forms from molten rock. Then it gets weathered, eroded, and potentially pelted with meteorites over time. Thus we can gauge how old a place is by how weathered it looks.

Old



Young



Brand Spanking New



Crater Density

By density, we mean number of craters per area. Impacts can happen randomly at any time but were more common in the early Solar System. Densely cratered areas are older and tend to include larger craters. Lightly cratered areas are younger, often due to lava flows, and tend to include only smaller craters.

Old



Young



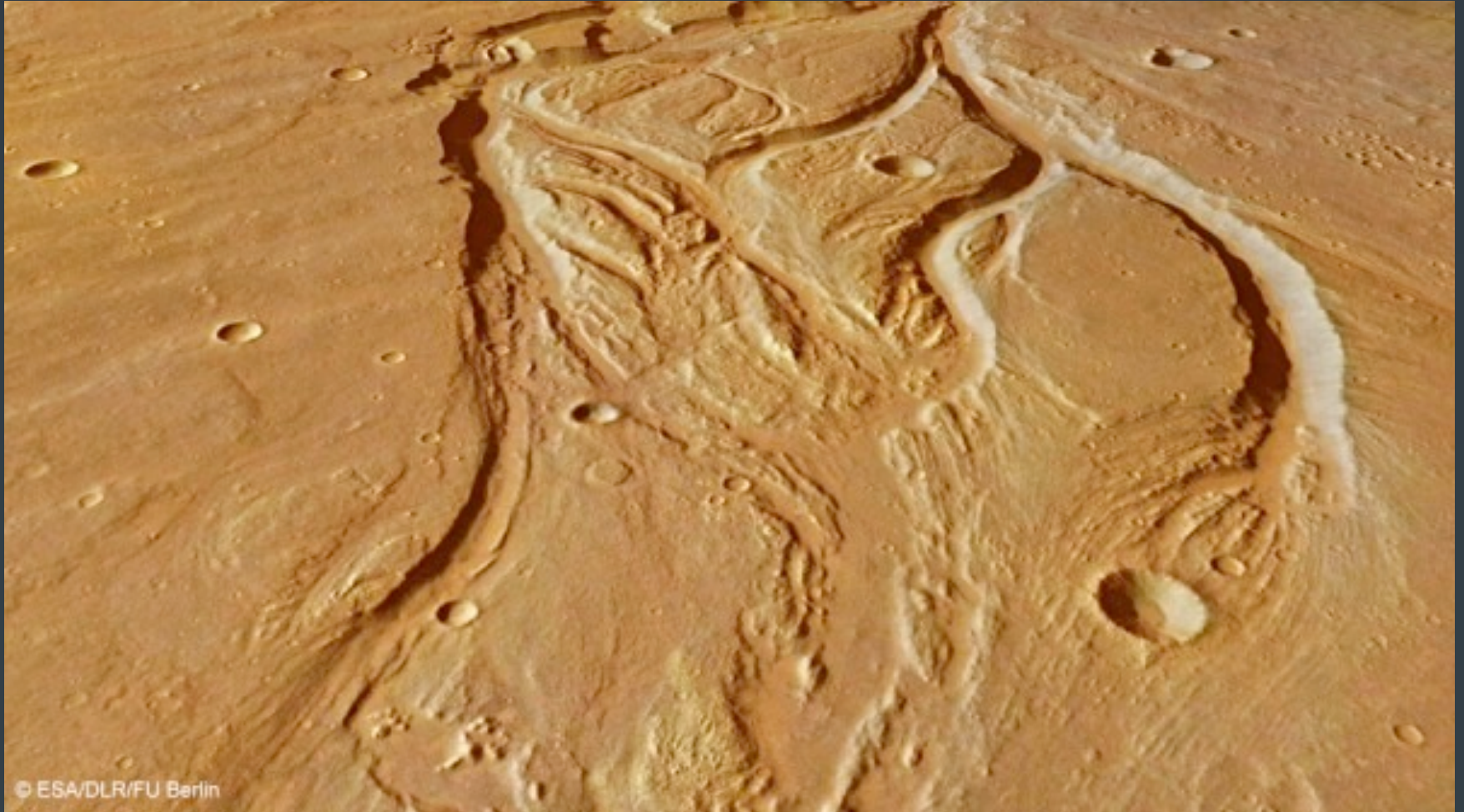
Volcanos

These guys could wipe out crater features whenever they erupted. They're dormant now.



Evidence of Flowing Water

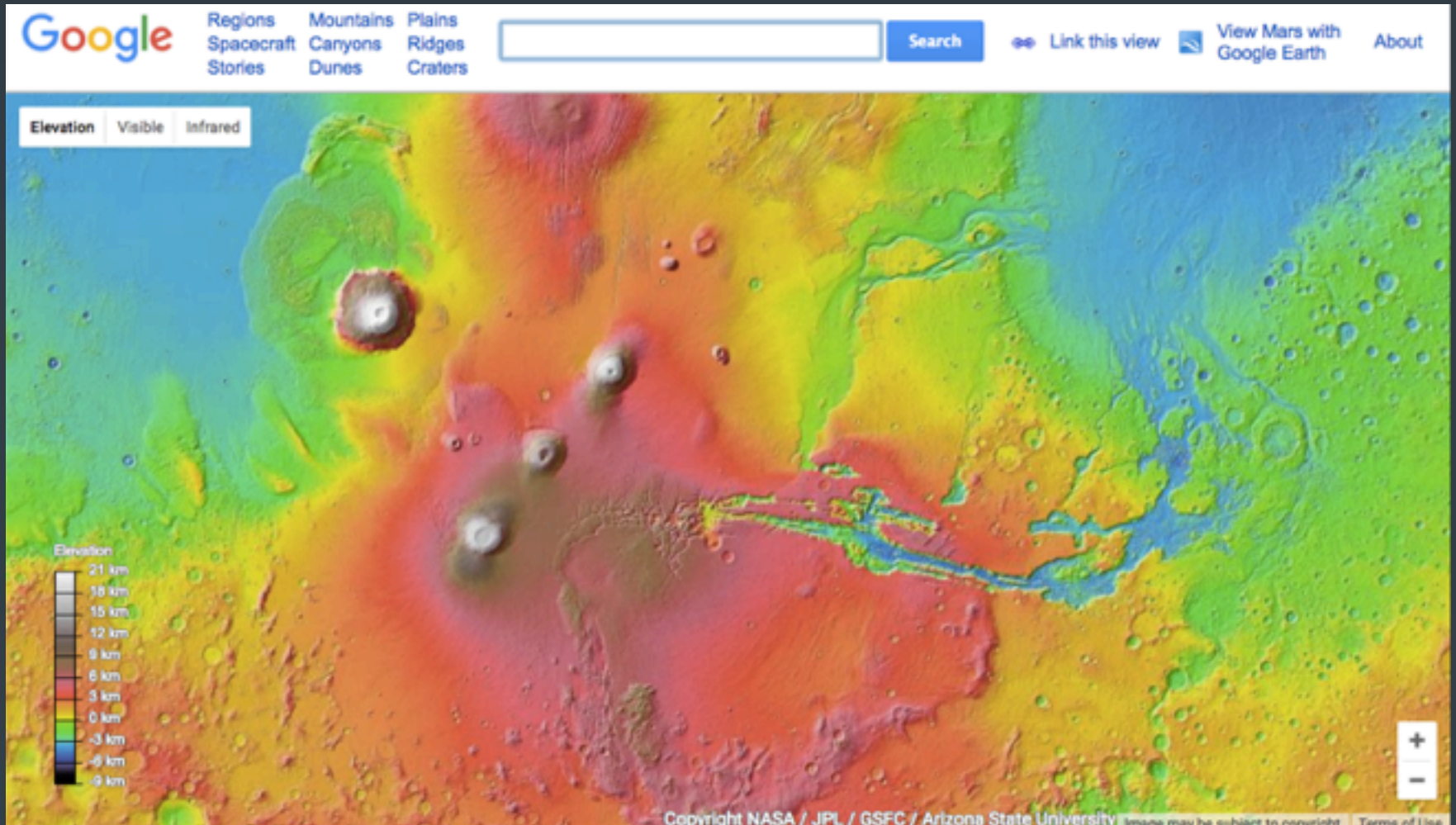
The canyons on Mars may have been carved by liquid water.



Google Mars

Google Mars is an elevation map. It's not as advanced as Google Earth yet. You can click through categories of features, but notice it doesn't show all the features at once, so you'll have to click through the pages to see more.

NOTE: Age of terrain is NOT correlated with elevation! The best clues are crater density and crater size.



Fin

