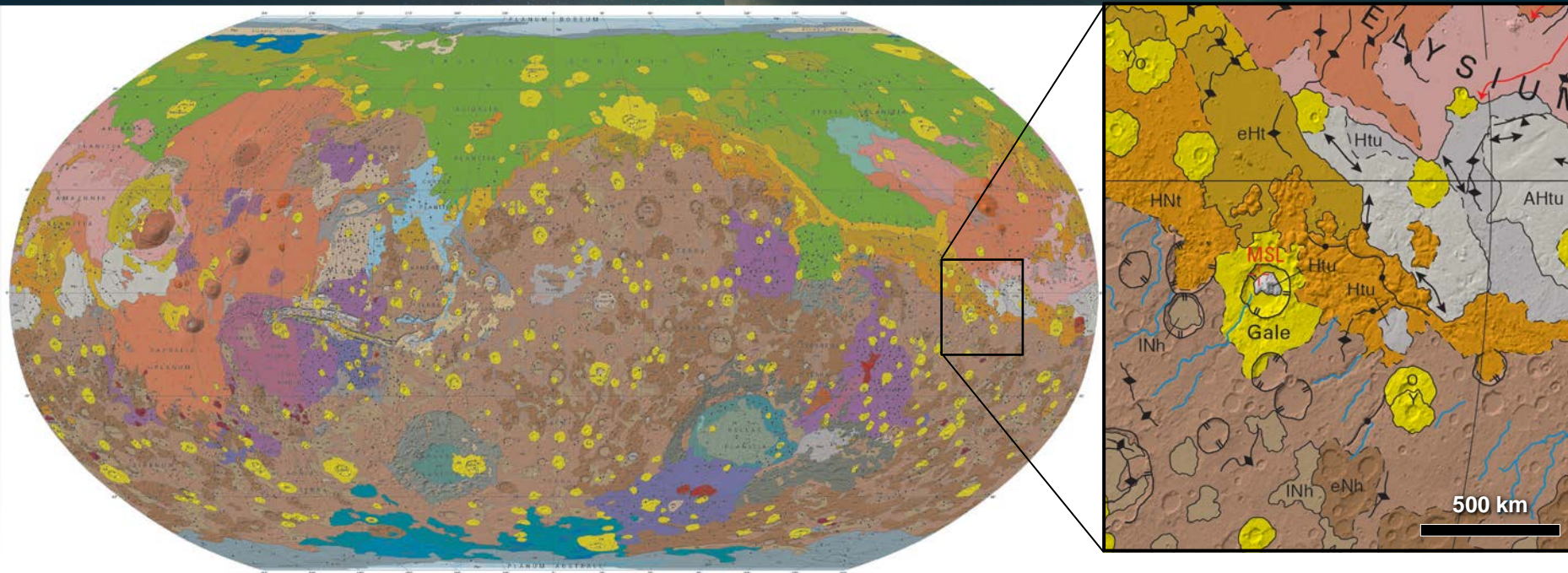
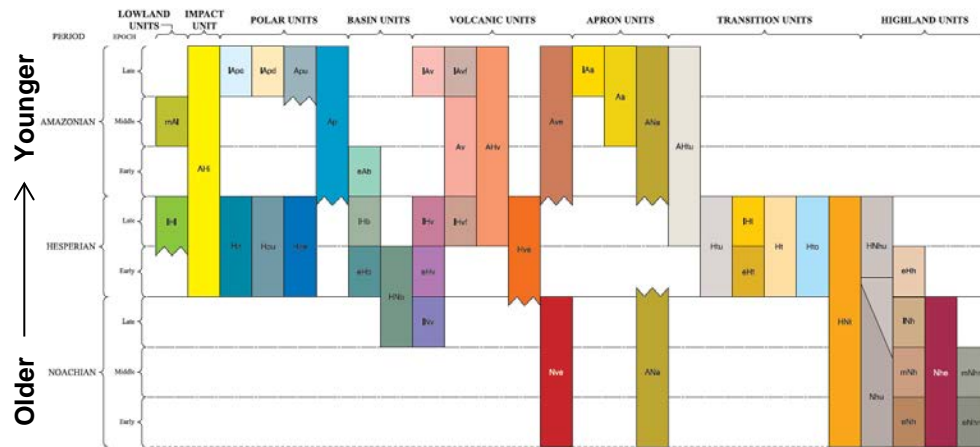


A New Global Geologic Map of Mars



The newest global (1:20,000,000 scale) geologic map of Mars, the result of a multi-year effort, leverages the complete suite of post-Viking orbital datasets (including instruments from four different spacecraft) to comprehensively refine how Mars' surface evolved on a global scale. This planetary map provides critical context for successfully conducting scientific research and exploration.

- Mars' surface is appreciably older overall than previously understood. More of the surface is Noachian or Hesperian age than earlier maps indicated.
- Resurfacing rates have been determined for all highland cratered units.
- Distinct ages of highland cratered units indicate punctuated geologic activity, rather than a single rate of deposition of these areas.
- Ancient, heavily eroded volcanoes occur throughout the highlands.
- Highland-to-lowland transitional units are key indicators of erosional history.



Tanaka et al., 2014, Geologic Map of Mars, USGS SIM 3292, 1:20,000,000 scale (<http://pubs.usgs.gov/sim/3292>)