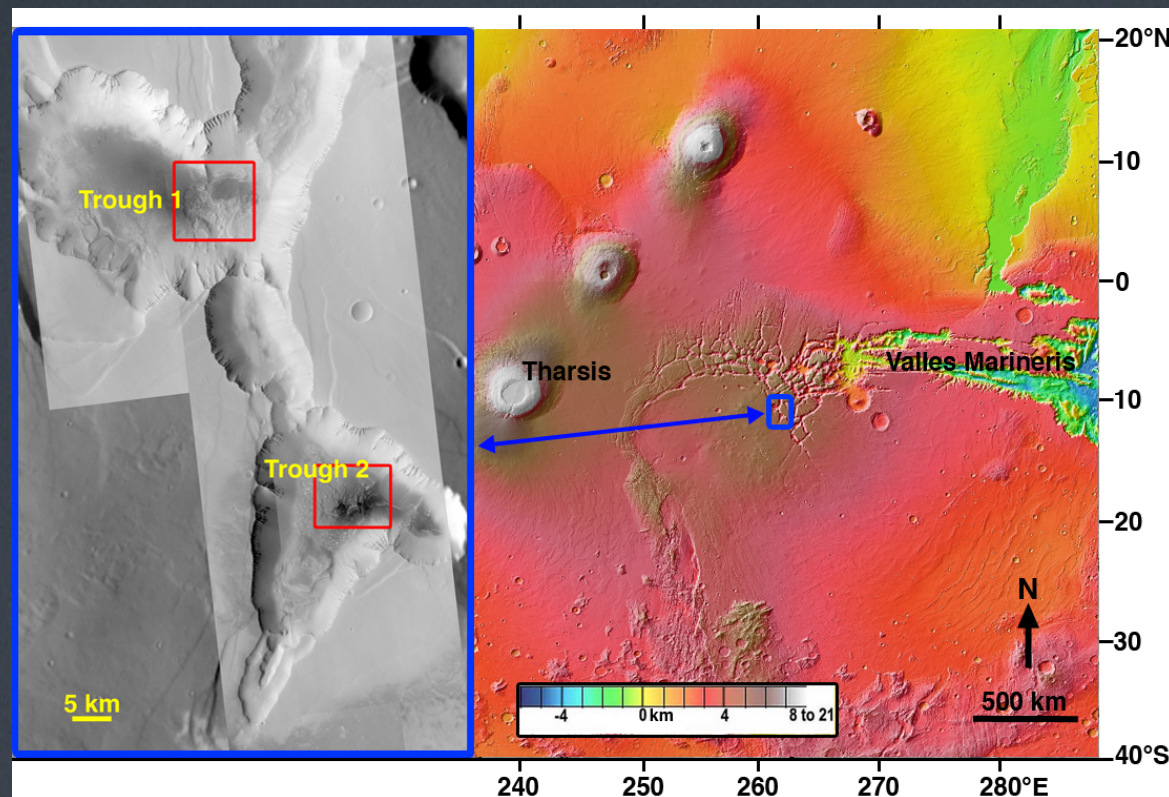


Young clays on Mars could have been habitable regions for life



- Two troughs (small depressions) at Noctis Labyrinthus on Mars have many kinds of minerals that formed by water, including Al and Fe/Mg clays, polyhydrated and mono-hydrated sulfates, hydrated silica, leached clays.
- The clays are Late Hesperian to Early Amazonian in age (2-3 Ga) compared to elsewhere on Mars where the clays are Noachian (>3.6 Ga).
- Progression of mineral deposition from sulfates to clays in these Noctis troughs is reverse relative to global Mars conditions where Noachian is characterized by formation of clays followed by climate change that favored sulfate deposition in the Hesperian.
- These two troughs are unique and could have been more habitable regions on Mars in the recent past when drier conditions dominated the surface.

