Habitable Environments Mapped in Candor Chasma, Mars

- To further our understanding of the structural and depositional history of Candor Chasma, in the Valles Marineris Region of Mars, three large-scale (1:18,000) structural and geologic maps were constructed using HiRISE images and digital elevation models.
- The oldest rocks, found in the E Candor Sulci and SE Ceti Mensa areas, formed as sand sheets in an aeolian-dominated, wet playa environment.
- The youngest rocks, exposed in the W Ceti Mensa area, showed a transition from sand sheets to sand dunes, signaling a shift toward an increasingly arid environment.
- The wet playa setting would have served as a habitable environment. Sediments associated with this environment are prime targets for the search for evidence of past life on Mars.