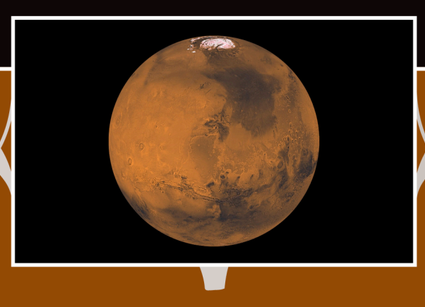
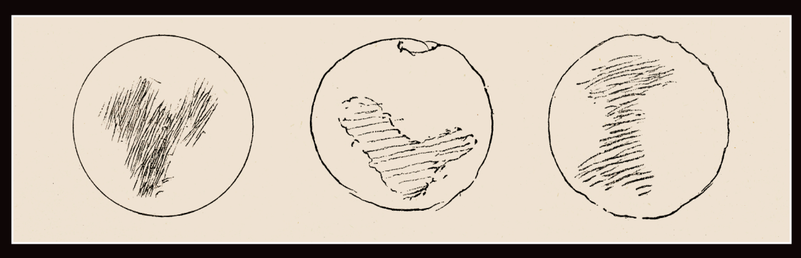


Mars, the most explored planet beyond Earth, is a red, rocky, cold, dry, and dusty world

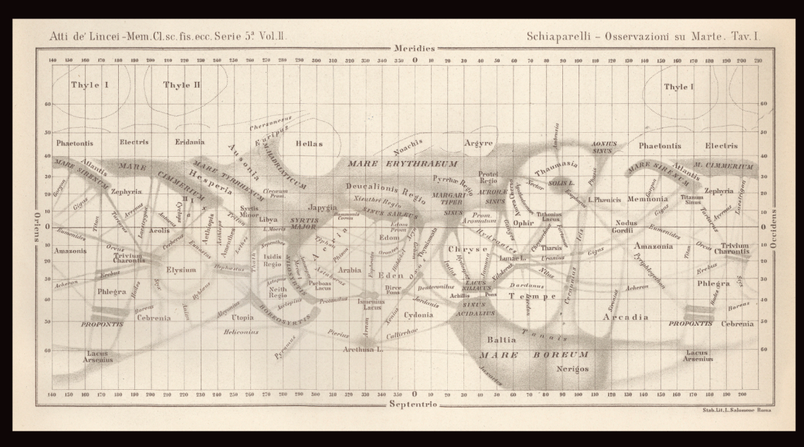
Mars has sparked our imagination, even when we could not see its features clearly. Speculations of Martian civilizations have given way to detailed knowledge from spacecraft and robotic explorers. The most important discovery is the evidence for water, a necessary ingredient if life on Mars were ever to have existed.

An indistinct planet (1659)



Christiaan Huygens' early drawings of Mars show only fuzzy dark patches and perhaps a hint at the presence of a polar ice cap.

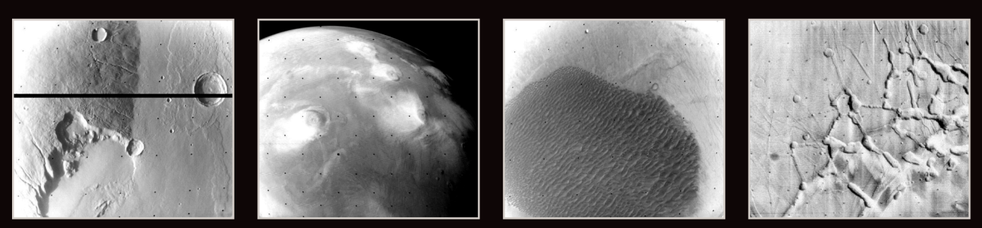
Drawings of Mars, C. Huygens



Mars imagined (1878)

The detailed markings of Giovanni Schiaparelli's maps of Mars inspire ideas of canals built by a Martian civilization. Neither the canals nor the fine markings were real.

Map of Mars, G. Schiaparelli



Surface features (1965)

The Mariner missions obtain the first close-up images of Mars and revolutionize our view of its surface.

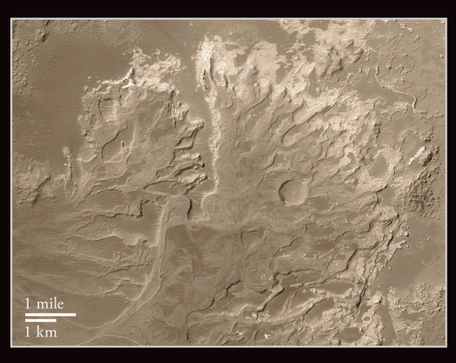
Features on Mars, Mariner 9
Left to right: Craters, volcanoes, sand dunes, and channels



Landing on Mars (1976)

The twin Viking Landers are the first successful Mars surface missions and begin our onsite investigations of its rock-strewn landscape.

Mars surface with scrapings made by the Viking 2 Lander to retrieve soil samples



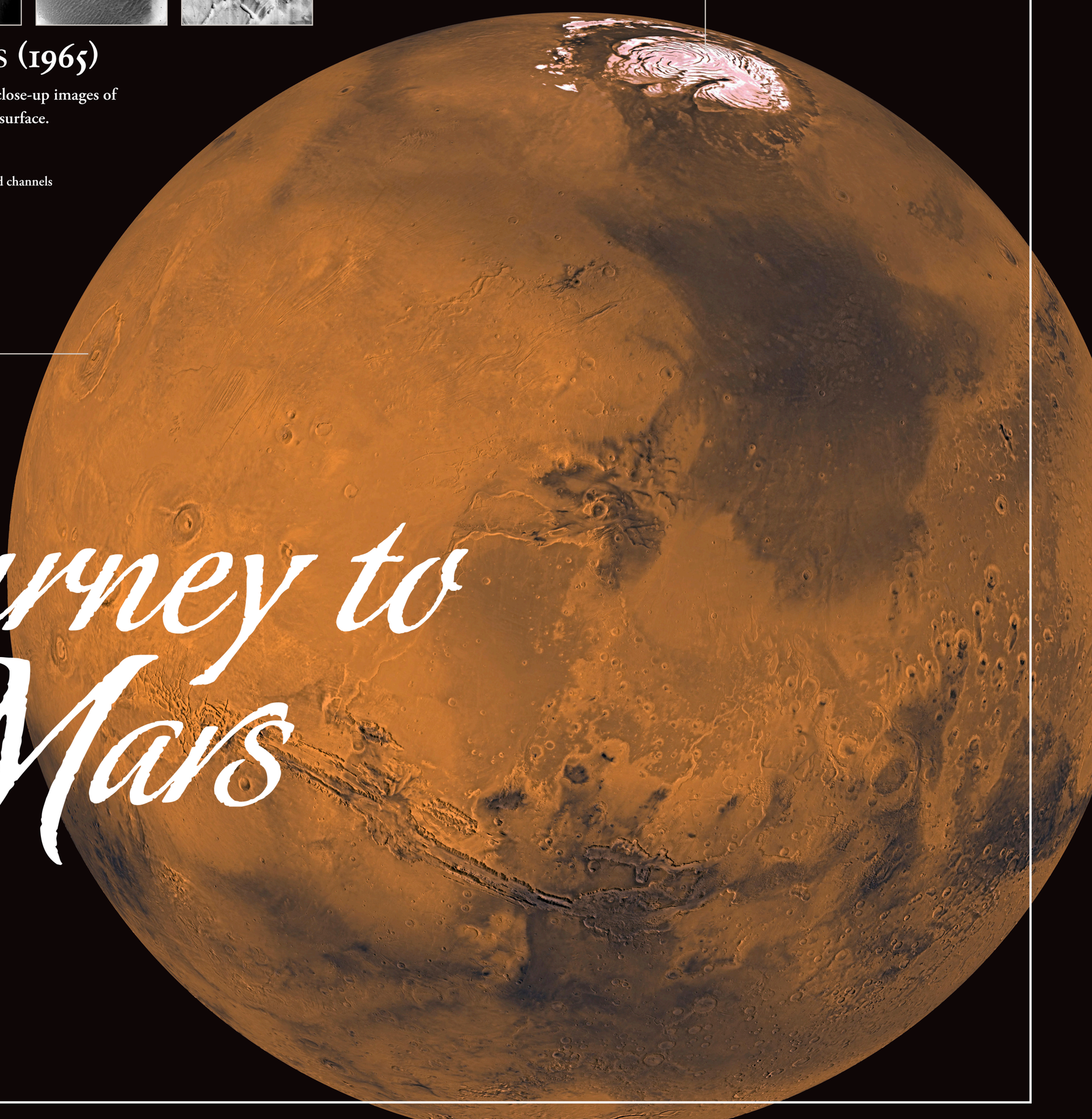
Ancient river delta on Mars,
Mars Global Surveyor

Water on Mars (2008)

While ancient river structures provide evidence of water on Mars long ago, the Phoenix Lander finds present-day water in ice below the surface.

Polar ice cap

Mount Olympus volcano



Journey to Mars

Background:
Mars Global Mosaic,
Viking Orbiters, 1980