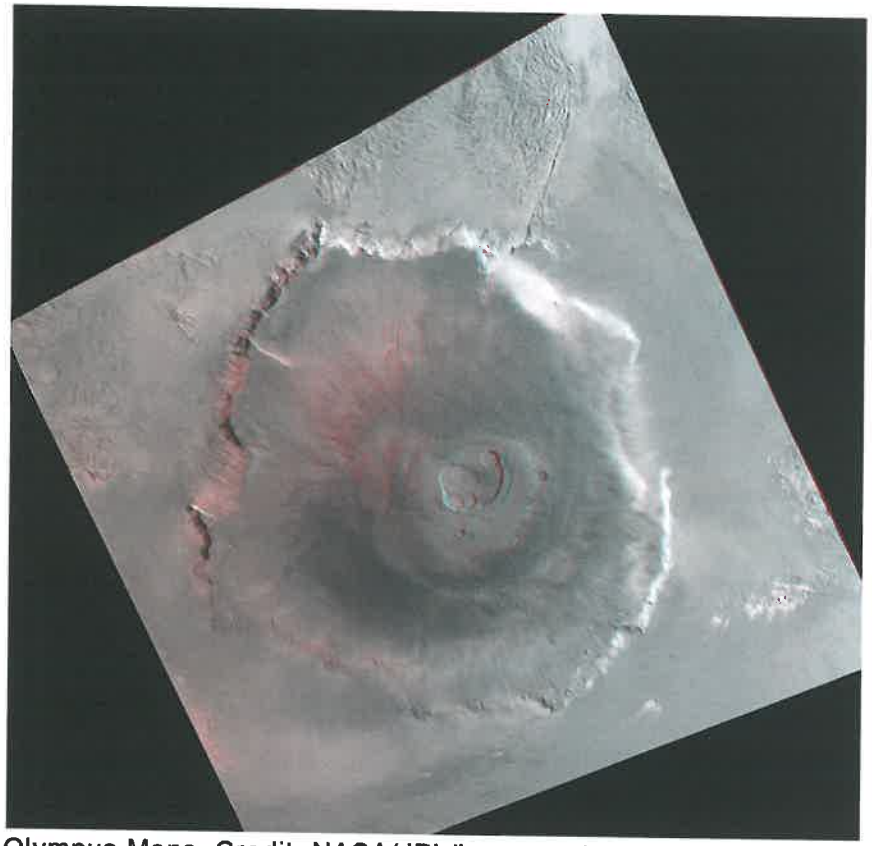
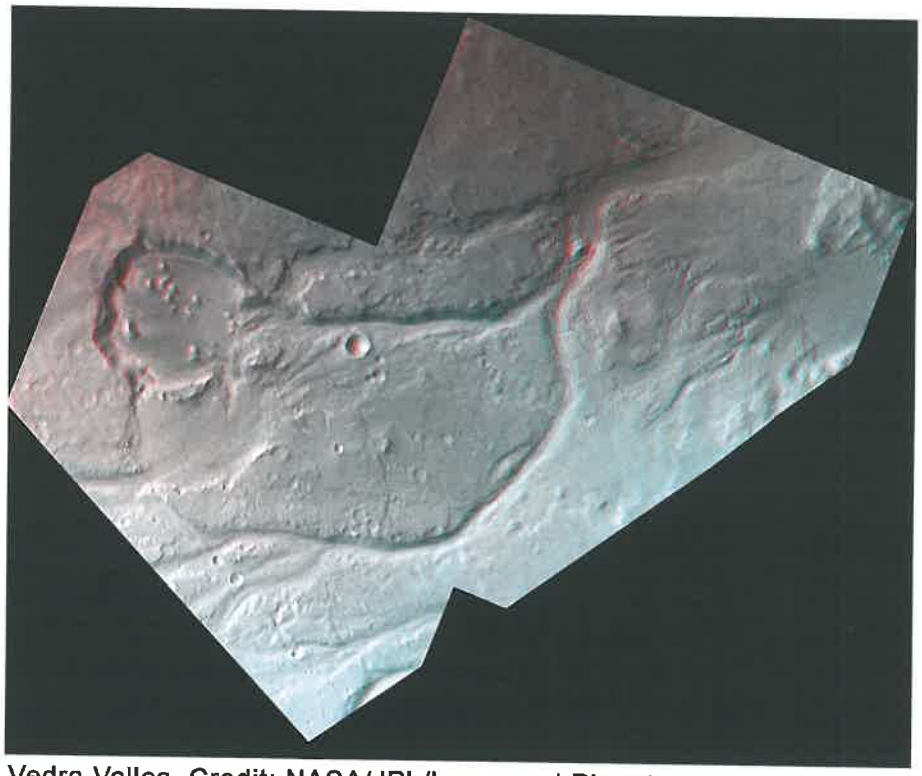
Mars in 3D



Olympus Mons. Credit: NASA/JPL/Lunar and Planetary Institute



Vedra Valles. Credit: NASA/JPL/Lunar and Planetary Institute

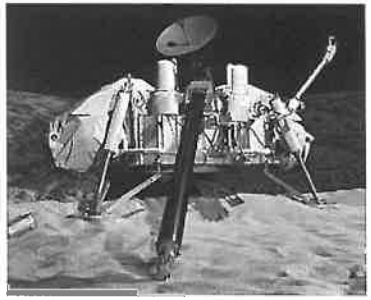
Viking 1 Landing Site. Credit: NASA/JPL/Lunar and Planetary Institute

Mars in 3D

Olympus Mons This 3-D view features Olympus Mons, the largest of the more than 12 large volcanos in the volcanic region of Mars known as Tharsis Montes. Measuring nearly 400 miles (600 kilometers) across and 13 miles (21 kilometers) high, Olympus Mons is also probably the largest volcano in the solar system. In contrast, the largest volcano on Earth, Mauna Loa, is about 75 miles (120 kilometers) across and 6 miles (9 kilometers) high.

Vedra Valles This 3-D view of Vedra Valles shows a group of now dry outwash channels that once carried liquid water across the surface on Mars. These channels are estimated to be 650 to 1,000 feet (200-300 meters deep). Vedra Valles and other similar outflow channels were carved by running water more than three billion years ago at a time when Mars was able to support liquid water on its surface. The Viking 1 landing site is located roughly 250 miles (400 kilometers) east of Vedra Valles.

The 3D images shown on this document were created by Dr. Paul Schenk of the Lunar and Planetary Institute. They are derived from images of Mars acquired by NASA's Viking mission orbiters and Viking 1 lander. NASA's Viking missions made history on July 20, 1976 when the Viking 1 lander made the United States' first successful landing on the surface of Mars.



Viking 1 Landing Site This 3-D view of the martian surface was obtained by the Viking 1 lander in July 1976. It features a rock-strewn, gently rolling landscape. The largest rocks in this view are 3 to 7 feet (2-3 meters) wide. Viking 1 landed roughly 190 miles (300 kilometers) east of Vedra Valles. Floodwaters from Vedra Valles probably flowed over this site several billion years ago. Windblown dunes have formed in this area since that time.

Over the past 40 years, NASA has successfully explored Mars with robotic spacecraft, fundamentally changing our understanding of the Red Planet. Today, NASA is developing the capabilities needed to send humans to Mars as we expand our presence into the solar system. Follow NASA on the #JourneyToMars at http://www.nasa.gov/mars.

LUNAR AND PLANETARY INSTITUTE

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