

Mars Imaginings: The Setting – Mars Match

Mars Images

1. Mars – Volcano

A three-dimensional view of Olympus Mons, the tallest volcano on Mars, created by using elevational data and planetary imagery. The volcano forms a gently sloped "cone" on the surface of Mars. Olympus Mons rises 22 kilometers (13 miles) above the surface of Mars and is 500 kilometers (310 miles) wide at its base.

Image courtesy of NASA: http://www.esa.int/SPECIALS/Mars_Express/SEM2K1W4QWD_0.html

2. Mars – Channels

Satellite image of river channels on Mars. The branching – dendritic - pattern was produced by flowing water carving ribbon-like channels into the land. No liquid water is present on the surface of Mars today, so these channels were formed by flowing water in the past. The image is about 200 kilometers (124 miles) across.

Image courtesy of the Lunar and Planetary Institute: http://www.lpi.usra.edu/publications/slidesets/redplanet2/slide_26.html

3. Mars – Craters

Spacecraft image of a large circular depression – crater - created when an impactor struck the surface of Mars. This is an unnamed crater in Tyrrenia Terra. A couple of smaller craters can be seen above the large crater in the image. The sunlight is coming from the left side of the image; shining on the right side of the crater and leaving the left portion of the crater in shadow.

THEMIS image courtesy of NASA/Jet Propulsion Laboratory/Arizona State University: <http://image.mars.asu.edu/convert?format=jpeg&image=/mars/images/special/themis/iotd/V25983003.png>

4. Mars – Volcano

Infra-red spacecraft image over the small-dome shaped Hecate Tholus volcano on Mars. The sunlight is coming from the left side of the image; shining on the left side of the volcano and leaving the right side in shadow.

THEMIS image courtesy of NASA/Jet Propulsion Laboratory/Arizona State University: <http://themis.asu.edu/zoom-20040820A>

5. Mars - Channels

Spacecraft image of channels carved into the surface of Mars. The channels merge together toward the bottom right of the image. No liquid water is present today, so these ribbon-like channels were cut by flowing water in the past. The sunlight is coming from the upper right side of the image.

Image courtesy of the European Space Agency / DLR / FU Berlin (G. Neukum): <http://www.esa.int/esa-mm/mmg.pl?b=b&type=l&mission=Mars%20Express&single=y&start=91&size=b>

6. Mars – Craters

Spacecraft image of a circular depression on the surface of Mars created by an impactor striking the planet. The material thrown from the crater (ejecta) forms a rough, irregular surface around the crater. The crater is approximately 6 kilometers (3.7 miles) across. The sunlight is coming from the left side of the image; shining on the right side of the crater and leaving the left portion of the crater in shadow.

THEMIS image courtesy of NASA/Jet Propulsion Laboratory/Arizona State University: <http://themis.asu.edu/zoom-20060818a>

7. Mars – Volcanos

A small volcano rises above the surface of Mars, Uranius Tholus, in this spacecraft image. Smaller impact craters dot the surface around the volcano, and on the volcano, too! The large, flat bottomed, circular depression in the center (on the top) of the volcano is a caldera, the location from which lava flows. The sunlight is coming from the right side of the image; shining on the right side of the volcano and leaving the left side in shadow.

Image courtesy of NASA: <http://erc.arc.nasa.gov/MarsVolc/TharsisTholi.htm>

8. Mars – Channels

Spacecraft image above ribbon-like channels cut into the surface of Mars. Unlike the dendritic patterns observed on other images, these channels are wider and have many branches braided together, with tear-drop islands separating the channels. These are interpreted to have been carved by fast flowing water flooding across the surface.

Image courtesy of NASA: http://jules.unavco.org/Voyager/Docs/ImageGallery/mars_channels

9. Mars – Craters

Spacecraft image of a circular depressions located in the northern lowlands on the surface of Mars created by impactors striking the planet. The material thrown from the crater (ejecta) forms a rough, irregular surface around the crater. The ejecta surrounding the crater at the top of the image is still readily visible, whereas the ejecta surrounding the crater at the bottom of the frame is "disappearing" into the background plains. The sunlight is coming from the left side of the image; shining on the right side of the crater and leaving the left portion of the crater in shadow.

THEMIS image courtesy of NASA/Jet Propulsion Laboratory/Arizona State University: <http://themis.asu.edu/node/5936>