

# Space image: Jupiter-Io montage

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Image Credit: NASA/Johns Hopkins University Applied Physics Laboratory/Southwest Research Institute/Goddard Space Flight Center

(PhysOrg.com) -- This montage of New Horizons images shows Jupiter and its volcanic moon Io, and were taken during the spacecraft's Jupiter flyby in early 2007.

The image of Jupiter is an infrared color composite taken by the

spacecraft's near-infrared imaging spectrometer, the Linear Etalon Imaging Spectral Array. The [infrared wavelengths](#) used highlight variations in the altitude of the Jovian [cloud tops](#), with blue denoting high-altitude clouds and hazes, and red indicating deeper clouds.

The prominent bluish-white oval is the Great Red Spot. The observation was made at a solar phase angle of 75 degrees but has been projected onto a crescent to remove distortion caused by Jupiter's rotation during the scan.

The image of Io is an approximately true-color composite taken by the panchromatic Long-Range Reconnaissance Imager with color information provided by the Multispectral Visible Imaging Camera.

The image shows a major eruption in progress on Io's night side, at the northern volcano Tvashtar. Incandescent lava glows red beneath a [volcanic plume](#), whose uppermost portions are illuminated by sunlight. The plume appears blue due to scattering of light by small particles within it.

This montage originally appeared on the cover of the Oct. 12, 2007, issue of *Science* magazine.

Provided by JPL/NASA

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