



Video That's Out of This World

A Snapshot of Video Distribution from Across the Solar System

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While extraterrestrial scientific research advances to the Moon and Mars, so does the need for secure high-quality video links to capture data and share the experience. This paper describes the space to ground architecture needed to satisfy the cultural mantra challenging “Pictures or it didn’t happen!” as NASA travels beyond Low Earth Orbit.

The Marshall Space Flight Center’s Delay Tolerant Network Marshall Enterprise (DTNME) protocol is the framework for video distribution beyond the terrestrial Internet, appropriate for communications across the solar system. Utilizing the International Space Station (ISS) as a test facility, NASA engineers and contractors will demonstrate new technologies and capabilities to transmit high-quality video imagery for NASA’s return to the Moon, Mars exploration, and next generation of explorers.

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