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Danuri lunar orbiter sends photos, BTS song to Earth

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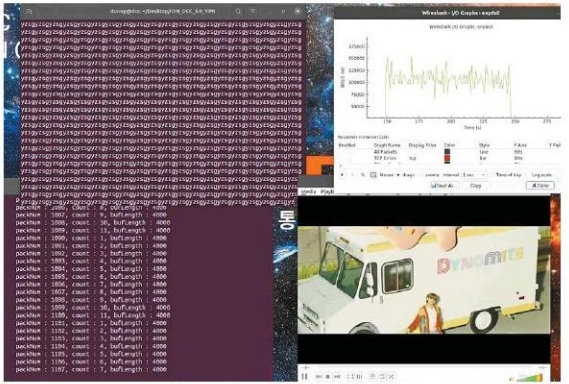
Danuri, Korea's domestically-developed lunar orbiter, succeeded in sending files including video, photos and interestingly "Dynamite," the hit single of K-pop band BTS from space at a distance of 1.28 million kilometers to Earth, the science ministry said Monday.

The Ministry of Science and ICT said "the Danuri has successfully sent data such as videos and photos from space," in a shared press release with the Korea Aerospace Research Institute (KARI) and the Electronics and Telecommunications Research Institute (ETRI).

The unmanned space vehicle sent the files using its space internet payload, developed by the ETRI. The internet device was designed to test the data transmission capability in a space environment where disconnection of telecommunications frequently occurs unlike that on Earth.

Sending BTS's hit song and other files have proved the stability of Korea's space internet technology, the science ministry explained.

"The ETRI conducted performance verification tests of its space internet payload twice on Aug. 25 at a distance of 1.21 million kilometers from the Earth and Oct. 28 from 1.28 million kilometers away, together with KARI and NASA (the National Aeronautics and Space Administration), and succeeded in sending video, photos and BTS's song 'Dynamite,'" the ministry said.



A graphic representation of the Danuri lunar orbiter sending "Dynamite," a song of BTS, to Earth, is seen in this photo provided by the Ministry of Science and ICT, Monday.

Courtesy of Ministry of Science and ICT

"The performance verification test is significant in that they were conducted at distances of about three times the communication distance of about 380,000 km, which was the mission given to Danuri before launch," the ministry added.

The ministry also unveiled photos of the Earth and the moon's orbit taken by the Danuri. Using its high-resolution camera developed by KARI, the Danuri took photos of the moon's orbit at a distance of between 1.46 million kilometers and 1.548 million kilometers for a month from Sept. 15 to Oct. 15.

> *"These photos are meaningful in that the Danuri captured the process of the moon orbiting and passing the Earth."*

On Sept. 24, the Danuri took 15 photos from a distance of 1.544 million kilometers as the moon orbited Earth.

"The first photo of the Earth and the moon, taken by the Danuri on August 26, only showed that moment, but these photos are meaningful in that the Danuri captured the process of the moon orbiting and passing the Earth," the science ministry said.

Carried by SpaceX's Falcon 9 rocket, the Danuri launched from Cape Canaveral Space Force Station in Florida, the United States on Aug. 5.

To conduct scientific missions for a year from January next year, the lunar orbiter was at a distance of about 1.05 million kilometers away from the Earth and was moving to the moon at a speed of approximately 1950 kilometers per hour as of Nov. 7. By navigating about 6 million kilometers until Dec. 17, the Danuri is scheduled to reach lunar orbit, the ministry said.