

AVRASYA İNCELEMELERİ MERKEZİ CENTER FOR EURASIAN STUDIES

INDIA SAYS IT HAS FOUND ITS MOON LANDER, BUT IT STILL CANNOT COMMUNICATE WITH IT

10.09.2019

The Verge (10 September 2019)

India claims to have spotted the countrys Vikram lunar lander on the surface of the Moon days after the spacecraft presumably crashed during a landing attempt. India still has not made contact with the lander, which went silent moments before its scheduled touchdown, but Indian officials are hopeful that the lander might still function.

We are trying to establish contact, Kailasavadivoo Sivan, the chairperson of the Indian Space Research Organization (ISRO) which oversees the lander, told Asian News International (ANI). It will be communicated soon.

The Vikram lander is a key part of Indias Chandrayaan-2 mission, which is aimed at studying the Moons south pole in greater detail. The lander, which was carrying a rover called Pragyan, was supposed to perform the first soft landing on the Moon for India by touching down in the south pole region. If it had been successful, India would have become the fourth nation in the world to put a vehicle intact on the lunar surface.

But Vikrams landing did not go as planned last week. On the afternoon of Friday, September 6th, the lander was using its onboard engine to slowly lower itself down to the ground. When the spacecraft was just 1.3 miles (2.1 kilometers) above the surface, India suddenly lost communication with the vehicle. A graph of the spacecrafts trajectory, shown during a live stream of the landing, revealed the lander to be slightly off its planned course just before touchdown.

Now, India at least knows where the Vikram lander is located. The lander traveled to the Moon with another spacecraft, an orbiter that is still circulating above the lunar surface. The orbiter successfully spotted the Vikram lander from above, taking a thermal image of the vehicle, according to ANIs interview with Sivan.

Sivan did not clarify what state the spacecraft is in, claiming it was premature to say anything. In the meantime, there have been very few official updates from ISRO. After the landing, the organization posted a brief message to its website, highlighting the technical complexity of the Chandrayaan-2 mission and noting that the lander worked mostly as expected. All the systems and sensors of the Lander functioned excellently until this point and proved many new technologies such as variable thrust propulsion technology used in the Lander, ISRO wrote on its website.

The organization also noted that the lunar orbiter is still operating as planned and may even be

operational for up to seven years around the Moon, instead of one year as planned. Overall, ISRO claims that between 90 to 95 percent of the Chandrayaan-2 mission has been accomplished, despite losing communication with Vikram and Pragyan.

https://www.theverge.com/2019/9/9/20856746/india-isro-vikram-lunar-lander-moon-contact-chandrayaan-2-mission

Kaynak/Source: