Telycam Vision+ 4KN Captures Zhuque-3 Rocket's Land Recovery

Witnessing a Milestone in Chinese Commercial Spaceflight

Tasked with covering a historic first-stage landing in the middle of the Gobi Desert, Beijing Traffic Radio's broadcast team turned to a single Telycam **Vision+ 4KN** PTZ camera to capture the one moment they couldn't afford to miss. The footage it delivered became the defining shot of the mission.



The Goals

On August 19, 2026, LandSpace's Zhuque-3 Y2 launch vehicle lifted off from the Dongfeng Commercial Aerospace Innovation Test Zone in northwest China. After stage separation sent its second stage and payload into orbit, the first stage began the far more difficult part of the mission: reorienting itself, re-entering the atmosphere, decelerating, and touching down on landing legs at a dedicated recovery site in the Gobi Desert near Minqin, Gansu Province.

A successful landing would make Zhuque-3 the first commercial rocket in China ever to complete a first-stage recovery — and Beijing Traffic Radio's broadcast team on-site had exactly one chance to capture it on camera.



Filming the launch process entails immense difficulty and unpredictability.

One Chance to Get the Shot

The rocket would land only once. With no opportunity for a retake, the camera had to lock onto the booster and capture the landing moment without hesitation.

A Visually Challenging Environment

A fast-moving rocket against a vast desert landscape made framing and tracking difficult. The camera had to maintain a clear, stable view of the booster throughout its descent.

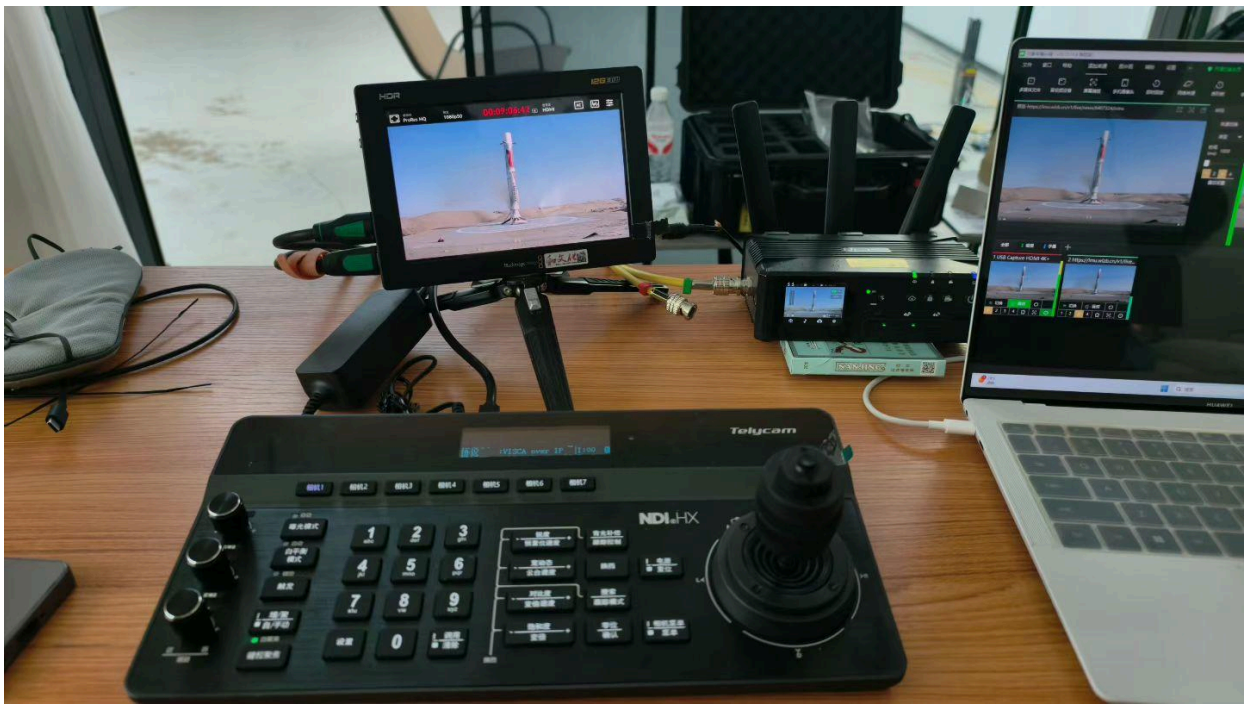
Harsh Desert Conditions

The cameras operated outdoors in the Gobi Desert, exposed to blowing sand and significant temperature changes between day and night. The equipment had to perform reliably in demanding conditions.

The Recovery Workflow

The **Vision+ 4KN** was positioned in the open desert a short distance from the landing pad, tasked with following the entire arc of the mission — from liftoff, through the vehicle's ascent out of view, to the far more demanding job of reacquiring and tracking the returning booster as it dropped back through the atmosphere.

That return proved to be the real test. As the first stage came down, it moved at near-sonic speed, and the operator had only seconds to locate it, frame it, and hold focus as distance, speed, and brightness all shifted rapidly.



Rather than relying on any automated tracking, the operator worked the **V JOY+ AT** keyboard by hand throughout the descent — panning, tilting, and adjusting zoom in real time to keep pace with the booster's trajectory as it closed in on the pad.

In the last moments before touchdown, engine-flame glare, ground vibration, and rising dust hit the frame all at once — exactly the kind of conditions that punish any lag between what the operator sees and how quickly the camera responds.

To keep the **Vision+ 4KN** steady in the desert wind, the crew weighted down its tripod with sandbags — a low-tech fix for a very real problem in an environment with no other way to shelter the gear.



Signal from the Vision+ 4KN fed directly into the production van, where it was monitored alongside the vMix switching system and cut live into the broadcast feed in real time.

Telycam Vision+ 4KN live rocket landing footage displayed on a production monitor during a desert broadcast

A Shot With No Second Take

The instant that mattered most came down to a single frame: the production monitor's timecode read 00:12:54 as the booster closed in on the landing pad, engines firing to slow its final descent. Guided entirely by hand through the V JOY+ AT keyboard, the operator held the target locked and in focus through that entire sequence, capturing the touchdown cleanly on the first and only attempt.

"If we didn't get the shot, that was it. The Vision+ 4KN's stability provided strong visual support for tracking the target, even during the intense vibration of the landing phase."
Zhang Yu - Lead Field Photographer

"Setting up gear in the Gobi is always a nightmare. The **Vision+ 4KN**'s robust build and quick manual tracking via the V JOY+ AT keyboard saved us precious hours before the launch window."
Chen Lei - Broadcast Operations, Beijing Traffic Radio

For the broadcast team, the result validated the camera's ability to hold a fast-moving, high-contrast target under real atmospheric and lighting stress — the same combination of speed, glare, and unpredictable exposure that makes rocket-recovery footage so difficult to capture cleanly in the first place, and something no amount of post-production could have fixed after the fact.

A Track Record in the Field

The Zhuque-3 recovery was not Telycam's first involvement in a major Chinese spaceflight broadcast. The Vision+ 4KN had also been used for coverage of the Long March 10A maiden flight from Wenchang in July 2026.The two assignments presented very different environmental conditions — coastal heat and humidity at Wenchang versus wind, dust, and temperature changes in the Gobi Desert.

For high-stakes live events where a missed frame means a missed moment, that track record is the argument that matters: rocket launches, major scientific test events, outdoor sporting events, industrial sites, and large-scale government and corporate broadcasts all share the same requirement of a camera system the crew can trust when there's only one take.