

MARS LANDING GIVES CHINA'S SPACE PROGRAMME A LEG-UP

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China landed a spacecraft on Mars carrying its first Mars rover in a big boost to its space ambitions, the country's space agency said on Saturday.

China had in July last year launched its first Mars mission, called Tianwen-1, meaning Questions to Heaven, carrying a lander and rover. Tianwen-1 had been in orbit since February, and on Saturday, a lander descended successfully on to the surface of the red planet carrying a rover named Zhurong, named after a god of fire for a planet known in Chinese as the planet of fire. Only the Soviet Union and the U.S. had previously carried out a successful landing on Mars.

China's official media described "nine minutes of terror" during the descent — the hardest part of the mission. The descent "was extremely complicated with no ground control, and had to be performed by the spacecraft autonomously," Geng Yan, an official at the China National Space Administration (CNSA) Lunar Exploration and Space Program Center, was quoted as saying by state media. "Each step had only one chance, and the actions were closely linked. If there had been any flaw, the landing would have failed," he said.

The rover will provide "first-hand materials for research on the planet's space environment, surface topography, and soil structure", the CNSA said.

China's leadership sees the space programme as an important part of China's ambitions to close the technological gulf with the U.S.

President Xi Jinping on Saturday described the Mars landing as "an important step in China's interstellar exploration" and said it had "left a Chinese mark on Mars for the first time" and was "another landmark progress in China's space industry development".

China had previously tried to launch a Mars orbiter along with Russia in 2011, but that failed to enter orbit. This attempt, on its own, hit the target.

China's Mars mission, along with lunar mission and space station, is key to its space programme. In 2019, the fourth lunar probe, Chang'e-4, carried out the world's first landing on the far side of the moon. The Mars mission was launched the following year.

China is also investing heavily in its manned space programme, as plans accelerate for its first space station, set to be functional by the end of next year and only the second space station after the International Space Station. Last month, a Long March-5B Y2 rocket carried out the first of three components for the space station, called the Tianhe or Heavenly Harmony module.

Thomas Zurbuchen, of NASA's Science Mission Directorate, congratulated China. "Together with the global science community," he said, "I look forward to the important contributions this mission will make to humanity's understanding of the Red Planet."

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