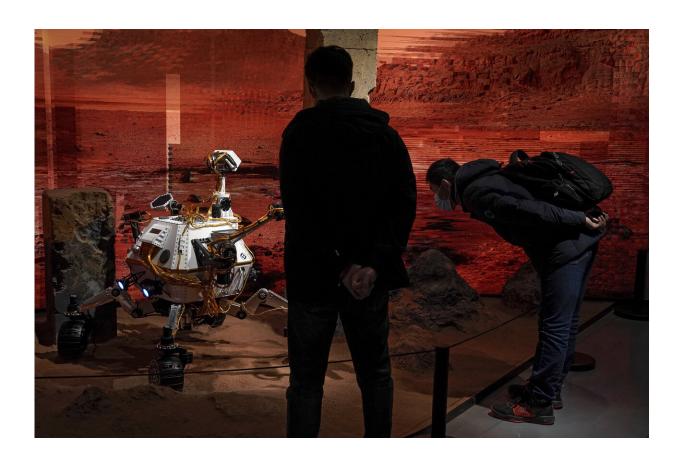


## China's Mars craft enters parking orbit before landing rover

February 24 2021



People wearing face masks to help curb the spread of the coronavirus look at a model depicting a rover on Mars during an exhibition at a shopping mall in Beijing on Wednesday, Feb. 24, 2021. China says its Tianwen-1 spacecraft has entered a temporary parking orbit around Mars in anticipation of landing a rover on the red planet in the coming months. (AP Photo/Andy Wong)



China says its Tianwen-1 spacecraft has entered a temporary parking orbit around Mars in anticipation of landing a rover on the red planet in the coming months.

The China National Space Administration said the spacecraft executed a maneuver to adjust its orbit early Wednesday morning Beijing time and will remain in the new orbit for about the next three months before attempting to land. During that time, it will be mapping the surface of Mars and using its cameras and other sensors to collect further data, particularly about its prospective landing site.

That follows the landing of the U.S. Perseverance rover last Thursday near an ancient river delta in Jezero Crater to search for signs of ancient microscopic life.

A successful bid to land Tianwen-1 would make China only the second country after the U.S. to place a spacecraft on Mars. China's solar-powered vehicle, about the size of a golf cart, will collect data on underground water and look for evidence that the planet may have once harbored microscopic life.

Tianwen, the title of an ancient poem, means "Quest for Heavenly Truth."

Landing a spacecraft on Mars is notoriously tricky. About a dozen orbiters missed the mark. In 2011, a Mars-bound Chinese orbiter that was part of a Russian mission didn't make it out of Earth orbit.





A man wearing a face mask to help curb the spread of the coronavirus tours an exhibition displaying models depicting a spacecraft and rovers on Mars at a shopping mall in Beijing on Wednesday, Feb. 24, 2021. China says its Tianwen-1 spacecraft has entered a temporary parking orbit around Mars in anticipation of landing a rover on the red planet in the coming months. (AP Photo/Andy Wong)

China's attempt will involve a parachute, rocket firings and airbags. Its proposed landing site is a vast, rock-strewn plain called Utopia Planitia, where the U.S. Viking 2 lander touched down in 1976.

Tianwen-1's arrival at Mars on Feb. 10 was preceded by that of an orbiter from the United Arab Emirates. All three of the latest missions were launched in July to take advantage of the close alignment between



Earth and Mars that happens only once every two years.

Tianwen-1 represents the most ambitious mission yet for China's secretive, military-linked space program that first put an astronaut in orbit around Earth in 2003 and last year brought moon rocks back to Earth for the first time since the 1970s. China was also the first country to land a spacecraft on the little-explored far side of the moon in 2019.



This file image made available by the China National Space Administration on Wednesday, Dec. 16, 2020, shows the Tianwen-1 probe en route to Mars. China said on Wednesday, Feb. 24, 2021, that its Tianwen-1 spacecraft has entered a temporary parking orbit around Mars in anticipation of landing a rover on the red planet in the coming months. (CNSA via AP, File)





People wearing face masks to help curb the spread of the coronavirus tour an exhibition displaying models depicting a spacecraft and rovers on Mars at a shopping mall in Beijing on Wednesday, Feb. 24, 2021. China says its Tianwen-1 spacecraft has entered a temporary parking orbit around Mars in anticipation of landing a rover on the red planet in the coming months. (AP Photo/Andy Wong)





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China is also building a permanent <u>space station</u> and planning a crewed lunar mission and a possible permanent research base on the moon, though no dates have yet been proposed.

On Monday, a massive Long March-5B Y2 rocket was moved into place at the Wenchang Spacecraft Launch Site in Hainan province for assembly and testing before it launches the space station's core module,



christened Tianhe. Launch is scheduled for the first half of this year, the first of 11 missions slated over the next two years for the station's construction.

China is not a participant in the International Space Station, partly at the insistence of the United States.

The space program is a source of enormous national pride in China and Tianwen-1 has attracted a particularly strong following among the public. Tourists flocked to tropical Hainan island to watch the launch, while others visit mock Mars colonies in desert sites with white domes, airlocks and spacesuits.

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