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## Mars probe photos show fine details

High-definition images shot by China's Tianwen I orbiter as it circles red planet

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The first high-definition pictures of Mars taken by a Chinese spacecraft were made public by the China National Space Administration on Thursday morning.

The pictures — two black-andwhite and one color — were shot recently by China's Tianwen 1 robotic probe when the spacecraft was traveling in a Mars orbit, the administration said.

The two black-and-white 0.7-meter-resolution images were taken by the high-definition camera on Tianwen 18 orbiter when the probe was about 330 to 356 kilometers above the Martian surface. Craters, mountain ridges and sand dunes on the red planet are clearly visible.

The color picture, generated by another camera on the orbiter, shows Mars' North Pole.

Tianwen 1, the country's first independent Mars mission, was launched by a Long March 5 heavy-lift carrier rocket on July 23 from the Wenchang Space Launch Center in Hainan province, kicking off the nations planetary exploration program.

The 5-metric-ton probe, which consists of two major parts — an orbiter and a landing capsule — has flown for 224 days and about 475 million km. Currently, it is about 212 million km from Earth, the administration said.

It entered its preset parking orbit above Mars on Feb 24 and will maintain that orbit for about three months before releasing its landing capsule, the administration said.

All seven mission payloads on the orbiter will be gradually activated during the probe's stay in the parking orbit to carry out scientific tasks and also to observe and analyze the



A color picture captured by China's Tianwen l Mars probe shows the planet's North Pole. XINHUA

landforms and weather of the optimal landing site, it said.

Bao Weimin, director of science and technology at China Aerospace Science and Technology Corp and an academician of the Chinese Academy of Sciences, told reporters at the Great Hall of the People in Beljing on Thursday a fermon that the spacecraft is in good condition and is travelingat 4.8 kilometers per second in orbit.

Bao made the remarks before attending the opening ceremony of the fourth session of the 13th National Committee of the Chinese People's Political Consultative Conference.

He is a member of the CPPCC National Committee, the nation's top political advisory body.

The Tianwen 1 mission's ultimate goal is to land a rover in May or June on the southern part of Mars' Utopia Planitia — a large plain within Utopia, the largest recognized impact basin in the solar system — to conduct scientific surveys.

Weighing about 240 kilograms, the rover has six wheels and four solar panels and will be able to move 200 meters per hour on Mars. It will carry six scientific instruments, including a multispectral camera, ground-penetrating radar and a meteorological measurer.

## First space station module being prepared for liftoff

By ZHAO LEI

China plans to launch the core module of its space station before the end of June, starting the construction of the nation's largest space-based asset, the China Manned Space Agency said.

The 20-metri-oton core module and the Long March SB heavy-life carrier rocket usked with launching it have arrived at the Wenchang Space Launch Center in Hainan province, the agency said on Thursday morning, adding that four groups of astronauts have been selected for the space station's construction and are undergoing training.

It said China is determined to open the station to international cooperation in science and technology. Chinese scientists and their counterparts from the United Nations have selected the first batch of scientific experiments proposed by foreign researchers that will be carried out in the station. They are currently working on the imple-

mentation of the cooperative programs, the agency said.

The agency said it is also considering plans for China's manned lunar exploration program.

chiorasmost programator programs of the multimodule space endeavor, the multimodule space station, named Tiangong, or Heavenly Palace, will be mainly composed of three components – a core module attached to two space laboratories – with a combined weight of more than 90 tons.

The core module, named Tianhe, or Harmony of Heavens, is 16.6 meters long and has a diameter of 4.2 meters. It has three parts – a connecting section, a life-support and control section and a resources section.

It will be central to the space station's operations, given that astronauts will live there and control the entire station from inside.

The entire station is expected to become fully operational next year and is set to operate for about 15 years, program planners have said.