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WASHINGTON, April 29 (Xinhua) -- U.S. space agency NASA said Tuesday its Curiosity rover will carry out its third drilling on Mars in the coming days.

Curiosity used several tools to examine a Martian sandstone slab dubbed "Windjana" over the weekend, including a wire-bristle brush known as the Dust Removal Tool to clear away dust from a 6-centimeter-across patch on the rock, NASA said.

"In the brushed spot, we can see that the rock is fine-grained, its true color is much grayer than the surface dust, and some portions of the rock are harder than others, creating the interesting bumpy textures," Curiosity science team member Melissa Rice of the California Institute of Technology said in a NASA statement.

"All of these traits reinforce our interest in drilling here in order to understand the chemistry of the fluids that bound these grains together to form the rock," Rice said.

Before Curiosity drills deeply enough for collection of rock-powder sample, there will be a preparatory "mini-drill" operation on the target, as a further check for readiness, NASA said.

Curiosity's drill collects powdered sample material from the interior of a target rock for analysis.

The only two rocks previously drilled by Curiosity are even finer-grained mudstone in Yellowknife Bay, about 4 kilometers northeast of the rover's current location at a waypoint called "The Kimberley."

Those two targets, examined in 2013, provided evidence of an ancient lakebed environment from billions of years ago with conditions favorable for microbial life.