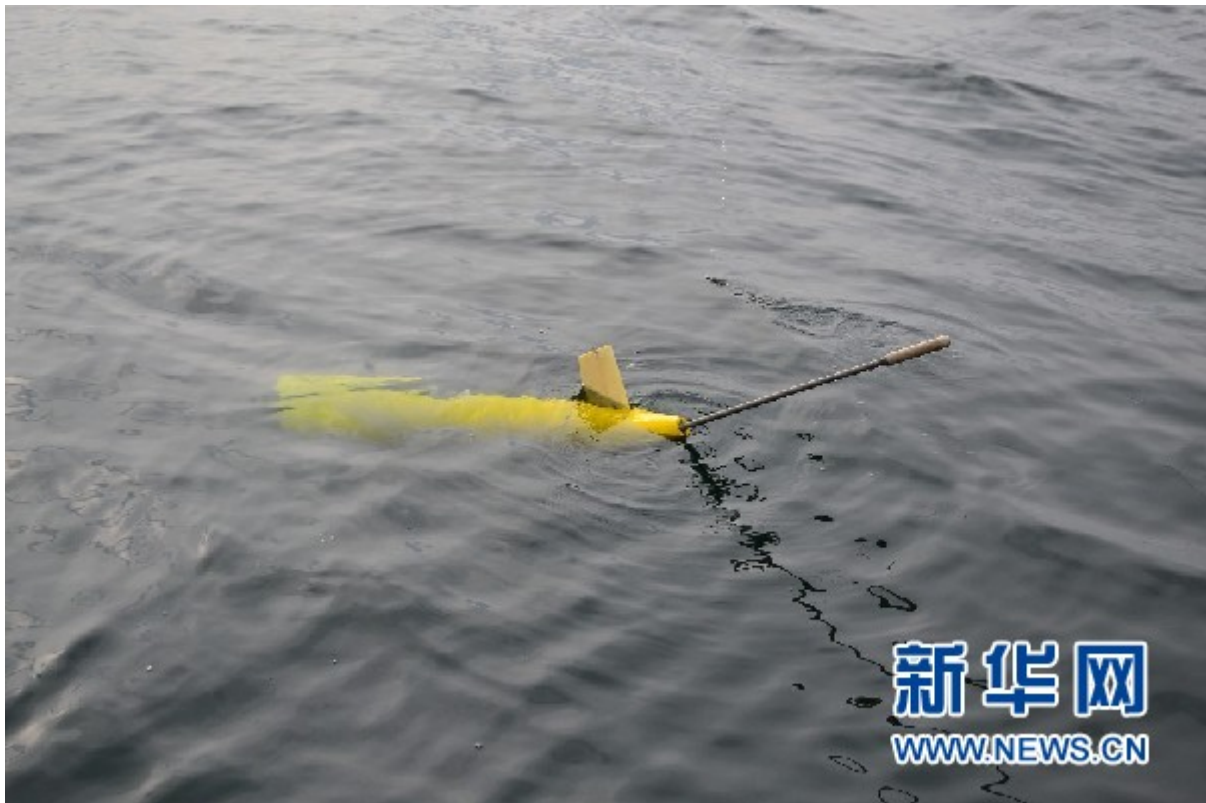


Records broken at ocean's lowest depth



Records broken at ocean's lowest depth [File photo/Xinhua]

Amid deputies attending the annual meetings of the top legislature and the top political advisory body, Chinese scientists have broken two world records at the ocean's lowest depth – the Mariana Trench, a scythe-shaped clef in the western Pacific Ocean seafloor that plunges nearly 11 kilometers deep.

China became the first country to collect the artificial seismic stratigraphy of the Challenger Deep, the deepest section of the trench measured at more than 10 kilometers, the Chinese Academy of Sciences' Institute of Geology and Geophysics said on Friday. The stratigraphy is used to study the Earth's movement, layers and geologic history.

China also set a new world diving record for underwater gliders at 6,329 meters with Hai Yi, a glider designed by the academy's Institute of Automation in Shenyang, Liaoning province, the academy said on Sunday. The previous recorder holder was a US glider at 6,000 meters.

"These experiments prove that China's deep-sea exploration technologies have reached an advanced level," the academy said in a statement.

"Data collected from these experiments are invaluable to the study of continental movement and its transformation," said Qiu Xuelin, a researcher at the academy's South China Sea Institute of Oceanology.

Both experiments were carried out by Chinese scientists onboard the academy's Explorer-I TS03 scientific surveying ship. They departed Sanya, Hainan province, en route to the Mariana Trench on Jan 15.

Upon arrival, they deployed 60 ocean-bottom seismometers to collect data for the stratigraphy on Jan 25. Some seismometers had sunk to 10,027 meters, the academy said, which is enough to submerge Qomolangma (8,850 meters), known as Mount Everest in the West.

These instruments can capture sound waves generated by earthquakes or human activities. These waves, combined with the motions of the Earth, can provide details about the geometry of the Earth's structure, said Wang Yuan, an engineer at the academy's Institute of Geology and Geophysics.

The glider is an autonomous underwater vehicle designed to survey marine conditions, such as temperature, salinity and currents, across large bodies of water.

Apart from breaking the world record, Hai Yi also completed 12 observation missions across 130 kilometers of water. The data it collected from the abyssal sea is "valuable for oceanologists studying the region", the academy said.

It took Chinese scientists 13 years to design and build the Hai Yi and its variants, it said, adding that there are more than two-dozen types, covering use in shallow sea, deep sea and abyssal sea.