Successfully measuring weather systems on planets outside the solar system

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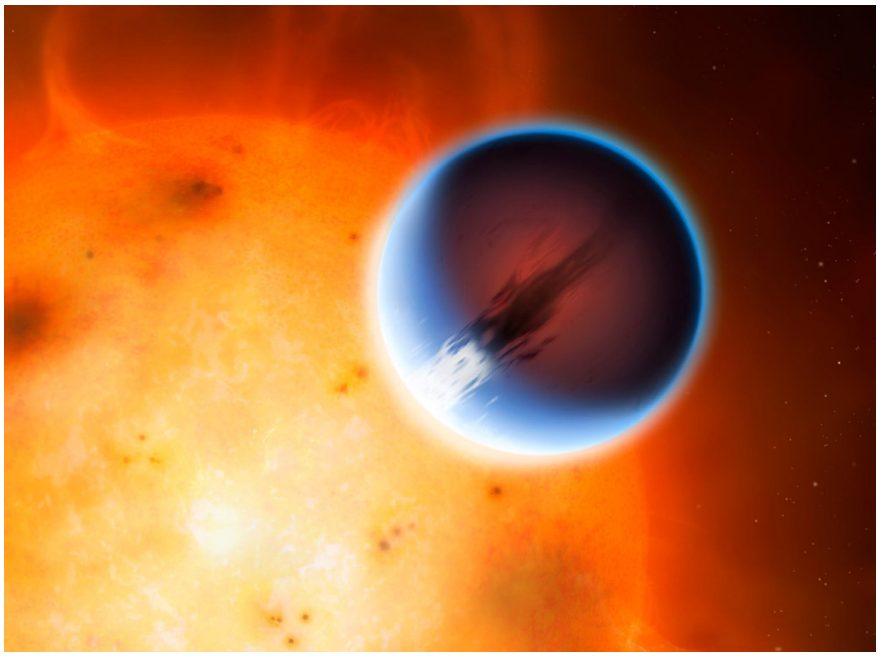
Scientists have published full results **of the successful measurement of the weather system on the planet HD 189733b** . This information was noticed by the global hydrologists because the attraction of this work reached a new height out of the scope of measuring weather on Earth.

It is known that planet **HD 189733b is in the constellation Vulpecula** , about 63 light-years away from Earth, the wind gusts on this planet are measured to be more than 8,690 km / h (5,400 mph), subdivision is equivalent to 2 km / sec, 20 times the speed of wind on Earth, 3.5 times the speed of wind in the solar system and 7 times the speed of sound.



Successful study of weather systems on extraterrestrial HD 189733b (*Photo: Mark A. Garlick*)

This is the first time scientists have directly measured the weather system in an extrasolar planet, which is a project in a series of exploration projects measuring hydrological elements in space to find Search for planets with potential for a new life.

" *This is the first weather data on a planet outside our solar system* . " - researcher Tom Louden at the University of Warwick in England said in a statement.

In addition to measuring wind power, planet HD 189733b also has a temperature in the center of the planet core of 1,800 degrees Celsius - twice the temperature of the Earth's core - so it is difficult to survive a certain life. , in the near future is human.

To accomplish this measurement, scientists used planetary mapping technology, infrared ray technology and HARPS technology standard (planetary data scale) and considered the ability to disperse the amount of Sodium wind in the right atmosphere of the planet HD 189733b.

In addition, scientists have used the Doppler effect, changing the spatial wavelength to measure the speed and direction of moving winds from the inside of the planet's atmosphere.

With these astonishing figures, it can be seen that this information opened up a new era for cosmological meteorology, a new step that is more convenient in the process of finding potential planets. life.

However, it is the story of the future, before scientists will rely on the above data to create a weather map for extrasolar planets - HD 189733b.

This study is published on the Astronomical Journal Letters page.