

There is water on the Moon: the discovery thanks to NASA's flying telescope

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An old human dream, that of staying permanently on the **Moon**, is perhaps a little closer after the discoveries reported yesterday about the **presence of water on Earth's only natural satellite**.

Nature, one of the most important and authoritative scientific journals, has in fact published a **study coordinated by NASA** – the aerospace agency of the United States – and made possible by the use of “**SOFIA**”, a **flying telescope**, according to which traces of water are present in the large crater called Clavius located on the face of the Moon visible from Earth.

The telescope, **mounted on board of a Boeing 747**, analysed the spectrum of the Moon at a wavelength of 6 micrometres at which water can no longer be confused with other substances; the instruments used **until now did not allow to distinguish** whether the signal derived from the water molecule or from the hydroxyl bound to minerals.

The fact that the water is located in the Clavius crater is also interesting because, until now, only traces of **ice** had been detected **in some cavities** that are always in the shade; in this case, however, **the affected area is periodically illuminated** by sunlight.

“This discovery poses new challenges to our understanding of the lunar surface and poses fascinating questions about resources useful for deep space exploration,” explained **Paul Hertz**, director of NASA's astrophysics division.

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