

# There are major changes in the atmosphere of Mars

Mars' atmosphere is primarily composed of carbon dioxide (CO<sub>2</sub>), but there is also small amounts of oxygen and methane that fluctuate over time.

Mars has existed for billions of years, but humans have only begun to learn about the planet's atmosphere over the past few decades, and our knowledge of the field is very limited.

According to widely recognized knowledge, Mars' atmosphere is primarily composed of carbon dioxide (CO<sub>2</sub>), but also has small amounts of oxygen and methane that fluctuate over time. Since 1966, scientists have hypothesized that stable levels of CO<sub>2</sub> in Red Planet's atmosphere could have a profound impact on the planet's properties.

Recently, another study related to the CO<sub>2</sub> ice reserves in the southernmost part of Mars showed that it actually has a significant effect on the planet's atmospheric pressure. The reason is thought to be because Mars' atmosphere is very thin, with a surface pressure of 0.6% compared to Earth and the fact that Mars 'wobbles' on its axis to 10 degrees when orbiting the sun, so the level of sunlight exposure on the planet's poles is not stable, leading to the fact that the amount of CO<sub>2</sub> released from these poles is also less stable, causing un-cycled disturbances in the atmosphere.



In other words, the giant CO<sub>2</sub> ice sheets at the southern tip of Mars are sometimes exposed to direct sunlight, leading to sublimation (changing the state of a solid substance directly through the gas), specifically here CO<sub>2</sub> is transformed from solid to gas without going through the liquid phase. The huge amount of CO<sub>2</sub> being pumped abruptly into the atmosphere will have a profound impact on the entire planet over the long term.

These changes are sufficient to reduce the pressure of the Martian atmosphere to a quarter or two times more than normal, despite the fact that the above process will take place very slowly, in a row, tens of thousands of

years.

This shows strong evidence that the sublimation of CO<sub>2</sub> ice is actually changing atmospheric pressure over time, thereby helping us understand how the Martian climate has changed in the past and will continue to change in the future - a very important factor to prove whether Mars exists or not.

You finished reading the article "**There are major changes in the atmosphere of Mars**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.