

# Neutral escape from terrestrial planets (and light bodies)

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All planetary bodies with an atmosphere experience some process of atmospheric escape, whether it is primarily due to thermal, diffusive, or non-thermal escape. These escape processes affect the density, temperature, and compositional structure of the upper atmosphere. In addition, in some circumstances, they can have importance in the lower atmosphere and the evolution of the entire atmosphere. This field of research remains active and continues to evolve as we explore our solar system and beyond.

The MAVEN mission, observing Mars, and Venus Express (VEX), observing Venus, have shown a complex and variable story of neutral escape on terrestrial planet, with important implications to the history of water on Earth's closest planets. In the outer solar system, the Cassini and New Horizons missions observed the atmospheres of Titan and Pluto, respectively, constraining the atmospheric loss rates of these lighter bodies.

I will introduce some of the main concepts related to the escape of neutral atmospheres, and discuss where this process can have an important impact of planetary evolution and observation in our solar system.