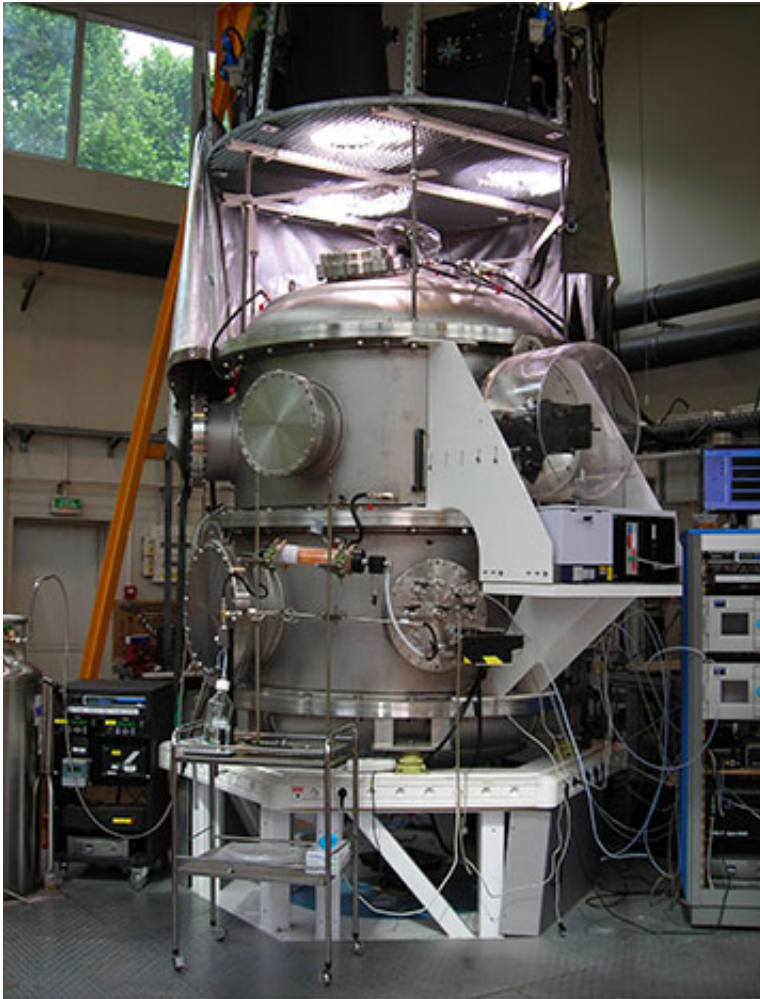


# Clouds reveal new particle formation process

February 15 2016

---



The CESAM simulation chamber. Credit: LISA (CNRS/Université Paris-Est Créteil/Université Paris Diderot)

In addition to precipitation, clouds influence the climate in various ways: they cover 70% of the Earth's surface and represent nearly 15% of the

volume of the atmosphere. Scientists need to understand their underlying chemical and physical mechanisms in order to better integrate them into climate change models.

An international team of researchers at the Laboratoire interuniversitaire des systèmes atmosphériques (CNRS/Université Paris-Est Créteil/Université Paris Diderot) and the Laboratoire chimie de l'environnement (CNRS/Aix-Marseille Université) thus demonstrated for the first time the role played by cloud droplets in the atmospheric transformation of volatile organic pollutants.

Volatile organic compounds, in gaseous form, condensate in these droplets to form secondary organic aerosols, which are a mixture of gas and solid or liquid particles.

This work is published on 15 February 2016 in *Atmospheric Chemistry and Physics*.

**More information:** L. Brégonzio-Rozier et al. Secondary organic aerosol formation from isoprene photooxidation during cloud condensation–evaporation cycles, *Atmospheric Chemistry and Physics* (2016). [DOI: 10.5194/acp-16-1747-2016](https://doi.org/10.5194/acp-16-1747-2016)

Provided by CNRS

Citation: Clouds reveal new particle formation process (2016, February 15) retrieved 12 July 2024 from <https://phys.org/news/2016-02-clouds-reveal-particle-formation.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.