

## **Carbon dioxide in karst cavities atmosphere dynamics, the example of the Aven d'Orgnac (Ardèche).**

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### **Résumé:**

A survey of CO<sub>2</sub> concentrations in the atmosphere of the Aven d'Orgnac shows that aerodynamic transfer can be a major process in karst system dynamics. The local meteorological conditions and the geometry of the cavity govern exchanges between the cave atmosphere and the exterior. Air enriched with biogenic CO<sub>2</sub> is transferred through the microfissural network by diphasic infiltration from soil to caves where it is continuously produced from rock walls. Analysis of the aerodynamic emptying of confined zones and direct flow measurement give a mean CO<sub>2</sub> production per unit surface of the cave rock wall.

CO<sub>2</sub>, cave, karst, hypogea atmosphere, aerodynamics, confinement.