

**THE IMPORTANCE OF THE EFFECTS OF TRAFFIC INDUCED
TURBULENCE AND TEMPERATURE DIFFERENCE OF STREET SIDES ON
STREET-LEVEL POLLUTION**

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ABSTRACT

A field experimental campaign was performed in a street canyon, the Rue de Strasbourg in Nantes, France. The experiment provided a detailed database documenting the mean airflow, turbulence, surface and air temperature, pollutants' concentration and traffic within the street. These data were analysed and were utilised to investigate the effect of traffic on the production of turbulent kinetic energy at different levels within the street as well as the influence of the different reception of direct solar radiation by the buildings' facades and ground on the airflow. The relative importance of both effects on air quality in a street canyon is discussed.

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