

## **Application of a non-hydrostatic meteorological model to flow and dispersion of tracers in a street canyon**

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Flow in a street canyon in a small town in the North of England is modeled using the EULAG model.

Two instrumented lamp-posts were used to measure velocities and concentrations. The street is ~ 15 m wide and 11m high and is subject to significant traffic flow. Preliminary results of the observations are presented.

The modeling of the airflow was carried out using the EULAG. The simulation was attempted using the Gal-Chen and immersed boundary condition, which proved to be more appropriate. Results will be presented of this work. The calculations were carried out in three phases; one to calculate the velocity fields, another to calculate the mean values and finally to calculate the variances.

Completion of a comparison of TKE fields and modeled fields is still to be completed, and the calculation of the helicity component is still to be completed.

The effect of the build up of concentration at street junction is demonstrated.