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Turbulence measurements within and above an urban intersection in Central London

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Measurements of turbulent wind profiles and temperature with sonic anemometers within and above an intersection within central London, UK from the DAPPLE 2007 urban field experiments are presented. The influence of background flow on the turbulent velocity field within the intersection is analysed. The observed patterns are different from those reported for basic urban canyons. Characteristics of flow switching within the intersection due to variability in the above roof flow will be investigated. Implications for pollution dispersion will be discussed