

ATMOSPHERIC DISPERSION THROUGH OBSTACLE ARRAYS

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ABSTRACT

Field experiments have been conducted to investigate flow and dispersion through obstacle arrays. Models of real buildings at a nominal scale between 1/10 and 1/20 were used. The main purpose of the experiments was to examine the dispersion of contaminants in the vicinity of individual obstacles embedded in an array of cubes. Dispersion around an isolated model building has already been investigated in the field. Thus comparison is allowed between dispersion around an isolated obstacle and around the same obstacle embedded in an array of cubes. The field experiments were supported by flow visualization trials performed in the wind tunnel.