

**THE SENSITIVITY OF DISPERSION MODELLING TO TOPOGRAPHICAL
DETAIL**

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A common question, concerning wind tunnel and computational modelling alike, is the sensitivity of predictions to the level of topographic detail treated in the analysis. A number of wind tunnel studies of building affected flow and dispersion will be reviewed with this question in mind. Results are available from all the selected studies that contrast behaviour with simple and more detailed physical models. Firstly, some new urban flow and dispersion data will be added to that discussed by Leitl et al (2001) and their conclusions thereby extended. However, attention will focus on the largely untouched topic of point-like sources, covering both either elevated and ground level emissions. The case studies will be discussed in terms of the modelling lessons learnt and the key underlying physical processes at play. General conclusions and guidelines will then be drawn and the implications for regulatory level modelling addressed.

EXTENDED ABSTRACT NOT SUPPLIED