

CAN HISTORIC AIR QUALITY DATA BE USED TO MODEL INDIVIDUAL LONG-TERM EXPOSURE TO AIR POLLUTION?

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Whilst it is widely accepted that poor air quality can have an effect upon health, few studies have evaluated the effects of long-term exposure to elevated concentrations of air pollution. This is often because historical air quality data are unavailable and any data is averaged both temporally and spatially. This paper will review the use of historic air quality data by making reference to the interpretation of monitored data collected from 1920 onwards in the North East of England. Monitored data will be interpreted with reference to both meteorology and pollutant source information. The paper will also present the results of a study of co-located historic and modern particulate monitors. An analysis of the particles sampled by the monitors in terms of size range and composition will further illustrate the suitability of the historic data for use in health studies.