

Spatial And Temporal Distribution of Wood/Coal Household Heating and Air Pollution

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ABSTRACT

The 1996 NZ Census included questions about type of household heating devices. A map of census areas showing the density of household wood and coal heaters per km² was combined with meteorological data to identify “hotspots” for air pollution. Data from the Canterbury Region were used to quantify the levels of air pollutants (PM₁₀ and CO) in the “hotspots” on cold and calm days. This spatial analysis validates a new method for estimating air pollution exposures during the cold season in New Zealand.