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**PRELUDE: Predictive modelling of Lead concentrations using G-Base datasets for urban environments**

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Lead (Pb) is toxic to all life; even low blood Pb levels can cause neurological issues. Elevated Pb levels are found in some urban soils due to the historical use of leaded-petrol, Pb-based paints, and industrial emissions. The legacy of Pb contamination persists today due to Pb's low mobility in the soil. Studies have used spatial interpolation methods to map the distribution and associated health risks from Pb in urban soils. However, these methods require numerous soil samples. A low cost alternative is to predict soil Pb concentrations using proxy datasets i.e. road proximity, housing age and past land use.