

## Arsenic in topsoils

EUSO has developed a new method to model Arsenic (As) contamination in European soils using LUCAS 2009 soil samples. We introduced the GAMLSS-RF model, a novel approach that couples Random Forests with Generalized Additive Models for Location, Scale, and Shape. After fitting and validating a spatial model, we produced European-scale As concentration maps at a 250 m spatial resolution and evaluated the patterns against reference values. By overcoming limitations in existing databases and methodologies, the present approach provides an alternative way to handle highly censored data. The methodological approach is published in this [paper](#). The model also consists of a valuable probabilistic tool for assessing As contamination risks in soils, contributing to informed policy-making for environmental and health protection. Data available:

