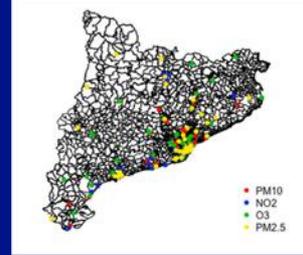


## Predictive modelling of air pollution and other meteorological variables



Air pollution represents a significant public health problem, but the uneven distribution of meteorological stations and the omission of the spatio-temporal dependence of pollutants makes it difficult to make accurate estimations of their actual exposure in the population. The proposed solution uses an optimised Bayesian predictive model that takes these issues into account, and provides more accurate predictions of air pollution levels, with an associated low computational cost.

## COMPETITIVE ADVANTAGE

- More accurate predictions of short- and long-term exposure.
- Reduced computational cost.
- Does not require a large number of monitoring stations.

## OBJECTIVE MARKET

- Public environmental management administrations.
- Health and air pollution research centres.
- Air quality monitoring companies.

## POTENTIAL APPLICATIONS

- Assessment of air quality in urban and rural areas.
- Support for public environmental health policies.
- Prediction of exposure to pollutants in epidemiological studies.

## ROADMAP / TIME-TO-MARKET

- SUPERA COVID 19 2020 Grant.
- Grant of the Competitive Program of Pzifer Global Medical Grants 2020.
- Project 2023 CLIMA 00037 AGAUR
- Validated with real data AEMET
- Commercialisation of the model as an air quality prediction tool.

## RESEARCH GROUPS

Research Group of  
Statistics,  
Econometrics and  
Health (GRECS)

University of Girona

TRL – 5-6

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