

UTAQ

the Urban Tool for Air Quality

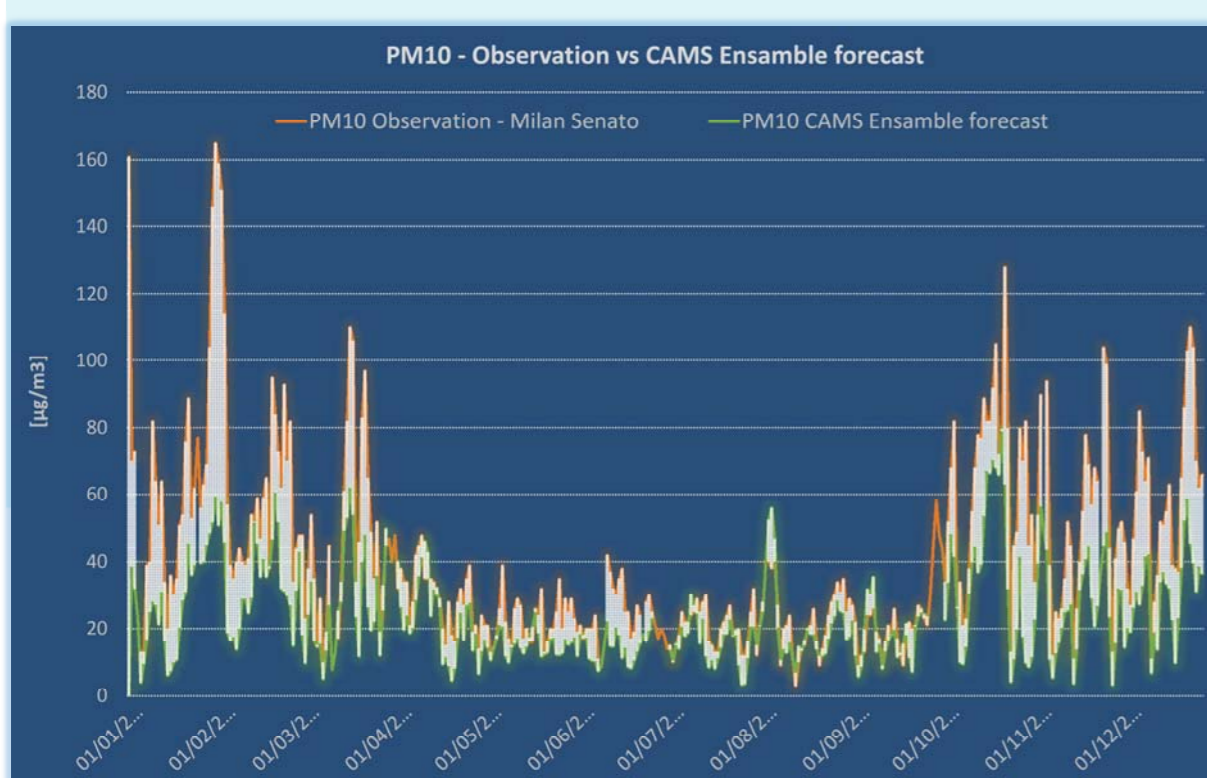
TerrAria s.r.l.

Giuseppe Maffeis - Fabrizio Ferrari—Roberta Gianfreda
g.maffeis@terraria.com

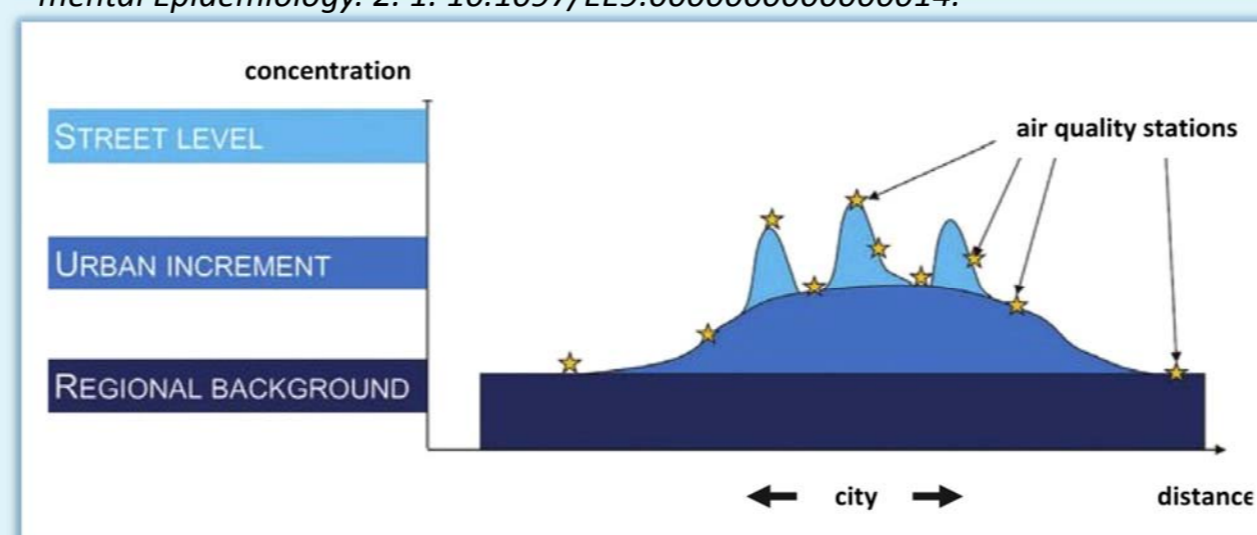
TerrAria srl – Via Melchiorre Gioia, 132, Milano (Italy)
Tel +39 02 87085650 www.terraria.com

1. CHALLENGE

UTAQ is a web-based application that allows urban city planners and municipality agencies to easily use CAMS forecast product to assess air quality and evaluate short-term response to manage emergency conditions of air quality exceedances. This requires the integration of an ad hoc modeling tool to look at the air quality conditions in metropolitan areas in greater detail.



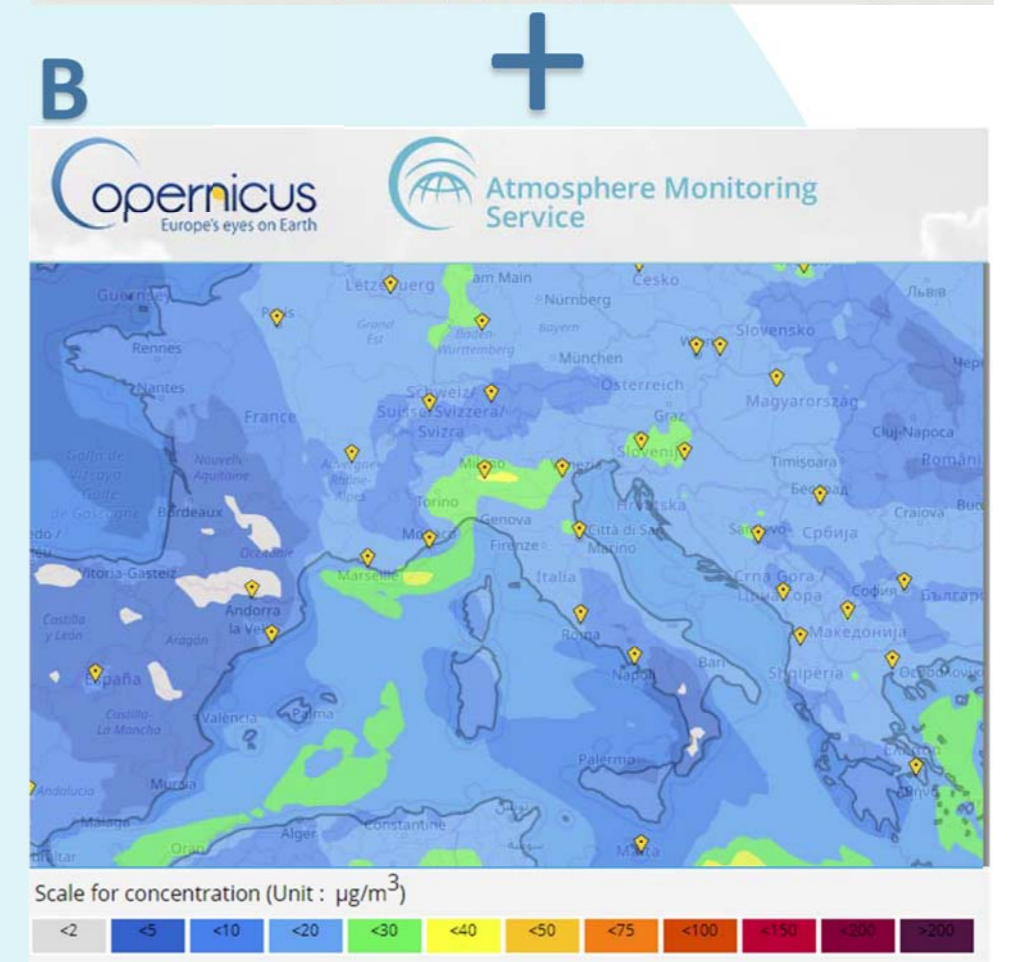
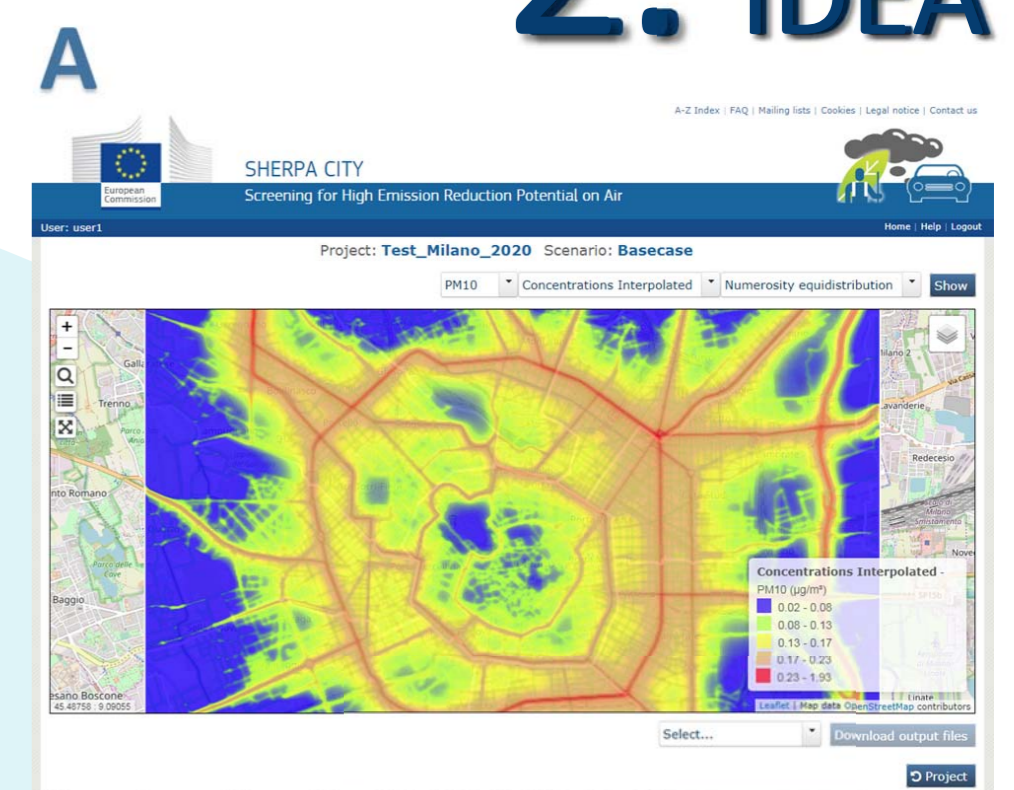
Hvidtfeldt et. al. (2018). "Evaluation of the Danish AirGIS air pollution modeling system against measured concentrations of PM2.5, PM10, and black carbon." *Environmental Epidemiology*. 2. 1. 10.1097/EE9.000000000000014.



A multiscale integrated model system is developed and validated with EU public modelling tools:

- A. SHERPA CITY (JRC – IES) forecast for the urban increment and the street level
- B. CAMS (ECMWF) forecast for the regional back-ground and the urban increment

2. IDEA



3. SOLUTION

UTAQ Graphical User Interface are developed for:

- ⇒ WEB_Public: 4DAYS AIR QUALITY FORECAST MAPS (at EU or city level)
- ⇒ WEB_City decision planner: DSS tool to choose different scenario results of policy application
- ⇒ APP_Public: AIR QUALITY EXPOSURE LEVEL (for the user position) and FORECAST

