QUANT

Quantification of Utility of Atmospheric Network Technologies

Assess and enable low-cost sensors for UK urban air pollution monitoring and enhance the value of low-cost sensor data for UK clean air challenges

WP1

Transparent assessment of commercial low-cost sensor devices in multiple UK urban environments

WP2

Exploiting low-cost sensor networks for air quality measurements

WP3

Low-cost sensors for particle characterization and low-cost source apportionment models

University of York

University of Cambridge

University of Birmingham

Cranfield University

UK Centre for Ecology & Hydrology

Clean Air Programme

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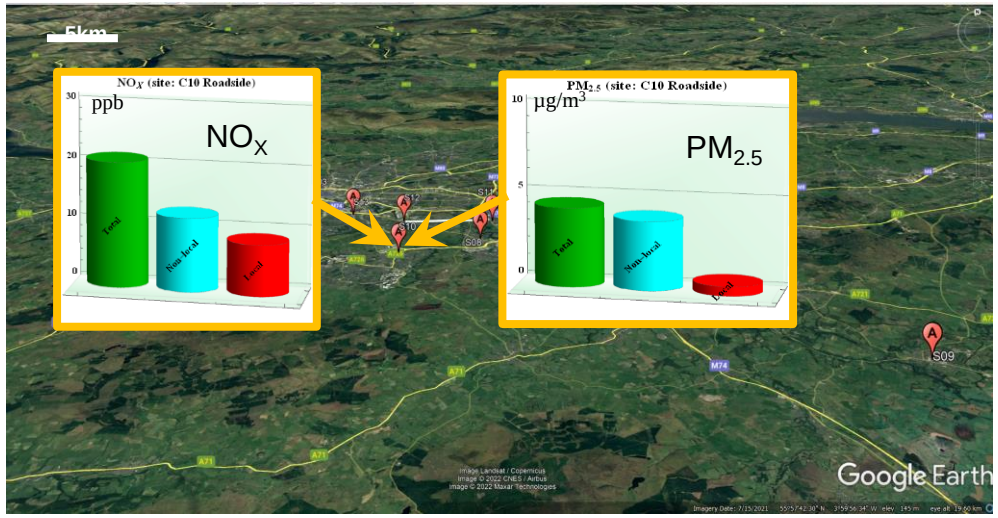
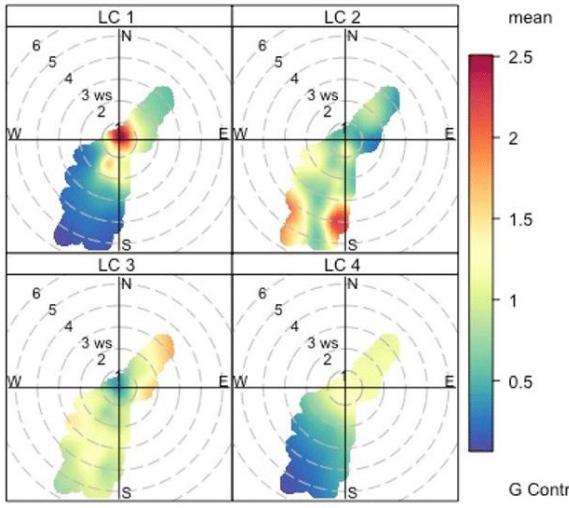
- New datasets:
  - Most comprehensive assessment of LCS in UK urban environments to date
  - Strong collaborations with other groups to bring together existing datasets



- New methodologies:
  - Sensor test-bed demonstration
  - Quantifying and minimising sensor data uncertainty
  - Network calibration methods
  - Pollutant source information using low-cost sensors



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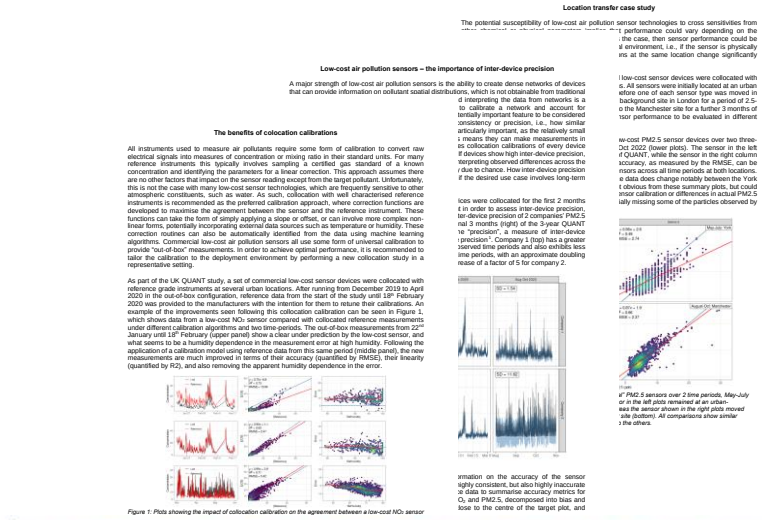
- Communicate findings to key stakeholders
  - Publish finding in academic literature
  - Case studies demonstrating best practice
  - Open data and data visualisation tools
  - Stakeholder workshop planned
- Demonstrate methodologies:
  - Demonstrate power of network methods
  - Source apportionment to inform targeted interventions

Currently looking for opportunities to enable the above impact activities

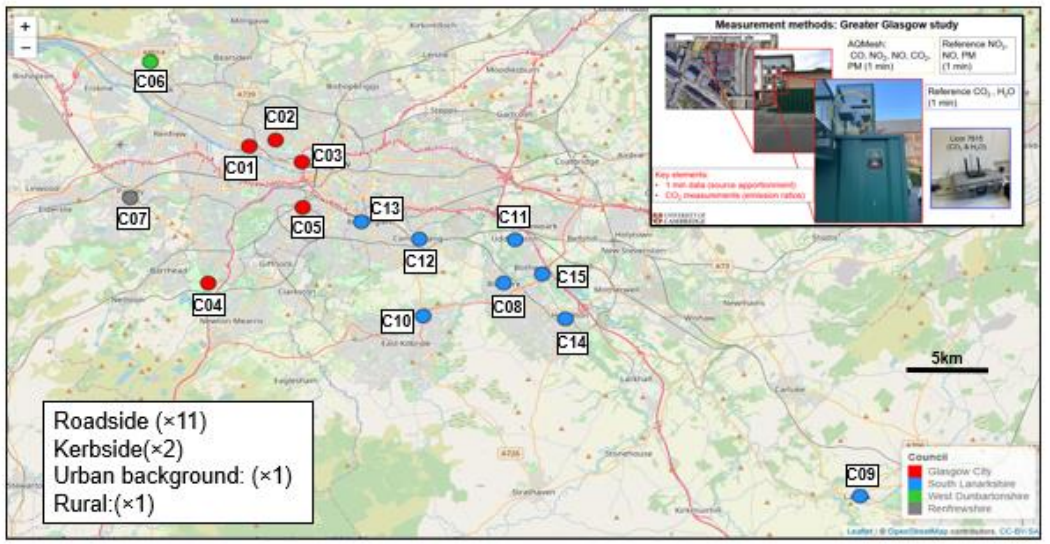
(QUANT funding ended in early 2022)



Low-cost air pollution sensors – the importance of inter-device precision

The benefits of colocation calibrations

Location transfer case study



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