

SOLENT AIR WATCH



Chiquita

Project Objectives using Citizen Science

1. Public engagement
 1. Air Quality
 2. Finding alternatives
2. Increase trust in science
3. Identify major pollutant sources

Joshua Taylor

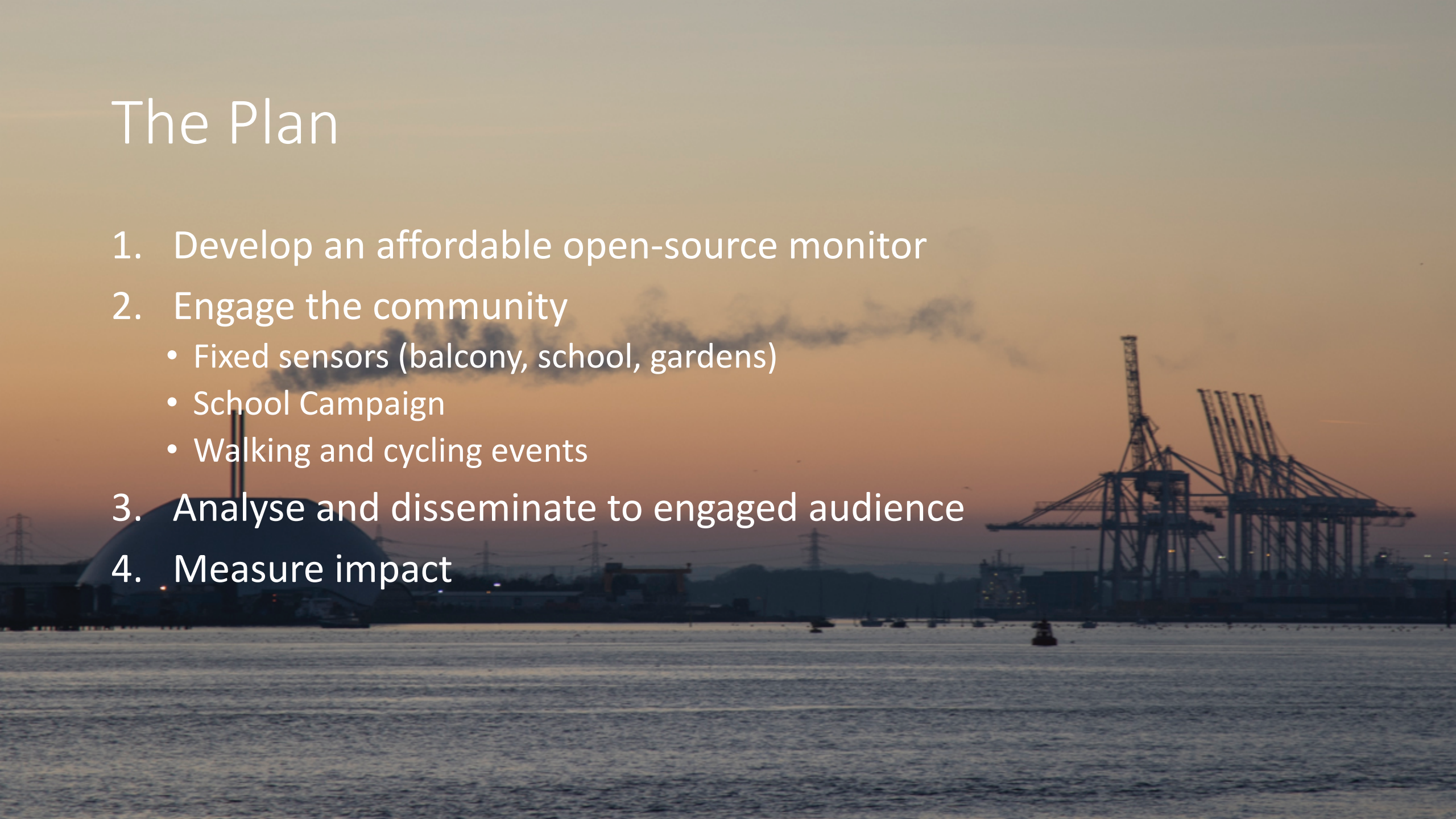
www.solentairwatch.co.uk

info@solentairwatch.co.uk



The Plan

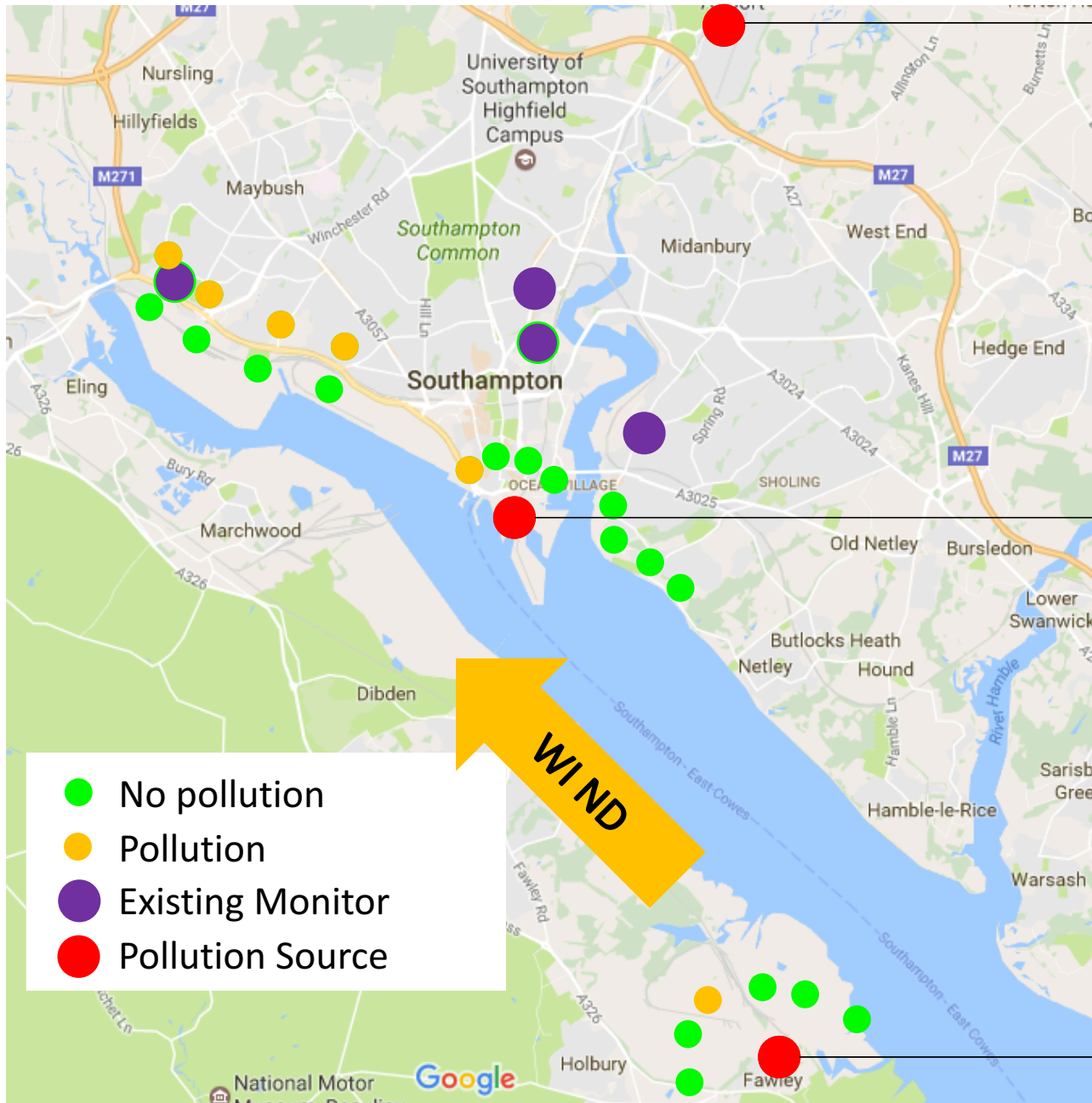
1. Develop an affordable open-source monitor
2. Engage the community
 - Fixed sensors (balcony, school, gardens)
 - School Campaign
 - Walking and cycling events
3. Analyse and disseminate to engaged audience
4. Measure impact



Meet Sniffy

- Open-Source Air Quality Monitor
 - Raspberry Pi or NodeMCU versions
 - Particulate Mater PM10, PM2.5, PM1
 - Resolution $\pm 1\mu\text{m}/\text{m}^3$
 - Nitrogen Dioxide
 - Linearity ± 5 ppb



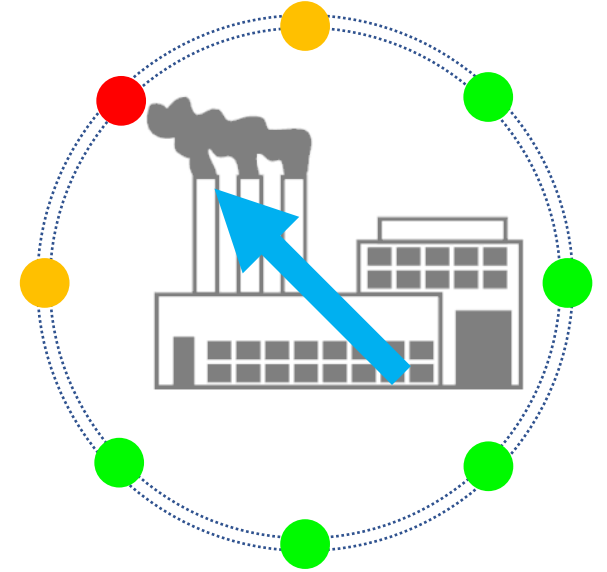
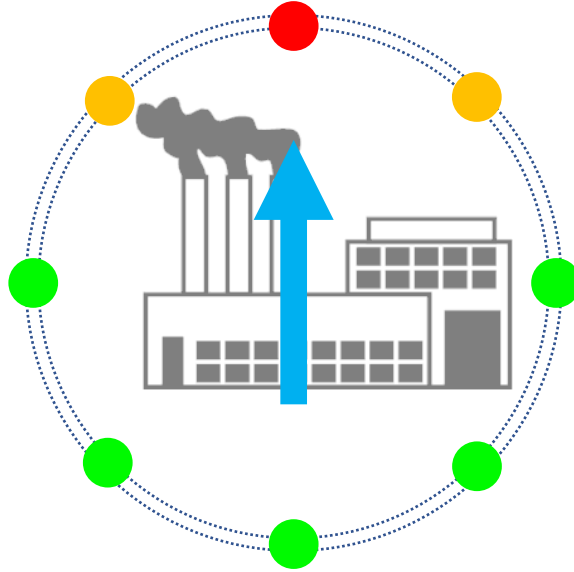
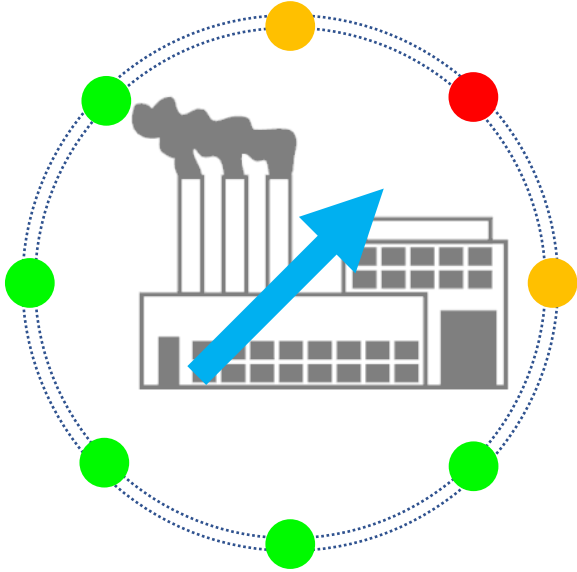


Airport

Docks

Oil Refinery

Method to identify source



Sensor unaffected by source



Sensor partly affected by source

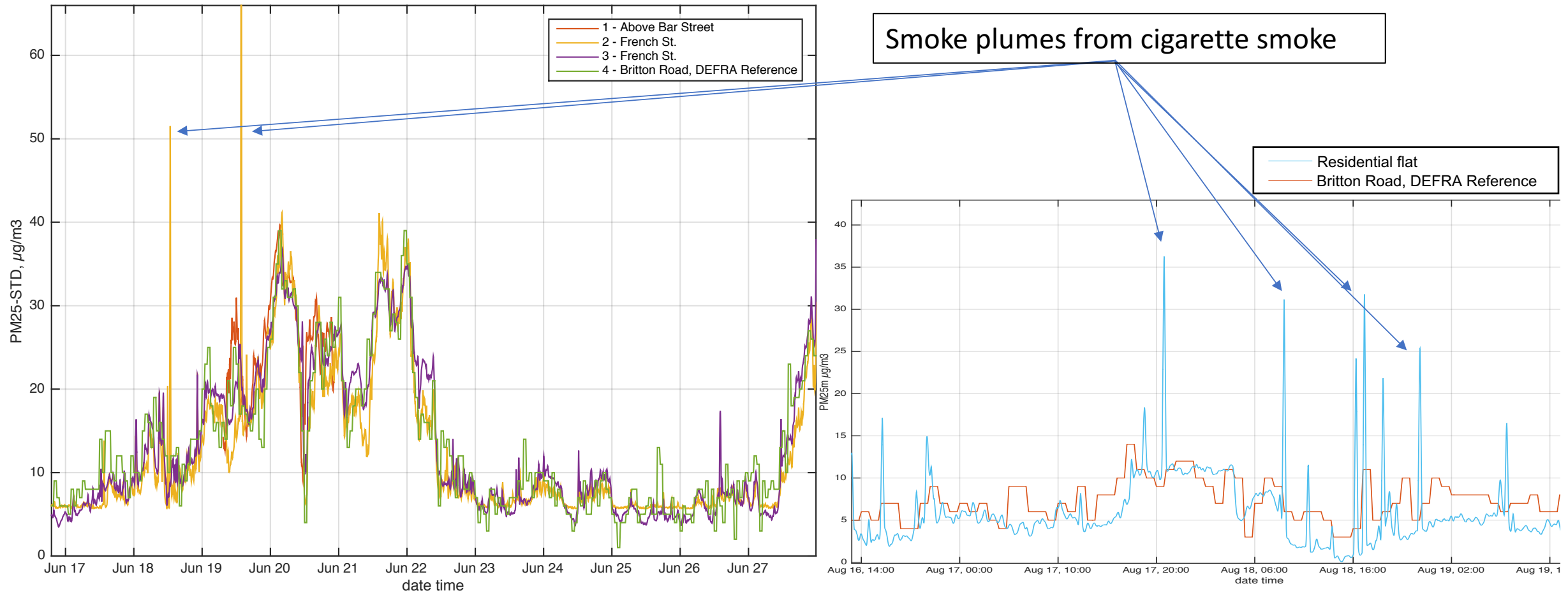


Sensor very affected by source



Wind direction

Data analysis - Complexities



Questions / call to action

- We're looking for collaboration and funding opportunities please contact us for more information.
- We also need volunteers in PR, visual studies, health sciences, engineering and marketing to help develop our project. These make great student projects and internships. Please encourage your students to contact us .
- Many thanks

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Wish to thank:

UNIVERSITY OF
Southampton

