



AECOM

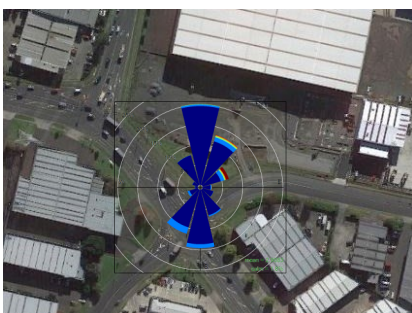
AECOM has one of the largest air quality practices in the world today. In 2017 AECOM New Zealand was involved in the planning process for a new development in Auckland. The air monitoring requirements included three months of data to understand the impact of roadside and industrial source emissions. AECOM installed a Met One Instruments E-BAM for PM₁₀ measurement and diffusion tubes for NO₂ and BTEX. However, diffusion tubes cannot provide real-time data resolution.

“This approach using the AQS1 worked out cost-effective. Set up was quick and the data capture was high. We were able to give the client valuable insights not available by conventional methods within the budget.”

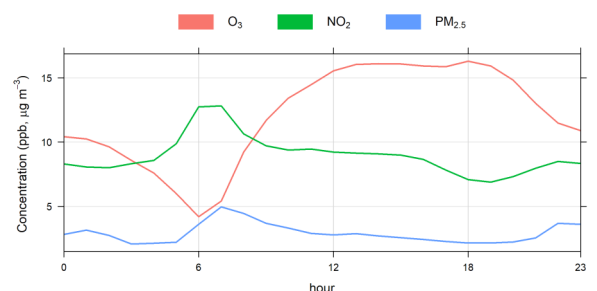
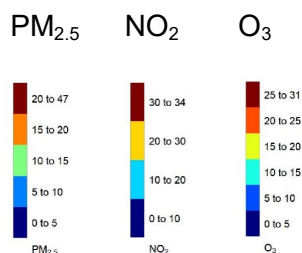
- Jonathan Harland, Senior Air Quality Scientist AECOM

AQS1 Mini Air Quality Station

To capture a richer data set to support the planning process AECOM deployed an Aeroqual AQS1 mini air quality station to measure ambient levels of PM_{2.5}, NO₂ and O₃ plus wind speed and direction, temperature, humidity and pressure. Continuous data was transmitted via 3G modem. Pollution rose tools in Aeroqual Cloud software were helpful for reporting and source apportionment of emissions from traffic, industry and construction. The dataset from the AQS1 correlated with the data collected from the E-BAM and passive methods.



AQS1 Pollution Rose (1-hour average)



AQS1 Diurnal (1-hour average)