



Development of Low-Cost PM Sensors Deployed to Air Quality Measurements

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Message from the Guest Editor

Dear Colleagues,

PM sensors are low cost, small size and can be used to provide information on the air quality in areas with limited regulatory monitoring stations. They are also expected to be applicable for hotspot identification, emission inventories of pollutants creation, and real-time exposure assessment. In order to improve the correctness of low-cost sensors datasets, the linear regression method, multivariate linear regression method, and deep-learning methods have been used to calibrate the values measured by low-cost sensors. However, measures for large-scale PM sensors network calibration and strategies for regional deployment are still in need of development.

This Special Issue aims to provide original and the state-of-the-art studies on the deployment of low-cost PM sensors for air-quality measurements. Studies on calibration methods for sensors networks, site selection protocols for sensors deployment, spatial-temporal characterization of PM concentrations, hotspot identification, exposure assessment, and source tracing based on sensor datasets are welcome. The applicability of sensor networks for environmental enforcement is also of interest.





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Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

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