Special Issue

Remote Sensing in Air Quality Monitoring

Message from the Guest Editors

Rapid advancements in remote sensing technologies, particularly satellite-based sensors, has transformed air quality monitoring by enabling large-scale real-time assessments of atmospheric conditions. Remote sensing provides a powerful tool to monitor air pollution across extensive regions, offering a broader perspective and improved data accessibility compared to traditional methods. Such developments in remote sensing techniques have significant implications for our ability to track and understand air quality dynamics on a global scale. Hence, this Special Issue aims to explore the latest advancements in the use of remote sensing for air quality monitoring, focusing on novel methods, technologies, and applications that improve our understanding of air pollution dynamics. We welcome papers on a wide range of topics, including, but not limited to, the following:

*Remote sensing methods for air pollution detection and monitoring;
*Development of air quality models based on remote sensing data;
*Use of remote sensing and machine/deep learning techniques in air quality trend analysis;
*Air quality prediction and forecasting based on remote sensing data.

Guest Editors

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Dr. Bo Zhang

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About the Journal

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!

Editor-in-Chief

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