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Dust Detection and Long-Term Transport in High Spatiotemporal Resolution

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Deadline for manuscript submissions: closed (10 July 2021)

Message from the Guest Editors

This Special Issue aims to bring together the latest dust detection and transport tracking techniques; to highlight the high spatiotemporal resolution in dust detection; and to explore the potential of using high-performance computing, machine learning, and big data frameworks in advancing this topic. Applications of dust products are also welcomed, as are review papers, that summarize the current state-of-the-art.

Potential topics include but are not limited to the following:

Novel quantitative methods for dust detection, retrieval, and tracking

Long-term (e.g., transatlantic) dust transport understanding

Interaction of airborne dust, cloud, and precipitation Machine learning approaches for dust monitoring

Applications of advanced computational capabilities for dust detection and tracking









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Editor-in-Chief

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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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