Special Issue

Numerical Simulation and Forecast of Fog

Message from the Guest Editors

Fog is a kind of typical low-visibility weather phenomenon that exerts adverse effects such as causing traffic accidents, impairing human health, and interrupting electrical services. Since the development of computer science and atmospheric numerical theory, enormous efforts have been put into fog numerical simulation and forecasting. Numerical models, from simplified 1D models to complex 3D meteorology–chemistry coupled models, have been widely used during recent decades. Although much progress has been made, some issues still require intensive studies: 1) the qualitative and quantitative effect of natural and anthropogenic factors on fog; 2) physical and chemical progress in fog; 3) how to improve the simulation/forecast performance of numerical models. Areas covered in our scope may include, but are not limited to, the following:

- Fog lifecycles.
- Impact factors of fog.
- Physical and chemical characteristics of fog.
- Development in fog numerical models.
- Fog/visibility diagnostic scheme in models.
- Fog numerical forecast.

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Deadline for manuscript submissions

closed (26 June 2025)

Atmosphere

an Open Access Journal by MDPI

Impact Factor 2.3
CiteScore 4.9

mdpi.com/si/205055

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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!

Editor-in-Chief

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