



## Development of LIDAR Techniques for Atmospheric Remote Sensing

Guest Editor:

**Dr. Xin Ma**

School of Remote Sensing and  
Information Engineering, Wuhan  
University, Wuhan 4730079,  
China

Deadline for manuscript  
submissions:

**closed (30 June 2023)**

### Message from the Guest Editor

Dear Colleagues,

As an important tool of active remote sensing, LIDAR can monitor the contents of the atmosphere, such as aerosols, temperature, polluting gases, and greenhouse gases during day and night. Moreover, it can also acquire the distribution of atmospheric compositions with spatial information and high accuracy. Data measured by LIADR can help us analyze the causes of extreme pollution cases, carbon cycle, and global climate change.

This Special Issue aims to present the latest research in the system development and applications of LIDAR in atmosphere. We would like to invite you to submit articles on your recent research on LIDAR system development with respect to the following topics:

1. Innovative methods for monitoring atmospheric composition;
2. Hardware development for LIDAR systems;
3. Models for quantifying gas fluxes;
4. Collaborative observation of greenhouse and pollution gases;
5. Measurements for stratospheric meteorology.





## Editor-in-Chief

### **Prof. Dr. Ilias Kavouras**

Environmental, Occupational,  
and Geospatial Health Sciences,  
CUNY School of Public Health,  
New York, NY 10027, USA

## 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!

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, Inspec, CAPlus / SciFinder, Astrophysics Data System, and other databases.

**Journal Rank:** CiteScore - Q2 (*Environmental Science (miscellaneous)*)

## Contact Us

---

Atmosphere Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/atmosphere](https://mdpi.com/journal/atmosphere)  
[atmosphere@mdpi.com](mailto:atmosphere@mdpi.com)  
[X@Atmosphere\\_MDPI](https://twitter.com/Atmosphere_MDPI)