Special Issue

Advances in Lidar Remote Sensing Research in the Middle and Upper Atmosphere

Message from the Guest Editors

Due to the excellent advantages of high precision, high resolution, and specific chemical element component detection in the remote sensing field, Lidar has become an important technology for studying the middle and upper atmosphere. In the past decade, lots of studies have reported the characteristics of metallic atoms and ions in the higher thermosphere and ionosphere by lidar detections. Furthermore, researchers are developing lidars to detect the fluorescence scattering from helium atoms at 200 -1000km, and the lidar detection range is expect to extend extreme height. This Special Issue is a compilation to showcase the current studies of the middle and upper atmosphere with lidar remote sensing technology. Authors are encouraged to submit an original paper that includes but not limited to the topics of the relevant lidar research on metallic species, neutral wind and temperature observations, lidar instrumentation, as well as the theoretical mechanism analysis and modeling.

Guest Editors

Dr. Guotao Yang

Dr. Zhibin Yu

Dr. Shaohua Gong

Deadline for manuscript submissions

closed (20 February 2024)



an Open Access Journal by MDPI

Impact Factor 2.3 CiteScore 4.9



mdpi.com/si/158899

Atmosphere
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
atmosphere@mdpi.com

mdpi.com/journal/atmosphere





an Open Access Journal by MDPI

Impact Factor 2.3 CiteScore 4.9



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

Dr. Daniele Contini

Institute of Atmospheric Sciences and Climate (ISAC), National Research Council (CNR), Str. Prv. Lecce-Monteroni km 1.2, 73100 Lecce, Italy

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))

