Special Issue

Using Atmospheric Components as Tracers for Optical Remote Sensing in Different Height Regions

Message from the Guest Editors

The composition and concentration of atmospheric constituents vary significantly with altitude. These altitude-dependent components naturally serve as indispensable “tracers” for the professional optical measurement of atmospheric and space environmental parameters. Using metal atoms as tracers, LiDAR can yield crucial thermospheric environmental parameters, including temperature and wind fields. Accordingly, lidar now offers the potential to acquire key parameters (e.g., temperature and wind fields) at these ultrahigh altitudes. Additionally, passive optical methods remain important techniques in atmospheric measurements. In order to further advance LiDAR and passive optical technologies in atmospheric and space science, we are organizing this Special Issue. We invite submissions that explore the active or passive optical detection of atmospheric parameters at any altitude using diverse tracers. Relevant topics include, but are not limited to, experimental methods, data analysis, equipment and technology improvement, model simulation, standards, and specifications. We look forward to receiving your submissions.

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Message from the Editor-in-Chief

Remote Sensing is now a prominent international journal of repute in the world of remote sensing and spatial sciences, as a pioneer and pathfinder in open access format. It has highly accomplished global remote sensing scientists on the editorial board and a dedicated team of associate editors. The journal emphasizes quality and novelty and has a rigorous peer-review process. It is now one of the top remote sensing journals with a significant Impact Factor, and a goal to become the best journal in remote sensing in the coming years. I strongly recommend *Remote Sensing* for your best research publications for a fast dissemination of your research.

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