



an Open Access Journal by MDPI

# Multisource Remote Sensing Data Fusion and Assimilation in Atmospheric Observations

Guest Editors:

#### Dr. Jianhui Xu

Guangzhou Institute of Geography, Guangdong Academy of Sciences, Guangzhou 510070, China

#### Dr. Hong Shu

State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, Wuhan 430079, China

Deadline for manuscript submissions: closed (30 March 2024)

# Message from the Guest Editors

Dear Colleagues,

This Special Issue mainly explores "advanced" or "novel" data fusion and data assimilation techniques for atmospheric observations concerning air pollution, air temperature, precipitation, wind, etc. The availability of multi-resolution remote sensing data has promoted the development of different data fusion and assimilation. The aim of this issue is to collect new ideas on data fusion. data assimilation, machine learning, geostatistics, and quality assessment. The authors will be able to express their creativity without restrictions and ensure the scientific rigor of research. This Special Issue is, therefore, intended to strongly encourage creative endeavors in theory and practice. We are looking for techniques that may bring challenges and lead to breakthroughs, for example, the new methods in the initial experimental stage that have made basic advancements and potentially contributed to a paradigm shift. Recent developments, applications, and evaluations of remote sensing and observation techniques for atmospheric observations are preferred.



**Special**sue





an Open Access Journal by MDPI

# **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

### 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, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/atmosphere atmosphere@mdpi.com X@Atmosphere\_MDPI