

Special Issue

Solar Irradiance and Wind Forecasting

Message from the Guest Editors

The world is constantly witnessing ground-breaking advancements in forecasting technologies, which are being integrated into daily life and sectors such as economics, medicine, and meteorology. Renewable energy sources, particularly solar and wind, have experienced increasing benefits from these advances, as accurate predictions of their behavior lead to both financial gains and resource conservation. We invite authors to share their insights, expertise, and accomplishments concerning new modeling paradigms, variable importance, uncertainty evaluation, and the use of remote sensing data and related information.

Moreover, this Special Issue also welcomes reviews on best practices in solar and wind forecasting. In particular, the following topics are of significant interest:

- Evaluation of physical, statistical, or machine-learning-based models;
- Developments in environmental forecasting;
- Examining the effects of uncertainty on decision-making processes;
- Innovative forecasting approaches;
- The influence and interplay of forecasting on key stakeholders;
- The impact of global warming and climate change on solar and wind forecasting.

Guest Editors

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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

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