Special Issue

Advanced GNSS for Severe Weather Events and Climate Monitoring

Message from the Guest Editors

The global navigation satellite system (GNSS) is a well-established atmospheric remote sensing system which can accurately measure precipitable water vapor, zenith total delay, slant total delay, slant water vapor, gradient, bending angle, refractivity, etc. Advanced GNSS have heralded a new era of atmospheric sounding, severe weather monitoring, GNSS meteorology, and climatology. Effective monitoring and accurate forecasting of severe weather events and climate change can prevent disasters and save human lives. To take advantage of advanced GNSS techniques, this Special Issue mainly focuses on papers that address topics including but not limited to:

- Advanced GNSS atmospheric sounding and data processing;
- Data mining of atmospheric products;
- Weather and climate monitoring using GNSS techniques:
- Severe weather event forecasting;
- Numerical weather prediction models;
- Interdisciplinary research and new applications in the atmosphere, meteorology, and climatology fields.

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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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