Special Issue

Typhoon and Extreme Precipitation and Wind Wave Prediction by Big Data Technology

Message from the Guest Editor

Nowadays, forecasting the behavior of complex typhoon systems has been a broad application domain for big data technology, such as machine learning, deep learning, neural networks, and Hadoop parallel computing. Particularly, predictions regarding rainfall, wind, and wind-wave caused by typhoons provide critical information that can be used for flood control and advanced disaster prevention preparations. This Special Issue focuses on applications of big data techniques and machine learning methodologies in the field of typhoon precipitation, wind, and wind-wave predictions. Topics of interest for publication include, but are not limited to the following:

- Predictions in rainfall, wind, and wind-wave caused by typhoons
- Big data technical developments in typhoon-induced problems
- Machine learning methodologies in typhoon-induced problems
- Deep learning methodologies in typhoon-induced problems
- Neural network-based methodologies in typhoon-induced problems
- Application of Hadoop framework and parallel computing

Guest Editor

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Deadline for manuscript submissions

closed (4 December 2020)

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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